ASSESSMENT OF NATIONAL TEACHERS' INSTITUTE'S NIGERIA CERTIFICATE IN EDUCATION BY DISTANCE LEARNING SYSTEM IN NORTHWEST GEO-POLITICAL ZONE OF NIGERIA

BY

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BEING A DISSERTATION SUBMITTED TO THE SCHOOL OF POSTGRADUATE STUDIES, AHMADU BELLO UNIVERSITY, ZARIA IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE AWARD OF DOCTOR OF PHILOSOPHY (PhD) DEGREE IN CURRICULUM AND INSTRUCTION

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DECLARATION

I declare that the work in this Dissertation entitled ASSESSMENT OF THE NATIONAL TEACHERS' INSTITUTE'S NIGERIA CERTIFICATE IN EDUCATION BY DISTANCE LEARNING SYSTEM IN THE NORTHWEST GEO-POLITICAL ZONE OF NIGERIA has been carried out by me in the Department of Educational Foundations and Curriculum of the Ahmadu Bello University, Zaria. The information derived from the literature has been duly acknowledged in the text and a list of references provided. To the best of my knowledge, no part of this dissertation was previously presented for another degree or diploma at this or other Institution.

_____ _____

Bala IBRAHIM Date

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CERTIFICATION

This dissertation entitled ASSESSMENT OF THE NATIONAL TEACHERS' INSTITUTE'S NIGERIA CERTIFICATE IN EDUCATION BY DISTANCE LEARNING SYSTEM IN THE NORTHWEST GEO-POLITICAL ZONE OF NIGERIA, by Bala IBRAHIM, meets the requirements governing the award of Doctor of philosophy in the Department of Educational Foundations and Curriculum of the Ahmadu Bello University, Zaria and it is approved for its contributions to knowledge and literary presentation.

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DEDICATION

This dissertation is dedicated to God Almighty who has seen me through my education successfully.

ACKNOWLEDGEMENTS

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Finally, I wish to specially thank my wives and children for their support, patience and prayers for the successful completion of this work

ABSTRACT:

This study entitled Assessment of The National Teachers' Institute's Nigeria Certificate In Education by Distance Learning System in the North-West Geo-Political Zone of Nigeria, set out to assess the effectiveness of the tutorials used in the Nigeria Certificate in education by Distance Learning System; assess the adequacy of the contact sessions organized for the programme; assess the quality assurance mechanism used in the programme and; assess the success rate of the NCE (DLS) programme. Accordingly, four corresponding research questions, and hypotheses were formulated with a view to providing directional clues and approaches to the study..In line with the objectives of the study, relevant literatures were reviewed .Ex-Post Facto Research Design was used in which a sample size of 666 respondents responded to the instrument out of the total population size of 2,980 representing 22.3%, which according to Asika (2004), is representative enough for a study of this nature The data obtained from the respondents was subjected to analysis using Chi-square (x2) statistics to determine differences among the opinions of the two different groups of respondents, which were tested at 0.05 alpha level of tolerance. Questionnaire was used throughout the study in which the respondents indicated their opinions. The findings revealed that the tutorials used in the NCE (DLS) programme were effective, the contact sessions were also adequate, the quality assurance mechanisms were effective and the success rate was also high. The results showed that there is no significant difference between the opinions of staff and students in the effectiveness of tutorials and success rate of the NCE (DLS) programme, but significant differences existed on the adequacy of the contact sessions organized in the programme and on the effectiveness of quality assurance mechanisms used in the programme and on the success rate of the programme. Based on the findings above, four recommendations were provided thus: Need to limit face to face tutoring and expand media; need for Prompt and Adequate Supply of Course Materials and Use of more Professionals during Contact Sessions; need to strengthen the quality management mechanisms of the programme and strengthening the Delivery of Distance Learning Systems. Wide ranges of implications of this study have been identified for distance education practitioners in Nigeria, especially to tap to strengthen their distance education practices.

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OPERATIONAL DEFINITION OF TERMS

- North West Geo-political Zone- refers to the following states: Kaduna, Kano, Katsina, Kebbi, Jigawa, Sokoto and Zamfara.
- Personnel - refer to staff of the National Teachers Institute in both Headquarters and States.
- Contact session - refers to the period of interaction with course tutors.
- Course tutor - s refer to part time teachers with NCE by distance learning programme
- Tutorial - refers to the face-to-face interaction between the course facilitator and the students
- Delivery mode - is the method of instruction used in Distance learning system

LIST OF ABBREVIATIONS

NCE - Nigeria Certificate in Education

DLS - Distance Learning System

HO - Hypothesis

CIPP - Contexts, Input, Process, Product

NCCE - National Commission for Colleges of Education

PTTP - Pivotal Teacher Training Programme

COL - Common wealth of Learning

NPE - National Policy on Education

CHAPTER ONE
INTRODUCTION

1.1 Background to the Study

Distance learning is a field of education that focuses on teaching methods and technology with the aim of delivering teaching, often on an individual basis, to students who are not physically present in a traditional educational setting such as a classroom. It has been described as "a process to create and provide access to learning when the source of information and the learners are separated by time and distance, or both". Honeyman and Miller; (1993) Distance education courses that require a physical on-site presence for any reason (including taking examinations) have been referred to as hybrid (Tabor, 2007) or blended (Vaughan, 2010) courses of study.

The practice of distance education started in 1728, according to Holmberg, (2005) with "an advertisement in Boston Gazette by Caleb Phillips, Teacher of the new method of Short Hand" seeking for students for weekly lessons by post. In the the early part of the 19th century also, Isaac Pitman continued to teach shorthand in Great Britain via correspondence in (Moore & Kearsley, 2005) through.distance education by heavily relying on postal services.The University of London, the first university to offer distance learning degrees, established its external programme in 1858, which is now known as the University of London International Programmes. The programmes include Postgraduate, Undergraduate and Diploma degrees created by colleges such as the London School of Economics, Royal Holloway and Goldsmiths. *(Levinson, 2005)*

The concepts of extended and correspondence education, another name by which distance education was called, were first developed in the United States by William Rainey Harper, the

maiden president of the University of Chicago and promoted by Columbia University in 1892. (Levinson, 2005).The Queensland University in Australia also established a Department of Correspondence Studies in 1911, (White, 1982), and after 1911, the University of Wisconsin significantly promoted distance education through methods other than the postal in America. From 1964 to 1968, the Carnegie Foundation funded the Queensland University's Articulated Instructional Media Project (AIM) which brought in a variety of communications technologies aimed at providing learning to an off-campus population. According to Moore, Micheal &Kearsley (2005), AIM (Articulated Instructional Media Project) impressed United Kingdom which imported these ideas in establishing the Open University of London in 1969. The University initially relied on radio and television broadcasts for much of its delivery.

Germany's FernUniversität in Hagen followed in 1974, (Three Decades, 2011) and there are now many similar institutions around the world, often with the name Open University (in English or in the local language). All "Open universities" use distance education technologies as delivery methodologies and some have grown to become 'mega-universities',(Daniel 1988) a term coined to denote institutions with more than 100,000 students.The development of computers and the internet have made distance learning distribution easier and faster and have given rise to the 'virtual university, the entire educational offerings of which are conducted online,

In 1996 Jones International University was accredited by a regional accrediting association in the United States, and launched as the first fully online university in America. *(Regional AccreditationAssociation, 2011)*In 2006, the Sloan Consortium, a body known with deep interest in online distance education programmes had more than 96 percent (more than 15,000 total enrollments) of students enrolments of the very largest institutions in some online offerings and

almost 3.2 million United States students were taking at least one online course in 2005, (Allen and Jeff, 2006).

Today, there are many private and public institutions worldwide offering distance education courses from the job oriented skills programmes to the highest levels of degree and doctoral programmes. Understanding distance education from its different evolutionary perspectives is valuable in articulating ideas that would shape the direction for a purposeful and robburst distance education practice, taking into consideration the initial challenges of its evolution and the factors that would shape its practice in the modern times.

.The National Teachers' Institute, Kaduna was established in 1976 to upgrade the quality of teachers in the nation's educational system using distance education. Its establishment was incidental following the introduction of the Universal Primary Education (UPE) in 1976 by the then military administration, which led to an unprecedented explosion in primary school enrolment which in turn resulted in the recruitment of a large number of unqualified and underqualified teachers. In order to address the challenges of training these unqualified and underqualified teachers, the Federal Government established the National Teachers' Institute to ran courses leading to the upgrading and certification of teachers to the Nigeria Certificate in Education level to manage the primary education sector that had already enploded to unimaginable proportion. In addition, the Institute also designed and run pivotal teacher training programme, Advanced and Postgraduate Diploma in education courses and presently planning to introduce Bachalor in Education Degree courses in conjuction with the National Open University of Nigeria (NOUN).

The general objectives of the NCE-DLS programme include:

To train and upgrade all qualified grade II teachers to NCE level; provide the basic background for those of them who may later wish to pursue their studies at higher levels; and

to help produce the number of teachers required for the successful implementation of the National Policy on Education.

Towards actualizing the objectives of the Nigeria Certificate in Education by Distance Learning System, the Institute produced a handbook which spelt out in details the strategies for realizing the objectives of the programme. The course was designed to last for four years during which students will be provided with self instructional course materials to study; provision of learning resources in form of learner support service; face-to-face tutorial contacts at the study centres and;Students' achievement evaluation (examination) (NCE (DLS) Students' handbook 2013: 3).The Nigeria Certificate in Education by distance learning system has self instructional course books that are user friendly.These books are written in a simple easy-to-read format and follow the modular approach i.e written in comprehensive interrelated units, word study, sub-units, activities, summary and assignments. Each student is expected to study the modules, carryout the instructions, practice the skills as indicated on the assignments and ativities, note areas of difficulties and take these to the study centre for discussions with peers and course tutors.

In addition to the course texts, the Institute has produced series of recorded audio and video cassettes, CDs, science kits, maps, charts, computers, internet services, library services, etc, as learner support materials.Face-to-face tutorial contacts are held at the study centres at weekends and daily during schools holidays. These contacts provide the leaner with tutorials and peer support.The course tutor in the Nigeria Certificate in Education by Distance learning system plays a vital role. He is expected to help students master concepts and skills and develop positive attitudes. He also explains the course content and helps the students to solve their learning problems, marks, comments and advise on activities and assignments in the course texts as well as give review texts.Evaluation is through continuous assessment and examinations. Continuous

assessment consists of tests, practicals, assignments and constitutes 40% of the overall assessment while examinations carry 60% of the overall assessment.

Students are allowed to graduate only if they have successfully completed and passed all the semester examinations. To be eligible for examinations in a course subject, a student must satisfy all the conditions such as registration, attendance during tutorials, etc. To qualify for admission into examinations for subjects with practicals, the students must have atleast 75% attendance in practical sessions.

1.2 Statement of the Problem

The specific objectives of the NTI in the provision of instruction leading to the development, upgrading and certification of practicing Grade II teachers , is a noble and rational one when realized. However, the problem of many programmes initiated by government is that they appear good and laudable in principle but in practice they fail to realize or achieve the intended objectives.

In furtherance of the mandate establishing the Institute, which are to train and upgrade all qualified grade II teachers to NCE level; to provide the basic background for those of them who may later wish to pursue their studies at higher levels; and to help produce the number of teachers required for the successful implementation of the National Policy on Education, the Institute made concerted effort at training teachers while on their jobs through the distance learning system. It has been doing so inspite of the daunting challenges that are generally bedeviling the teacher education sector in Nigeria which include quality and quantity of teachers in our schools;quality and quantity of teaching/learning resources;curriculum implementation strategies; and; evaluation/examination (information booklet on NCE-DLS,.2014: 5)

Despite efforts at successful implementation of the distance education programme with special focus on the distance learning delivery mode and the effectiveness of contact sessions used in the

programme, the National Teachers' Institute has often been critised for the quality of teachers graduating from the programme. The reason why this is so has been a matter of great concern to stakeholders and the Institute itself. This was what informed the choice for the present study to assess the Nigeria Certificate in Education by Distance learning System of the National Teachers' Institute with a view to ascertaining the degree to which the specific objectives of the programme are being achieved and.

1.3 Objectives of the Study

This study aimed at assessing the Nigeria Certificate in Education by Distance Learning System of the National Teachers's Institute in the Northwest zone of Nigeria in terms of its tutorials, (delivery mode), contact sessions, quality assurance mechanisms being used in the programme, and the success rate of the Nigeria Certificate in Education students.

The study sets out to achieve the following specific objectives:

1. Determine the effectiveness of the tutorials being used in the Nigeria Certificate in Education by Distance Learning System in the Northwest Zone of Nigeria;
2. Assess the adequacy of the contact sessions being organized for theNigeria Certificate in Education by Distance Learning programme in the Northwest Zone of Nigeria;
3. Assess the quality assurance mechanism being used in the Nigeria Certificate in Education by Distance Learning System in nthe Northwest Zone of Nigerie;
4. Determine the success rate of the NCE (DLS) programme in the Northwest Zone of Nigeria.

1.4 Research Questions

The following research questions were raised for this study on the basis of the study objectives:

1 How effective are the tutorials being used in the Nigeria Certificate in Education by Distance Learning programme?

2. How adequate are the contact sessions being organised for the Nigeria Certificate In Education by Distance Learning programme?

3. How effective is the quality assurance mechanism being used in the Programme?

4. What is the success rate of students of the Nigeria Certificate in Education by Distance learning system in the Northwest Zone of Nigeria?

1.5 Hypotheses

The following hypotheses are postulated for this study on the basis of the research questions raised:

HO1: There is no significant difference between the opinions of the respondents in the effectiveness of tutorials in the Nigeria Certificte in Education by Distance Learning System;

HO2: There is no significant difference between the opinions of the respondents on the level of adequacy of contact sessions being organised for the programme;

HO3: There is no significant difference between the opinions of the respondents on the level of effectiveness of quality assurance mechanism being used in the programme.

HO4: There is no significant difference between the opinions of the respondents on the success rate of the Nigeria Certificate in Education by Distance Learning students.

1.6 Basic Assumptions

1. Nigeria Certificate in Education by Distance Learning System cannot be effective without tutorials;

2. Nigeria Certificate in Education by Distance Learning System is never possible with in effective contact sessions,

3. Nigeria Certificate in Education by Distance Learning System is ineffective without proper quality assurance mechanisms.
4. Nigeria Certificate in Education by Distance Learning System is never successful without high quantity of success rates of students.

1.7 Significance of the Study

The findings of the study would expose the Distance education practitioners and administrators of the NTI (DLS) programmes to more result-oriented strategies for effective tutorials, contact sessions, quality assurance mechanisms thereby enhancing the quality of the Nigera Certificate in Education by Distance Learning of the Institute.

The result of the study would reveal the gray areas of great concern in the training of NCE by DLS teachers by the Institute that need to be adjusted based on empirical investigations and open up insights into the resources to be used effectively in the Institute's Distance Education Delivery System to achieve the mandate of the Institute.

The outcome of the study would also open up opportunities for the traning and retraining of the personnel associated with the implementation of the Institute's Distance Education practice in the use of relevant and adequate resources in training the NCE by DLS teachers across the country.The findings may serve as a basis for modification in the implementation policies of the Institute's distance education programmes by incorporating current globally accepted ideas in Distance Education. The significance of the study extends beyond the constraints militating against effective performance of tutorial functions and contact sessions to the entrenchment of vital options that would strengthen the quality of the Institute's Distance Education practices.

The study would give the tutors and programme operators the necessary feedback that will lead to improvement in job performance in tutorials, the quality of instruction at the study centres

during contact sessions, quality assurance mechanisms and success of the NCE (DLS) programme will ultimately improve.

1.8 Scope of the Study

This study was delimited to course tutors and students of Nigeria Certificate in Education by Distance Learning in cycles three and four (2013/2014 academic session) in the states of the Northwest zone of Nigeria, namely: Kaduna, Zamfara, Kano, Sokoto, Katsina, Kebbi, and Jigawa

CHAPTER TWO
REVIEW OF RELATED LITERATURE

2.1 Introduction

This chapter reviews the concepts of Assessment (evaluation), Curriculum/Curriculum processes; Quality Assurance; Teacher Education; Open and Distance Education; Tutorial Support in Open and Distance Education and Assessment of learner performance in open and Distance Education.

2.2 Assessment: Conceptual Bases

Assessment or Evaluation as it is interchangeably called, refers to the process and tools of obtaining information that would aid rational decisions based on objective, reliable and valid criteria that have been universally accepted within the realm of the academia. It is a process of determining the extent to which desired goals have been achieved.

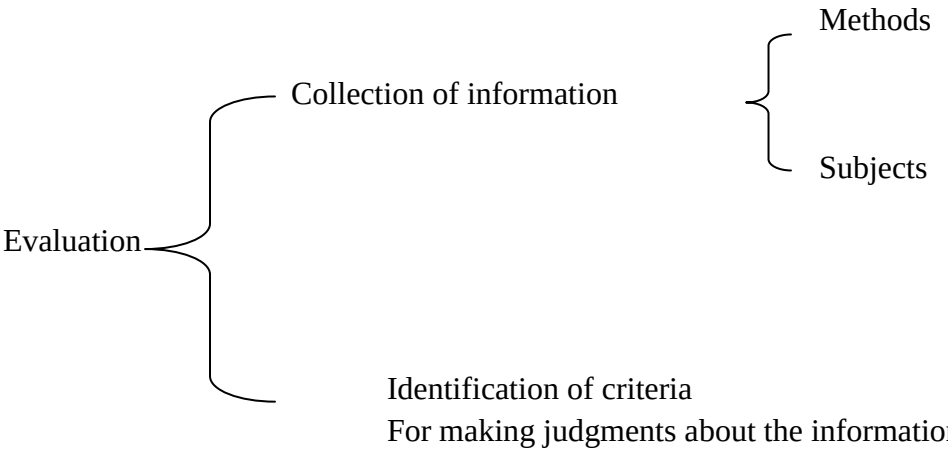
Stufflebean (1971) defines evaluation as the process of delineating, obtaining reporting and applying descriptive and judgmental information about some objects, merit, worth, probity and significance in order to guide decision making, accountability, disseminate effective practices and increase understanding of the phenomena involved.

Shehu (2014), defined evaluation as "the making of judgement about the value of ideas, works, solution, methods, materials, etc. It involves the use of criteria as well as standards for appraising the extent to which particulars are accurate, effective, economical or satisfying. The judgement may be either quantitative or qualitative and the criteria may be either those determined by the students or those given to him".

Yusuf (2012), defines curriculum evaluation as "the systematic process of identifying, assembling or gathering data and making value judgement about such data to determine the

merit, worth and significance of a curriculum…, as the systematic process of determining the extent to which curriculum objectives are being achieved with the hope of suggesting approaches that could lead to improved teaching and better educational activities"

Wrigley & et-al (1980) in Shehu (2014), proposes a schematic definition of the concept thus;



Accordingly, the proposition expressed schematically above means "that evaluation comprises not only the collection of information but the identification and use of criteria for making judgments about the information".

Assessment or evaluation by standard is best carried out scientifically based on specified models believed to be rational and credibly assured.

Atkin (1981), for example, regards evaluation model as a set of steps that can be used by decision makers for the purpose of improving educational programmes. He explained that "the factors to be considered in selecting an evaluation model should look at how appropriate and adequate is the information and the effective application the model is in ensuring effective implementation of the evaluation process".

Sufflebeam (1971), considered CIPP Model essentially relevant, most popular and commonly used by evaluators because of the following reasons:

a. It is concerneds with context: Context centres on planning, helps to define the relevant environment and the formulation of relevant objectives. This is relevant in assessing curriculum implementation, since the success of any curriculum implementation is tied to the environment created for its actualization.

b. Input which is an important aspect of curriculum implementation is part of the model.

c. Process evaluation is necessary for any on-going programme so as to determine its level of effectiveness.

d. Product evaluation helps in examining the output of a programme, and the noticeable changes in the behaviour of beneficiaries.

e. The CIPP model provides a general framework for this study which intends to analysis certificate in education by distance learning system.

The acronym, CIPP means- the context, input, process and product (CIPP) model,

The model is presented in a cyclical figure thus:

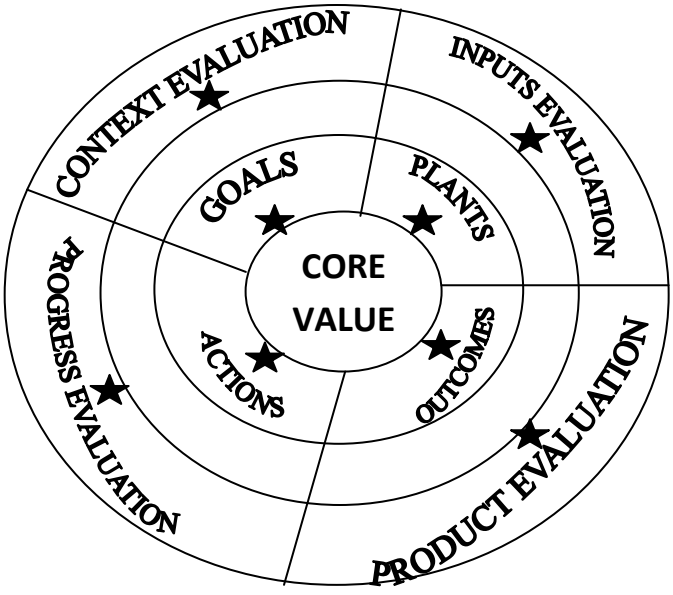


Figure 1: Key Components of the CIPP Evaluation Model and Associated Relationships with Programme

Context Evaluation:

Context Evaluation evaluation provides a rationale for the determination of objectives. It is the most basic kind of evaluation that defines the relevant environment, describes the desired and actual conditions pertaining to that environment, identifies unmet needs and unused opportunities, and diagnoses the problems that prevent needs from being met and opportunities from being used.

The diagnosis of problem enables the evaluator to formulate objectives whose achievement will result in programme improvement. In view of the fact that the analysis/assessment being proposed in the North West zone aims at programme improvement, the context evaluation is ideal.The various methods for context evaluation are primarily descriptive and comparative. The evaluator is expected to describe the status of an educational setting and compare the present, probable and possible system, output. The conclusion made by the evaluator should contain the set of specific objectives for which an instructional programmer can be designed and used.

Input Evaluation:

This type of evaluation provides information for determining how to utilize available resources to achieve the objectives of a programme. The resources required for any programme include both the human and material resources.

Input evaluation involves determining the nature of available capabilities of the programme; potential strategies for achieving programme objectives identified through context evaluation; and the design for implementing a selected strategy.

Popham (1970) had asserted that input evaluation helps decision makers to select and design procedures considered suitable for promoting the achievement of programme objectives.

Ughamadu (1992:97) agreed that the CIPP Model of evaluation provide relevant information for four types of decisions as follows:

a. Planning decision to design objectives

b. Structuring decision of design instructional procedures

c. Implementation decisions to use monitor and improve these procedures.

d. Recycling decisions of judge and react to the outcomes produced by those procedures.

All these are considered are paramount in the act of evaluation/analysis of the distance learning system in the North-West geo-political zone of Nigeria which targets the end product, the students' performance. The proponents of the model recommend that for each of the different types of decisions, a corresponding type of evaluation be used from among the context, input, process and product evaluation stated earlier.

2.3 Participants in Curriculum Implementation

Curriculum implementation, noted Garba (1996) Arigbede (1999), "is a co-operative affair, which involves those within, and those outside the school. Such persons within the school include typists, laboratory and workshop attendants, messengers, cleaners, school administrators. The internal participants cooperate with the teacher to ensure that within available means and time, his work is carried out effectively.

They act as fillers of functions that teacher cannot easily do and still give maximum time to the planning and teaching of his lessons. The functions for example include the typing of examination papers, preparation for practical, in science laboratories and technical workshops, running errands between the teaching and the administrators.

Those outside the school include the Parents – Teachers Association, (PTA) the proprietors, Ministry of Education officials and Inspectors. The P.T.A. helps in the provision of

instructional materials, enforcement of curricular decisions. The proprietor determines what can be done at any particular time in the school with the resources he makes available, while inspectors ensure that quality is maintained. Thus, while the teachers are directly charged with the responsibility of teaching the students, their success or effectiveness is dependent upon, or tied to how well other participants are willing and committed to executing their roles.

2.4 Delivery Modes in Distance Education

Delivery modes or strategies are the essence of distance education, the world over. It is the element that distinctively differentiates distance education from conventional learning in what may be called 'sit-tight or regimented learning institutions'. This view has been expressed by Harrison (1989) who said "it serves as a core element on which the principles and operations of distance education rest".

Distance education has diverse operational delivery patterns across different countries of the world depending on their peculiar situations and levels of technological developments. Prominent among these include correspondence study.

In correspondence education, the course contents are structured by the course writer who explains and elaborates on the textbook to be studied. Peterson (1991) observed that "anything the learners does not understanding should be repeated, the use of time, carefully explained, when to study, how to develop reading habits that will assist studies" and concluded by emphasizing that "the achievement of the autonomous correspondence learners is dependent to great extend on the efficiency and channel of communication from the learners to the tutor and from the tutor to the learner".

Olayemi (1990) also stated that “two way communications is essential to reinforce and individualize the learning process in order to reduce the rate of possible misunderstandings” and called it “a major factor in correspondence system”.

Contributing to correspondence approaches, Moore (1988) identified course writing, the subject, the learners, the lessons study guides, course units the syllabus and the assignment as basic elements that vital to the overall application of this concepts. According to him, course writing simply means “writing of a course of instruction on a subject, the subject matter selected as issues to be taught from a small syllabus prepared usually by the course tutor, presented in serial order called a lesson using units or topics in a process called lesson and given inform of correspondence study with specific instruction on what the learners is expected to of which is called as assignment”.

Bown, (1981) also maintained that “course writing in correspondence education is learner’s booklet on study techniques in general. The special techniques for each subject will need explanation in the introduction to the subject. And that it is in the introduction of the subject that the tutor by correspondence can “establish that personal relationship between the tutor and the learners which carry the learners happily and interesting into the study of a subject matter”. Oyedeji (1989) concurred by saying that “for effective implementation of correspondence education, there is the need for a courageous approach towards incorporating affordable media based techniques as in the case of radio and television which is gaining considerable popularity among the learners to enhance and facilitate correspondence education especially in developing countries”.

Course development and writing of correspondence materials must convey relevant, concise and self explanatory information that will assist the isolated learners in assimilating the

course contents with little efforts. Therefore, the task of developing course and content materials must involve various experts/specialists that work in teams and in concert with Distance education principles. This confirms the need for inter-disciplinary and multi-disciplinary approach to course development in Open and Distance education.

Generally, correspondence study is considered as one of the earliest and crudest forms of distance education in which students solely relied on study materials sent by correspondence by their host institutions. This mode of delivery is today seen as lacking in providing for any physical contact between/among teachers and other students of any sort. Similarly, it has been criticized as diametrically opposed to the definition of distance education in the 19th century, for example, that possess the inherent support elements most of which are taken to mean delivery modes.

According to Peterson (1991), the theory of correspondence study "is not primarily associated with individual study" which can be construed to mean that by reflection, correspondence study limits the autonomy of learners to drive maximum benefits from other delivery outlets.

One other obvious problem associated with correspondence delivery system is the absence of personality torch. The necessity of counseling distant learners has not been appreciated as a dependable achelon in distance education delivery. Experts in correspondence study have over the years, intensified efforts towards bringing personality into correspondence education system in order to bridge the gap between and the learners and the correspondent tutors.

Correspondence study by its nature, does not allow for any physical appearance of both learners and tutors and does not as well provides for immediate two-way communication, the rason why Gerrald (1989), claimed "may require the use of other forms for media to facilitate and re-enforce learning".

Parraton (1989), considered organized contact sessions in which the correspondence learner is provided with advises, assistance and encouragement, and suggested a "completely written correspondence course, with professional abstractions efficiently fundamental for correspondence education".

It is important to note that the communication pattern in correspondence education is highly complex and not fully understood. For instance, the problem of isolation with its obvious consequences may result into high rates of drop-outs.

On the correspondence course writing approaches in distance education, Milton (1983), outlines the following to be the most effective process of course writing and development - that a consultant, usually an academic of senior level, reads the materials produced by the course writer, comments on it and provide academic credibility to the course by lending his name to it. He further stressed that a course writer is usually on part-time assigned to one or more unit to write guided by a syllabus and following a defined format. The drafts, he said are submitted to the centers' respective subject coordinators or tutors for necessary corrections and modification while the final drafts is presented to the subject tutors and editors which takes close a period of six months or more depending on the nature of the course.

Harrison (1988) also maintained that the course writer's role is similar with that of a full time subject teacher in the conventional school who works in collaboration with part time tutors and

other school staff such as the typist and printers in the course preparation. Explaining further, Harrison stresses again that course writing is an enormous task because of the materials and notes that any institution teaching by correspondence must take into consideration the following factors. The preparation of the teaching materials, the distribution of teaching materials and the correction of students' written and practical works".

In line with this thinking, Emmeline (1990), observed that "the Open Learning Institute of the Queens University of British Columbia has small course teams usually consisting of one writer and one course designer having complementary roles to play as specialist in subject presentation, materials development and course writing. The course writer may be an employee of another educational institution hired by the institute to produce the course while the course designer may work with several writers and be an employer of the institution".

This enough lending to the crucial roles of an editor in the development of course materials in distance education failing which the essence and interests of Distance Learning/Learners may be confused and difused into unconventional distance education study materials rather than facilitating/assisting the learners.

Osuji (1981), agreed that the main task for the distance learning providers "is to demonstrate high sense of dedication in the principles and practice of correspondence teaching, planning and application as in the face to face teaching methods" and recommended an approach of course structuring using syllabus contents through proper presentation, providing assignment and supplementary materials for residential sessions.

Planning for the success of Distance Education entails the provision of what Harrison (1989), calls "facilitating delivery factors such as printed materials, broadcast facilities methods of delivery, personnel and correspondence teaching materials".

Garrison (1989), agreed that correspondence teaching materials are:

a Effectively prepared;

b Professionally distributed;

c Adequately assess students' performances; and

d Evaluate entire academic work.

2.4.1 Effectiveness of Distance Education Delivery Modes

The success of distance education is dependant upon the effectiveness of the delivery modes of the Institution and choice of the distant learners and largely based on their availability and affordability.

Desmond (1989), classified the modes of distance education delivery as "print, audio, video, computer based or teleconferencing and asserted that majority are print based".Peterson (1991), claimed that the "print based covers all forms of written correspondence course or lecture carefully and sequentially arranged by a distance education course tutors and sent an isolated distant learner, necessitated by the gap or distance between him and the tutors". Ezeani (1984), says, "Print based mode of delivery can be supported with the use of set kits or materials to assist the learners during self study of the course prepared in modules"

In the view of Moore (1988), another interesting aspect of the course is by newspaper in which the learning materials are not dispatched to the learners and through video for demonstration and simulations".

Desmond (1989), also listed video-conferencing, low power Television, closed circuit television service and cable television, Video tapes, files graphics slides and data as recent innovations in the audio based modes".

Holmberg (1989) ,maintained that closed circuit television is "relatively low in cost and often used in rural areas between 10-12 square kilometers while the close television, he says, is privately used with hardwired system often used on compuses and the instructional fixed television service uses micro-waves technology for one way or two way audio and video transmission to cover a radius of 50 kilometers.

Moore (1988), again said "the cable television offers a two way communication for instructions that wish to send local programmes to the cable station. Under this method, the information is distributed to the community by a way of special access channel on normal cable".Peterson (1991) also believed that "the use of television is the most attractive complex and expensive delivery mode amoing most provider because it requires a powerful dedication as he put its own the pa,rt of the distance education and the public television broadcasters and personnel".Milton (1983), stressed that television added appearance and movement ot the teaching process which including to him improve and reinforces teaching and its goes along way in improving variety of teaching methods.

The audio-based according to Michael (1980), centre around audio-cassettes that are transmitted over the radio which he considers cost effectives and can be used to teach learners with literacy problems and language.

According to Gerrarld (1989), radio broadcast has relative advantage especially in developing nations. This, he stresses further, explains why radio is extensively used. The

advantages of radio are in its affordability and its ability to reach the isolated audience quickly and relatively in expensive. In addition, he says the audio bases are simple to operate, durable and portable. The learners have the ability to control time and place it which learning takes place, it can be reviewed and replayed as may be required and provide a confidential two way access between the tutor and the learners.

Ranly (1988), commenting on the computer based delivery code applicability in distance education programme, maintained that the cost of developing a valid system are relatively high and will remain so for many years to come, especially in developing nations, on the other hand, Desmond (1988), sees computers as the medium in which educational programmes that fall within the definition of distance education are based. Commenting further, he says a number of institutions have develop computer based education programme and a reaccredited for use in the distance learning system.

Gerald (1989), claimed that the computer teleconferencing is the transfer of information from one computer to another in which case, the learners of any number at site can engage or participate in a live interaction by entering message at the keyboard and reading message. As they appear on the screen, the computer can hold message until the users check in. other form she says include the telephone and the touch phones, electronic blackboard; fax machine, compressed video and cable television among others. Distance education can be expensive in its operation, especially in planning, management and programme development. The administrators should therefore, consider the appropriate delivery modes that the institution can afford such that will reach the audience of the learners and provide better instruction to replace the absence of personally as in the case of the conventional schools system.

Harrison (1989), said “the use of radio in particular, depends strictly on the use of sound” and for it to be effectively utilized; it must be tied to the minds and imagination of the listeners.

Homberg (1989), stressed on the reason why radio and television are increasingly being used in modern education. According to him, “it is because most countries want to increase the extend and variety of education provided to the people and to possibly reduce the constraints of inadequacy of qualified personnel, barrier associated with distance between the tutor and the learner indeed, to reach the people in remote areas, extend education also to those who are in employment, who may not be privileged to leave their places of work for further studies”.

It is also believed that television improves and re-enforces teaching /learning as certain subjects depend heavily on demonstration and this holds lasting effect through articulated radio and television educational programmes. Hence, the need for educational expansion in developing nations using radio and television especially in the teaching of educational programmes for distance learning institutions at the national and local levels.

The case of Malawi, Kenya and Tanzania that have used radio and television to facilitate teaching by distance, support the view point expressed above, the challenges associated with effective use of radio and television, notwithstanding.

The use of radio and television as educational broadcast outlets requires the application of skills and professional expertise to present a clear and simple illustration of subject contents of educational significance to facilitate distance education system. So also it is important that educational radio and television presenter/producer or programmers are adequately trained, which according to Clerk (1982), “can help bring to bear the barriers of students’ physical absence in the teaching and learning processes”.

2.4.2 Support Services in Distance Education Programmes

Learners' support services are very crucial in the overall delivery of distance education programmes. Support services in distance education reinforce, facilitate and provide grounds for consultations and clarificatios at different levels learning. They provide clues to the effective sourcing and utilization of library resources including e-learning reference mateials and online interactions through local and wide area connections that link distant learners to remote and wider locations, easing the shackles involved in distance education.

Milton (1983) observes that "support service helps in bridging the gap created by poor communication arising from course materials and also affords the tutor and the learners the opportunity to dialogue, clarify and correct issues puzzled by the ODE course materials. He argued for the use of adequate counseling approaches for assisting the distance learners admists possible emotional, vocational and academic problems.

Oyedeji (1990) believed that "the use of proper practical work as a support in laboratories especially for science-oriented course will assist in reinforcing teaching and learning process".

In a study conducted by Bakshish (1985), on the "use of various forms of support service by distance education institutions among selected nations" noted that India uses community television viewing and listening centre to support their distance education programme; Spain spends lots of money to establish study centres, while the United Kingdom gives financial support in form of grants in their distance education programmes, in addition to equipping 85 study centres, setting up nine (9) transmitters in 9 cities, and equipping laboratories and libraries to provide support service to the distance education programmes, etc."

Shehu (2014), maintained that, “the National Teachers’ Institute has been training and upgrading teachers to the required minimum teaching qualification (NCE) in the country through distance learning system and its strength has been more tended to print materials”. “Relative considerations have been given to the provision of the required qualitative learner support facilities/services in addition to their effective implementation by well trained personnel in the system”, he continued. These assertions were evidently confirmed by series of other research findings”.

All these explain why various countries adopt the use of support service in the facilitation of their distance learning programmes.

2.4.3 Challenges of Delivery Modes in Distance Education

No doubt, there are a number of challenges associated with the use of broadcast media as deliver modes. For instance the substance or information transmitted by the broadcast media may be lost or disintegrated before reaching the intended audience due to poor expression of the words of communication as in the case of radio. Television on the other hand may provide incoherent or disjointed piece(s) of distance education materials whenever there is a shift in focus or the learners’ attention are diverted by something else as the programmes are being aired.

In addition, the broadcast media do not contain any in-built feedback mechanisms to bridge the dire feedback need of the learners of create possible interaction chances between the presenters/teachers, learning materials and the students. Thus the gap keeps on widening with relative remedial assistance to overcome them.

Parraton (op-cit) observed that most people believe that radio is “considered more of a medium of disseminating information and entertainment”, while Peterson (op-cit) observed Television to be “basically a medium of entertainment” rather than a tool for teaching.

Perraton (1989), put that the “dimensional effects of radi and television programmes are misunderstood especially by people of lower education standards” and further stressed that “in radio and television broadcasting, programme competition becomes inherent conflict between educational programmes of the government and that of the distance education ideology and programming especially on methods of broadcasting correspondence course materials and inadequate trained programme personnel, poor financing, low supplies of equipment and added the ability of most of the learners to efforts the equipment especially, the television sets.”

In view of the opinion of Parraton (1989),, above, Holmberg (1990) suggested a synagy between the course tutors and the radio and television broadcaster in programme presentation.

The strength of radio pragramming is clearly underscored by the opportunity it offers in repeating exactly to the hearing of distant learners what is in the correspondence or study materials in lesson form, presents the same facts in various works and present additional information to give a broad understanding of the course contents, especially when talk experst are deeply invoved. This means that a lot of more is required to determine the most suitable medium needed to effectively reinforce distance education programme such as the use of dialogue and conversation on radio presentation.

Technical expertise is highly required to make live and repeated broadcast of radio, television and correspondence teaching effective. Therefore radio and television tutors have some peculiar expertise and charisma to present programme that will readily capture and hold the minds of the distant learners for a considerable length of time and instigate thoughtful analysis of the content being aired by them. They must be able to speak as the course tutors/writers, use the same style and tone and make the learners fell as if it is the course tutors that have come to the air or appeared on the screen.It is however, necessary to stress here that one of the most crucial

aspect of media presentation is an expert broadcaster who is expected to be vast in the art of broadcasting in order to take full and efficient advantages of the short air time as much as possible, to make clear the content of what ther are broadcasting to their isolated distance learners.

On the implications of delivery modes, Moore (1988), pointed that "because of inadequate funds and the level of technology advancement, institutional providers becomes principally affected in the choice of delivery modes to be considered". It is difficult for any institutional provider to combine all the major delivery modes in the teaching-learning process considering the huge sum of money required to operate facilities like computer, radio, television and satellite facilities, he continued.

Garrison (1991), supported Moore (1988), and further opined that inadequate cooperative assistance from institution of higher learning and personne; proximity of the study centers to the distance learners; inadequate library and laboratory facilities frustrate the efforts of the isolated learners especially those in remote and rural area.

Planning and implementation of correspondence materials takes longer time to be put in use and because of the absence of immediate two-way communication, physical presence of the students teachers in the teaching and learning processes, the need and impact of the resources could hardly be felt.

Ranly (1988), concluded that counselors and part time tutors for tutorials pay little or no attention to their duties and most distance learners do not have access to facilities like libraries, study centre etc, due situational factors which may affect programme implementation and the learners adversely.

2.5 Quality Assurance in Distance Education

Views on Quality Assurance feature mainly on chosen standards of criteria; the relative nature of quality; services as well as products; perceptions as well as measured outcomes; and relevance. Additionally, everyone agrees on the desirability of quality though judgments differ according to whose views are being sought; for example, there is an amalgamation of different meanings under the label quality. To large extent different stakeholders have different perspectives on quality; and different functional areas within a single organization have different views and this is because 'quality' does not exist in isolation from its context of use. Significantly therefore, Priorities vary according to who is making the assessment about quality assurance and for what purposes the assessment is being made.

Quality assurance is a process directed toward achieving that characteristic. It is the set of activities that an organization undertakes to ensure that standards are specified and reached consistently for a product or service. Quality control on the other hand operates retrospectively, 'inspecting out' or discarding faulty products that fail to conform to a predetermined standard. Nevertheless, Quality control and quality assurance, together with the assessment of quality systems such as the monitoring, evaluation and audit of procedures are overlapping functions in regulating how an organization or venture works. All of these tasks have a role in quality management approaches, the best known of which is total quality management.

It should be noted therefore that Quality assurance involves pro-active measures taken to avoid faults; just as Quality control involves re-active measures taken to remove faults; and so therefore Quality assurance plus quality control plus continuous monitoring and evaluation equal total quality management.

2.5.1 Quality Assurance in Teaching Institutions

Though 'quality assurance' may appear to be a recently applied term in the educational context, there is nothing new about educational organizations' undertaking systematic review and inspection of products and services to ensure their quality. More recent use of an emphasis on the label, quality assurance', can be attributed to factors such as the following:

- Governments' interest in return on public investment in education relative to other areas of expenditure;
- The assertion that education and training is essential to economic recovery, growth and competitiveness.
- The assertion that the institutions responsible for education in the recent past have failed in their mission to meet demand because of ivory tower or anti- business attitudes; and
- Insistence that education costs should be reduced and educational organizations made more accountable.
- Discussion: Does this list of external factors fit with your participants' experience? Do they have other factors to add?

2.5.2 Total Quality Management

Since after Nigeria Independence, industries have moved increasingly from quality control to measures taken to remove faults at the end of the production line to a more pro-active process called quality assurance measures taken to avoid faults. Even these measures were insufficient to enable them to reduce error costs in order to compete in increasingly global markets. Out of this need for more effective ways to increase and assure quality of products and services developed the system known as Total Quality Management.

West- Burnham (1992) outlines the basic points of total quality management as the following.*Table 2.1Basic Points of Total Quality Management*

Element	Purpose and scope
Focus	Internal and external customers
Definition	Meeting costumers requirement
Scope	Every aspect of the organization
Responsibility	Everyone
Standard	Right the first time (fitness of purpose)
Method	Prevention not detection
Measurement	Zero defects
Culture	Continuous improvement

2.5.3 Development of a Quality Culture

According to Mintzb`erg, (1979) Quality initiatives will inevitably flounder if the organization implementing them does take into account its organizational cultures. This requires recognition that education organizations are not 'people-incidental' systems. Rather they exist critically as the creation of their staff and learners.It is often assumed that all employees, regardless of their terms and conditions of employment, share the same vision. Rather, education organizations tend to possess a plurality of cultures that significantly influence their operations. Most education organizations can be characterized by at least the following cultures (drawn from Mintzberg 1979 as presented in Lenttell 1995):

- faculties and schools: the 'professional brureaucracy'; and
- Administration and operations: the 'machine brureaucracy'.

A ‘quality culture’ in educational terms is one that puts the interests of the learner and the facilitation of learning at the centre of its activities at every level, constantly striving to improve the effectiveness and efficiency of this activities in every way possible.

The variations in working conditions, takes and roles, and levels of commitment among employees shape their attitudes to their work and their vision of the organization. For example, professional staffs are more likely than support or administrative staff to be critical of attempts at ‘shared vision’ and more protective of their autonomy.

Tait (1997) suggests that creating a commitment to quality assurance among all employees, whether support or professional, requires managers to recognize the following.

- The importance of a mechanism of self-elevation in relation to meeting quality standards, so that professional staff and academic staff in particular feel they own the system;
- The connected importance of peer review and sites visit by external experts accepted by unbiased specialists in the field.
- The importance of reporting in such a way as to facilitate development and improvement
- Relationships between outcomes of a quality review system and funding, which should not be directed and rigid since this will lead to a ‘compliance culture’ rather than a real interest in qu,ality assurance.
- Discussion: ask participants to provide examples from their own experience of variations in organizational culture and how they deal with them in implementing quality assurance strategies.

2.5.4 Quality Assurance and Internal Efficiency

Three factors which are considered important in determining standards in teacher education are the process of selection into training, the programme of study during training, and the institutional factors that relate to teacher preparation. Each of these factors will be considered in turn, with particular reference to the CEOs.

Much has been written on the selection process for would-be teachers. The International Labour Organization (ILO) recommends that teachers should be selected on the basis of moral, intellectual and physical qualities. In UK, applicants must be seen in face –to-face situations and must be seen possess certain personal qualities and characteristics before they are admitted for training (Lassa, 2000).

Nigerian institutions have in the past varied in the criteria they have used, some being much more thorough than others (Urwick, 1987). In facing the realities of the present shortage of applicants, CEOs are certainly not likely to be rigorous about personal characteristics. The main emphasis of the NationalCommission for Colleges of Education (NCCE) is on prescribing the minimum academic qualifications mentioned earlier.

The regulation of the curriculum by the NCCE, described earlier, extends to the pre-NCE programme (i.e. the remedial programme). Standards are also prescribed in detail for institutional factors: staffing, physical facilities, administrative leadership, discipline and funding. All of these widely considered to be critical for quality assurance (Lassa, 2000). The NCCE enforces these standards through periodic accreditation visits, and completed the second round of such visits in 2000-20001.

2.5.5 Teacher Quality in schools

Overall, teacher quality at the primary level seems to be low and this reflects on the various part-time and sandwich programmes in which many are trained. There are complaints that the teachers produced by these programmes can barely write an assignment. The fact that even with increased availability of upgrading opportunities for NCE, most teachers are upgrading to Teacher grade II does not help matters. Since Grade II is a stepping-stone to the NCE, it is expected that these teachers would eventually upgrade to NCE.

Teacher quality is no less reduced at the secondary and post-secondary levels. While at the secondary level the same upgrading phenomenon and lower quality output is evident at the university level, the "brain drain" affecting the more able and experienced lecturers is a major problem. The reliance on inexperienced lecturers affects the quality of students' work, and so of lecturers of the future. This vicious circle contributes to the low status of education faculties. However, attempts are being made to sharpen the skills of lecturers and to arm them with knowledge of fundamental concepts in teaching.

Morale and Status of Teachers

The problem of teacher education cannot be detached from the continuing low morale and status of teachers in Nigeria. These are attributable, to a large extent, to poor incentives to improve performance, very poorly equipped working environments, inadequate social recognition, powerlessness and lack of control over working conditions. The old problem of late payment salaries, too, is again present in some states. Studies conducted in different states provide evidence for these points (Makoju, 1998; Nwangwu, 1997). In these circumstances, there are

thousands of under-qualified teachers in the system, and this in turn attributes to the low professional status of teaching.

Table 2.2 College of Education by Gender in selected states

S/N	State	1999/2000 MF	1999/2000 F	1999/2000 FPR*	2000/2001 MF	2000/2001 F	2000/2001 FPR*
1	Abia	1383	1109	82.25	1198	852	71.12
2	Anambra	4511	3951	87.6	5319	4977	93.7
3	Edo	2991	2084	69.7	3431	222	64.8
4	Ekiti	3250	2171	66.8	3352	2610	77.9
5	Ogun	4551	2793	61.4	5886	3730	63.4
6	Adamawa	3875	1481	38.2	5211	1792	34.4
7	Jigawa	2061	477	23.1	1989	881	44.3
8	Katsina	2782	510	18.3	3062	526	16.9
9	Kebbi	1807	337	18.7	1999	470	23.5
10	Yobe	1420	250	17.6	2266	417	18.4

Female statistical digest on colleges of education. Vol.6, 2002

The task of improving teacher's welfare and commitment to their work must be sufficiently addressed in any policy reform framework. This is a matter of recognizing the significance of the services they render to the nation, since, as it has been rightly observed, "the kind of teachers trained and posted to a school may well determined what the next generation of Nigerians will be" (Lassa, 2000). In the context of the UBE policy, it is particularly important to minimize the shortcomings of the past UPE programmers' as far as teachers are concerned. In the planning process, as Urwick (1987) obsessed, due attention needs to be given to "the existing profile of

teachers' skills qualifications, the cost of improving this profile and the existing size of teaching force".

2.5.6 Checklist for a Quality Assurance Programme

Quality assurance focuses attention on operational processes and systems that has three main elements:

- Set standards for a product or service.
- Organize the production or delivery of a product or service so that the standards are consistently met.
- Create confidence in the client or recipient that what is promised is what will happen.

In order to implement these procedures, it is helpful to ask the questions in the following quality assurance checklist.

QualityAssurance Checklis

Quality policy plan

- Has your organization developed a policy on quality with which all staff are familiar?
- Has this quality been translated into a practical plan?

Specification of standards

- Are specified and clearly defined standards in place?
- Have they been communicated to all concerned?
- Are they specified for key activities?
- Are they achievable?
- Are they reasonable?
- Are they measureable?

Identifying critical functions

- Have they critical functions for achieving the standards been identified?
- Have they taken the learner as the starting point?
- Have the procedures to achieve them been analysed?

Documentation

- Are the procedures to e followed clearly documented?
- Are they explicit?
- Do they represent facts or fiction?
- Are they consistent in different documents?
- Are they concentrated on essential procedures?
- Are they in a readable and user-friendly form?
- Do all those who need them have access to copies?

Staff involvement

- Has all staff been involved in the development of quality assurance?
- Have their suggestion been built in?
- Has enough time been given to this process?

Monitoring

- Are there systematic monitoring mechanisms for critical functions?
- Do they check weather standards are being met and procedures followed?
- How do you know?
- Are the findings disseminated?
- Are they harnessed to appropriate action?

Do they result in improved performance or a review of practice or reappraisal of standards?

Do they provide effective feedback loops between providers of products and services and learners or clients?

Training

- Is there adequate provision of training and staff development?
- Is this linked to the achievement of standards?
- Are they effective mechanisms for accessing training needs?
- Are this reviewed regularly?
- Are there resources allocated to meet them?

Costs

- Is there a strategy for monitoring the cost of implementing and maintaining quality assurance activity?
- Does this strategy take account of human and financial costs?
- Are the costs greater than the benefits?

Is there a review process to find out?

It must be understood therefore why Sallis (2003) maintain that it is by following the guidelines provided here that quality assurance can be effectively assured.

2.6 Teacher Education

The teacher is central to the process of education. Teacher education is considered to be the foundation for quality and relevance in education at all levels. The National policy on education (3rd edition,1998) clearly articulates the importance attached to teacher education in affirming that *"no education system can rise above the quality of its teachers".* According to the policy, the goals of teacher education shall be:

- To produce highly motivated, conscientious and efficient classroom teachers for all levels of our education system.
- To further encourage the spirit of enquiry and creativity in teachers.
- To help teachers to fit into the social life of the community and the society at large and to enhance their commitment to national goals.

- To provide teachers with the intellectual and professional background adequate for their assignment and to make them adaptable to changing conditions.
- To enhance teachers' commitment to the teaching profession. (NPC,3rd edition,1998,p33-34)

In addition, the policy stipulates that the Nigeria Certificate in Education (NCE) shall be the minimum entry qualification into teaching and provides that all teachers in educational institutions shall be professionally trained in relevant teacher education programmes. It requires that teaching services shall be so planned that teachers can transfer from state to state without loss of status. The current reality, however, is that the policy making the NCE the minimum requirement is not yet fully effective and neither is the transfer within states without loss of status. Teachers who have transferred have had to accept a lower status while some state governments have totally retrenched who are non-indigenes.

The excellent intentions of the NDE contrast with the massive challenges that teacher education in Nigeria faces. As the mobilization efforts of the Universal Basic Education (UBE) policy result in increased enrolment in primary schools, the issue of teacher capacity to respond to the demand assumes greater importance.

This challenge is no less real at the post-primary level, where daily teachers are expected to devise learning experiences which make schooling more enjoyable and relevant. Unless they make such efforts, even more young

people will take the decision to leave the school before completing the intended nine years of basic education. At the tertiary level, teachers face the intractable problem of working with dilapidated facilities even for the most sophisticated courses. Across these levels, teachers are generally expected to make the best of every situation.

To what extent are teachers equipped for the task assigned to them in the National Policy? What manner of education do teachers receive and what retraining opportunities are available for them? What support services are put in place for teacher professional development on is subsequent professionalism? This chapter attempts to address these issues.

2.6.1. Access to the teaching profession

Various routes of entry into the teaching profession are provided by different kinds of institutions. University faculties of education and schools of education in polytechnics and colleges of education (CEOs) provide pre-service teacher education. The National Teachers Institute (NTI). The latter also provides a new "pivotal" pre-service programme. One would not be wrong to infer that there appears to be many opportunities for anyone who is interested and minimally qualified to enter the teaching profession. Indeed, a one year remedial programme has been introduced to give candidates whose entry qualifications are not up to required minimum (of two to three) school certificate credits to remedy to defect before moving on to the full NCE programmes.

The emphasis on the NCE is a result of the policy (effective since 1997) that this should be minimum qualification of teaching. The policy was given a boost by the establishment of the National Commission for Colleges of Education (NCCE) in 1989. It led to the phasing out of the grade II Teachers' colleges in states where the deadlines for upgrading to NCE were met.

2.6.2 Teacher Demand and Supply

A major problem which the country faces is that the above measures, which might have been expected to raise the status of teaching, have not prevented a decline in the demand for pre-

service teacher education. A nationwide survey of secondary school pupils conducted by the NCCE (2000) found that less than 8% expressed a wish to enter colleges of education. In the selection examination for polytechnics and CEOs, held in the 2001/2002 academic year, the 14,338 candidates who applied for admission to NCE programmes represented only 22.4% of the intake capacity of the NEOs (NCCE 2000). Consequently, the CEOs have had to depend on mainly on their remedial programmes to fill NCE places. Furthermore, using data from 12CEOs over a three-year period ending in 2001, observes that a small and diminishing proportion of NCE students are specializing in primary education. They tend to prefer courses which would enable them to register for degree programmes or join non-teaching careers after graduation. Although it is recognized that the NCE programme is structured in such a way that every NCE teacher can teach in a primary school, yet the fact that these teachers may be mostly subjects specialized leads to the conclusion that their focused and interest is subjected matter rather than methodology as well in order to handle the delicate task of educating children at that level.

The same study, examining the supply and demand situation in four states, finds that the output of the NCE primary teachers falls far short of the demand.. Although containing a sample of only four states, illustrates the issue at stake..As shown in the table, for instance, Kaduna state required 1,349 new primary school teachers for the year 2000/2001, but of the expected output of 1,609 from CEOs located in the state, only 290 (18%) were primary specialists. In the same vein, Taraba state needed 3,509 new primary school teachers, but could expect an output 395 from the CEO of whom only 170 (43%) were primary specialists. Only limited help comes from inservice upgrading programmes: the output of the NTI's Distance Learning System, example, fell from 24,359 in 1994 to 7,606 in 1999 and has maintained an annual average of 3,500 since then..At the national level, the proportion of primary school teachers holding the NCE or higher

qualifications rose from 39% in 1996 to about 56% in 2000 (lassa,2000). But at the state level in 2000, the proportion varied from about 30% to 70%. In certain states more of the under-qualified teachers are, even now, upgrading to grade II rather than NCE. This is an encouraging trend, in a way as the teachers have to upgrade to grade II first before moving on to NCE.

Meanwhile, many NCE holders remain unemployed while the colleges of education jointly graduate over 30,000 NCE teachers yearly from full-time studies with relatively steadily increasing enrolment which peaked at 151,578 in 2001. The irony of this situation is that this available pool of teachers is not being utilized even while the cry against inadequate supply of qualified teachers is growing strident. In fact, fears are expressed that the PTTP graduates have joined the pool of unemployment teachers.

Table 2.3: colleges of education, by state, by NCE primary specialized output, by state new primary teacher requirement
2001/2002

State	.% NCE primary specialists	Total state enrolment in NCE primary specialists course	State primary teacher demand
Kaduna	14	950	1,349
Imo	28	363	3,500
Taraba	33	992	2,346*
Adamawa	24	333	1,000**

Taraba has a very large number of religious instruction teachers; this figure is based on current teacher numbers in primary schools exclusive RI teachers.

Figures for Adamawa could not be verified, but the demand is well over 1,000 additional teachers.For secondary school level, world bank survey (2003) indicates that here too there are serious gaps between demand between demand and supply of teachers, resulting in many over-size classes. Every area of the curriculum is under-serviced. This situation is partly explained by low and poor-quality enrolment in university faculties of education. In the 2001/02 session, for

instance, only 2.2% of the candidates in the University Matriculation Examination (UME) applied to study education, whereas 25.8% applied for administration and 20.3% applied to study social sciences (JAMB, 2002). Education would recruit mainly those who were denied access to their field of first choice. The resulting belief that teaches are the "academic dregs" contributes to their low status.

The supply of qualified teachers for the pre primary level should not be overlooked, since the government has a responsibility to promote suitable teacher education for this level. This is being done in the NCE programmes with courses available for teacher trainees in early childhood education. The demand for properly trained teachers at the pre-primary level arises as more women engage in work outside the home.

2.6.3 Content of Teacher Education Programmes

The statutory responsibility for teacher education is vested in CEOs, institutes of education, polytechnics and NTI (by distance learning system). Teachers are also trained in university faculties of education for B.ED, B.A.Ed. and M.Ed. programmes. CEOs award the Nigerian Certificate in Education (NCE) which is a sub-degree but professionally demanding diploma obtainable after three years of full-time study in CEO. These CEOs can therefore be said to be the core of the teacher-training system, expected to produce teachers for the primary and junior secondary levels.

Lassa (2000) identifies four major requirements for a teacher preparation programme: generally studies, educational studies, studies related to the students' intended field of teaching, and teaching practice. It is considered that these represent a widely accepted pattern of teacher education. Teacher training in Nigeria adopts this general pattern although with variations in

breadth and depth. In the past, it was left to the various universities to prescribe minimum standards for their affiliate colleges of education.

Since its establishment in 1989, the NCEE has three times laid down "minimum standards" for the COEs, the most recent edition published in 2002. The admission requirements for the NCE programme under the minimum standards (2002) specify an SSC, NECO or GCE 'O' level with five passes in five subjects with English, including three credits at the same sitting or four credits at two sittings. Two of the credits must be relevant to the course the candidates wishes to offer. Credits in English and/or mathematics may be required in some courses to meet departmental requirements. A Grade II Teacher's Certificate (TCII) with at least five years of post-qualification teaching experience, with or without the required number of credits, is also acceptable. Candidates can also apply with an associate Certificate in Education (ACE) at merit level and candidates who are successful in the pre-NCE final examination are also admitted. The selection process is done through JAMB.

The minimum standards were designed to produce teachers exposed t the breadth of studies covering all that is required to make them competent professionals. The academic level reached is equivalent to that of the third year of a university bachelor of education programme. The third edition of the minimum standards has, in response to increasing demand on teachers in the field, increase the number of credits in primary education, studies (PES) that are compulsory for all NCE holders. Courses such as computer education, mathematics and general English have also been made compulsory for all NCE students. Also, relevant themes, besides the Nigerian constitution input of general studies, have been infused into the NCE curriculum. These themes include environmental/conservation education, population and family life education, STD/HIV/AIDS education, and drug abuse and women's education. The objective is to improve

teacher's capacity to communicate, and to provide necessary guidance outside their subjects of specialization (NCCE, 2002).

Recent reports from classroom research (Aarons, indicate that there are other specific improvements needed to the training that teachers received. Deficiencies are identified in teachers' knowledge and skills in the area of language. They are found to need more skill in teaching initial literacy, number and basic science concepts in the children's mother tongue, more ability to manage children's learning needs during the transition to English as the medium of instruction, and more awareness of the importance of language across the curriculum. It is also suggested that they need additional training in the use of instructional time, in promoting active learning, in assessment techniques, and in teacher teamwork. An important issue is whether these needs can be best met through pre-service or through school-based in-service, training.

2.6.4 Opportunities for Teacher Professional Development

The National policy on education (1998) provides that "teacher education shall continue to take cognizance of changes in methodology and in the curriculum" and specifies that "teachers shall be regularly exposed in innovations in their profession". It recognizes the need for in-service training "as an integral part of continuing teacher education". There is however, a contrast between opportunities for upgrading and those for continuing professional development.

Programmes to upgrade qualifications are available and easily accessible to teachers in service from variety of institutions already listed. The Cos offer sandwich programmes leading to the NCE by correspondence and vacation courses. Many universities offer part-time B.Ed. programmes. The NTI, as we have mentioned earlier, offers various upgrading programmes

through distance education. Teachers themselves consider such programmes to be widely available.

In the area of professional support through school-based in-service workshops, seminars and training programmes, however, there appears to be very limited opportunities. Most teachers in the system have never been exposed to any form of such support programmes and for many, there is a feeling of abandonment to the frustrations and travails that today's children generate. These result in loss of self-esteem and create room for teachers to develop negative attitudes towards development pupils.A concludes from recent field studies that "a system of teacher development at school and school cluster level is at the core of improving teaching and learning" and "could be the main source of professional development opportunities".

Some of the obstacles to effective Teachers education matters of cost. In a survey of difficulties encountered by NCE sandwich teachers, exorbitant fees, high cost of materials for practical work, high cost of transportation, the wide scope of the course offered and lack of facilities for practical work were identified. The survey observed too that the more distant the teaching practice posting, the more acute the problems seem to be (NCCE, 1997).

Under the emotive heading, teachers are paying for their own education documents the cost incurred by teachers in their education and training. In its sample of CEOs, the study finds that direct private cost for full-name NCE students in federal colleges range from ₦15,488 to ₦91,000 per annum, while in state of colleges they range from ₦27,490 to ₦117,000. For upgrading to NCE through the part-time programme of NTI's DLS, costs in the year 2000/01 varied between ₦27, 830 in Imo state and ₦61, 700 in Cross River state. It is noted that the base fee for the NCE DLS programme is ₦12, 000 per annum, hence the additional costs are those incurred for levies, stationery, examination fees, tutorials, practice teaching sites, etc. These costs

have implications for access and raise the need to consider heavier subsidies to increase enrolment in teaching. Stipends have also been used in some countries for the purpose. As the profile of average education students does not depict affluence, this is a critical issue for policy.

2.6.5 Milestone and Innovations in Teacher Education

Some innovations have been introduced to address the teacher issues raised in this chapter. With the UBE programmes mobilizing for greater participation of children in basic education, it is important that steps are taken to address the issues of teacher demand and supply, training, welfare and professionalism. The government, in an apparent move to address these issues, has through appropriate supervisory agencies, introduced several measures.

The Pivotal Teacher Training Programme (PTTP) was introduced to address the teachers' shortfall of 279,411 identified in 1999 at the inception of UBE in an apparent search for cost effective alternatives for bridging the gap. The PTTP is a 15-month course including 12 weeks school experience and three-month internship in primary school. The mode of teaching combines face-to-face contact at weekends and holidays, self-instruction course materials and school experience after which the candidate is qualified to teach.

A two-year capacity-building programme has just been introduced for teachers. This teacher corps programme will involve two years compulsory post-training experience for teachers in an internship capacity.

At the university level, quality is being enhanced by the establishment of three pedagogical centres in selected universities to provide short courses for lecturers in principles and methods of teaching. The National University Commission is also involved in recording the teaching models seasoned lecturers for use as model lessons for other lecturers.

The revitalization of Teachers' Registration Council (TRC) is another development for the teaching professional. It is believed that this move will help raise the status of teaching as a profession.

A major challenge in teacher education is to balance the demand and supply of teachers across the states. The reality at the moment is that some states are oversupplied while others have barely enough teachers to staff half their schools. NPE provides for teachers to work in any part of the country unrestricted. Is there a way perhaps of using the framework provided by this policy to redress the imbalance in teacher supply?

It is imperative that the welfare of teachers must be looked into to boost their morale. Perhaps other non-salary inputs may be explored.

The quality of teacher training programme by distance also needs to be examined. A specific case is the PTTP programme which leaves a lot to be desired in delivery across the centres.

2.7 Open and Distance Education

Wikipedia defines open education as collective terms that refer to educational organizations that seek eliminate barriers to entry. Such institutions, for example, would not have academic admission requirements. Such universities include Open University in Britain and Athabasca University in Canada. There are other examples around the world including our own National Open University of Nigeria, NOUN – the first in the West African sub-region.

Mulder (2013) indicated that Opening up Education is significant for all educational sectors being an innovation where top-down and bottom-up are merging, with momentum and a clear goal to contribute to accessibility, quality, efficiency, and innovation, and if I may add,

transformation. Prof. Muller interestingly discussed the demand and supply sides of open education concept and common features of opening up education as: Openness to learners; Digital openness; Learner-centred approach; Independent learning; media-supported interaction; recognition options; quality focus and spectrum of diversity.

Though Open Education and Distance Education are frequently mentioned jointly (sometimes as Open and Distance Learning), they have different meanings. Open education generally refers to institutional practices and programmatic initiatives which broaden access to learning and training conventionally offered through formal education systems. Its main purpose is to widen access to a greater number of people through open-access resources. Distance education on the other hand is mode of delivering education and instruction to students who are separated by time or distance from a traditional classroom settling. The key factor here is the separation by time and distance between the learners and the learning environment.

At the higher education level, formal Distance Learning certification was pioneered by the University of London in 1858. Open education came much later, with the establishment of the Open University in the United Kingdom in 1969. It is one of the largest universities in the world with over 250,000 students and is a world leader in Distance Education (OU, In Nigeria, the National Open University (NOUN) was established in 1983 with limited activity until it's re-lunched in 2002. Presently it has 57,759 students, 6 schools and 48 study centres.

Open university provide higher education using Distance Learning Methods to candidates wishing to pursue higher education but are constrained by time, mobility, health disability, work commitments, etc. the rapid advances in ICT have made Open and Distance Learning methods increasingly interconnected due to an explosion of open-access resources which are both certificate and non-certificate to the traditional methods of postal, print and broadcast media.

Open-access resources which are both certificate and non-certificate awarding such as the Massive Open Online Courses (MOOCs), Coursera, MIT Open Course ware, Khan Academy, and Udacity and increasingly relied on by top-ranking global institutions such as MIT, Harvard, University of Pennsylvania and many others. According to the UK's Department for business Innovation and Skills (2013:5), comprehensive assessments acknowledge that MOOCs bring an impetus of reform, research and innovation to institutions where they are utilized.

This revolution in pedagogy no doubt provides Nigeria with a massive opportunity to broaden access to education across wide swathes of the population, and empower them with the technical and intellectual skills to power Nigeria's transformation. However, utilizing this opportunity fully requires a holistic and integrated approach to the education sector. **This entails:**

First, there is the need to integrate the education sector with the manpower and intellectual needs of the vision 20:2020 agenda. This would require increased investments, curricula overhaul and proper monitoring and evaluation mechanisms.

Second, a selection of institutions should be designated as specialist centres, to serve as the country's intellectual hubs.

Third, Open and Distance Learning should be positioned for mass education, adult education and support services.

Fourth, there is the need to domesticate external forms of knowledge and create local forms of knowledge.

I will now elaborate on each of these points in greater detail.

(a) Integration of the Education Sector with Vision 20:2020

Education at all levels must properly aligned with the country's long-term developmental priorities as encapsulated in the vision 20:2020 agenda, which states, interalia, that "by 20:2020 Nigeria will have a large, strong, diversified, sustainable and competitive economy that effectively harnesses the talents and energies of its people and responsibly exploits its natural endowments to guarantee a higher standard of living and quality of life to its citizens".

Higher education in particular should be oriented to serve the needs of the priority economic sectors at the heart of the Transformation Agenda. The sectors include oil and gas, agriculture, banking and finance, ICT, construction, power and infrastructure, trade, water resources, solid minerals, hospitality and tourism (NPC, 2013). This integration would require curricula overhaul and repositioning across universities, polytechnics, colleges of education and other tertiary institutions in line with these specific needs of this agenda.

Attaining this alignment would require increased funding to the sector. As it is, government funding for education constitutes just 8.7% of the 2013 budget, less than the minimum 26% recommended by UNESCO. Unsurprisingly, the Academic Staff Union of Universities (ASUU) occupies a niche in its agitation for greater funding of universities. Yet, there needs to be greater innovativeness in diversifying the sources of funds to cater to the growing needs of tertiary institutions.

To this effect, there ought to be greater private-sector participation particularly by corporate organizations operating in the Transformation Agenda's priority sectors. Financial firms for instance can partner with management and administration faculties in providing funding for learning facilities, research grants and scholarships such that students are trained for

industry and academics conduct industry-relevant research. Same applies to Engineering, architecture, Social Sciences and Agriculture faculties which would benefit tremendously from public-private partnerships with tech firms, multinational corporations and construction firms. Other funding sources could be alumni networks and endowments.

Crucially, there needs to be proper monitoring and evaluation framework to ensure that funds, once secured, are judiciously utilized towards priority expenditure. The Federal Government recently provided N200bn for infrastructure in federal and state universities. Unions like ASUU should be at the frontline in ensuring that these funds are channeled towards maintenance through robust monitoring mechanisms. Importantly, these monitoring mechanisms should curb the phenomenon of abandoned projects which litter tertiary institutions. Regular audits and evaluation must be carried out by regulatory bodies such as the National Universities Commission (NUC).

(b) Designating Centres of Excellence

For Nigeria to accomplish its central developmental goal of becoming a gll economic powerhouse, the country's higher institutions ought to be the nerve-centres of research, innovation and the intellectual drive for the vision 20:2020 agenda. Consequently, certain tertiary institutions should be designated as specialist centres for agriculture, engineering, economics, computer science, and other fields relevant to the priorities of the Transformation Agenda. Stanford University in the United States closely associated with Silicon Valley, the leading hub for high-tech innovation and development where multi-billion dollar films such as HP, Google, Cisco Systems and Intel are headquartered.

The impracticality of transforming every single university into specialist centres makes it necessary for a systematic selection of specific institutions for this purpose. One approach for instance could be the selection of one first-generation university each, per geo-political zone, and one-state university each, per geo-political zone, amounting to 12 specialist institutions. These institutions will then become intellectual, research and innovation hubs in which resources-government, multilateral, and private-sector oriented will become concentrated. In many cases, several first-tier universities have already existing research institutes such as the institute for Agriculture Research at Ahmadu Bello University or the center for energy Research and Training at Obafemi Awolowo University, Ile-ife. These would simply need to be accorded special status and where necessary, modernized.

2.7.1 Entrenchment of Open and Distance Learning Programmes

As noted earlier, Open and Distance Learning has great potential in re-positioning the education sector to provide the manpower needs of the Transformation Agenda. This form of education holds immense potential for the massive spread of higher education among a greater number of Nigerians who may otherwise find it difficult to attend conventional face-to-face classes. This includes those enrolled in adult education, working class individuals, the physically disabled, married women, etc. the creation of a mass base of low to mid-cadre well qualified workforce such as administrators and managers in the public and private sector may lie Open and Distance Learning.Though Nigeria is the pioneer of Open Education in West Africa with the establishment of the National Open university of Nigeria (NOUN) in 1983, and several universities have distance learning programs, Open and Distance learning is yet to be well entrenched, and its gains yet to be fully realized in the country. This is due to the problems identified which bedevil higher education in general Distance Learning suffers setbacks due to

the general infrastructural deficit particularly in poor postal system, erratic power supply, ICT spread and penetration, the digital divide (Yusuf, 2006) and poor connectivity among tertiary institutions in the country which are essential for this form of pedagogy.

It is imperative for Nigeria to unlock the potentials provided by Open and Distance Education by addressing infrastructure bottlenecks particularly power supply, upgrading the Internet infrastructure, the employment of ICT and e-learning methods, and training educators on their use and maintenance in tertiary institutions. This would be beneficial not just to the recipients but would also improve connectivity among higher education institutes within the country, position Nigerian-based academics at the heart of cutting-edge research across the world, and provide Nigerians Access to the vast world of open access resources.

Production of Domestic Knowledge

It is also imperative that Nigerian institutions focus on the creation of domestic knowledge. Unfortunately, the research element in the country's tertiary institutions has been on a steep decline. According to the report on the Needs assessment of Nigerian Public Universities, "no Nigerian laboratory ranks among the top 1,000 in the world… where it is common to use kerosene stoves instead of Bunsen burners for experiments". Although Nigeria is Africa's largest country, it has only 15 scientists and engineers engaged in research and development per million persons. This compares with 168 in Brazil, 459 in China, 158 in India, and 4,103 in United States (World Bank, 2002).

Nigerian's low research output reflects the low priority accorded to research and developments by decision-makers (saint,, 2003). Consequently, there is lack of research funding, the faculties are bottom-heavy with only 4 out of 10 teaching staff having decorate degrees, the

students population is also bottom-heavy consisting of more than 80% undergraduates, there is limited opportunity for professional development among academic staff and a general unpopularity of technical and vocational education training. All these have undermined the quality of research output from within the country's shores. Sadly, in some cases, even the limited research funds currently available are not fully and judiciously utilized.

As Nigeria considers various alternatives in reinvigorating the education sector, the production and utilization of local knowledge should be a top priority. No nation in history has ever transformed itself without the development of a robust local knowledge system. The incubation of local knowledge can be attained by funding research to address context-specific problems, connectivity with the wider academic world, and greater valuation of local expertise in government policy. As we expand Open and Distance Learning programmes, we should ensure that there is substantial domestication of the knowledge we import from other societies.

From the four main issues discussed above, there is no doubt that Nigeria must reposition its education sector to be able to achieve its core developmental goals. To do this, the country would need to address the numerous problems bedeviling the sector with innovative approaches. One of such approaches is the opportunity provided by Open and Distance Learning. Yet, the full utilization of opportunities provided by Open and Distance Education requires a holistic approach to education reform with measures such as integration of the education sector with the country's development priorities, designed of centres of excellence, entrenchment of Open and Distance Learning programmes, and the production of domestic knowledge. These are all necessary steps for the reinvigoration of the higher education sector to cater to the needs of Nigerians and the country at large.

2.7.2 The need for teaching In-Service Education Programme

Teacher in-service education and training consist of programmes of activities designed to equip or re-equip teachers to perform their duties efficiently, whether instructional or administrative in order to impart quality education to the students. The inadequacies of pre-service training to equip the teacher to teach throughout his long years of teaching career has been emphasised in literature. This is because of the developments and innovations in educational theory and practice, and socio-cultural knowledge. Such developments can be seen through the introduction of new science or integrated science, new orthographies for different local languages, social and cultural studies, and environmental education. The behavioural sciences have contributed is no small way to educational theory and practice within the last thirty years, resulting in the development of new teaching techniques and school management. The new approaches to teachings with which the teacher needs to be acquainted to include the following: the conceptual approach, inquiry teachings, simulation and role-playing. Others are systems approach, team teachings, individualised instruction, the open plan, mastery learning, and programmed learning. A wide range of audio-visual materials is among the new ideas and techniques of teaching with which the teacher should get acquainted so as to remain and function effectively in the schools of today.

Furthermore, the challenges posted by the social and cultural revolutions make teacher in-service education and training imperative and that teachers above all others should be sensitised to the Cultural modes that are now appearing and that are in conflict with those of earlier generation. Music, art, dress, eating habits, travel, poetry, film, television, dance, sports, attitude to work, money, leisure and personal relationships reveal discriminating differences between young and old, probably even middle aged.

Thus the rapid growth of knowledge as well as the technological, social and cultural revolutions have rendered teacher pre-service preparation totally inadequate to make him perform successfully, therefore the need for in-service education and training cannot be over-emphasised.

Agreeing with Toffler (1970), Afolayan (1978) feels that "keeping abreast today requires not a ten year recycling of knowledge but a continuous process of education and re-education which must include both subject matter and evolving methodologies".

Lassa (1983) has also stressed the need for teacher in-service education and training in the case of Nigeria because "within the educational system there are many school teachers with little qualification in education. They have undergone the least training and work in isolated conditions. As a result, further training and re-training is necessary for this group of employees''. The explosion of primary education injected untrained teachers into the teaching profession in Nigeria especially since 1976 with the introduction of the universal primary education. These teachers also need to be trained, thus they train on the job and though in-service education and primary programmes. The governments of Nigeria introduced teacher in-service education and training schemes as far back as the 1960s to promote quality teachings and to upgrade the unqualified teachers. The universities also established institutes in Education, Ahmadu Bello University, and Zaria in 1967.

The institute of Education is one of the components parts of Ahmadu Bello University, which was founded in 1962. The objectives of the University as stated in the Ahmadu Bello University law and Northern Nigeria legislature of 4 October 1962 are:

i) To promote regular and liberal courses of instruction in the humanities, the sciences and other spheres of learning of the standard required and expected of a university of the highest standings;

ii) To promote research and the advancement of sciences and learning;

iii) To ensure the diffusion of knowledge throughout Northern Nigeria.

The functions are carried out through the faculties and institutes, among which is the institute of Education. The institute of Education was established in 1965 to act in an advisory and consultative capacity to the northern states ministries of education in any matter pertaining to education. It also takes an active part in the preparation of teachers for teaching at primary and secondary levels of education either through short-time in-service courses or the full-time studies. In addition, the Institute carries out research programmes on education in the northern states in particular. One of the in-service courses organised by the Institute is the Nigeria Certificate in Education (primary) through correspondence and short-time courses to produce high quality teachers for the primary level of education. This is in response to Ashby Commission's recommendations that this category of teachers is needed to provide leadership and promote quality teachings in the primary schools in order to lay a solid foundation for further education.

By 1977, the National Policy on Education also emphasised the importance of teacher in-service education by stating that however efficient the pre-service training given to teachers, there will still be areas of inadequacies. Therefore, in-service education of teachers will continue to fill these gaps… and will be systematically planned so that successful attendance at a number of such courses will attract incremental credits and/or count towards future advancement It is a pointer to the need to make future in-service courses intensive and deep

in treatment of content, so that after a proper assessment of a participant's work, he will be given a certificate of attainment rather than of attendance, if the participants is successful.

Furthermore, is order to promote adult and non-formal education, the national policy on education recognises the effectiveness of correspondence education which should be encouraged as it is a low-cost method of mass education as in-service education programmes are largely designed to enable teachers remain on job, the addition of correspondence educating method makes the in-service course more meaningful and related to the teaching profession. Since the plan is in motion to make the NCE the minimum basic qualification for entry into the teaching profession (National Policy on Education. 1981: para. 61), the NCE by correspondence programme is in the spirit of the current developments in education in Nigeria. It meets all the requirements of an in-service teacher education that leads to certificate attainment, future advancement and professional competence. The NCE by Correspondence programme also fits well into the definition of in-service training given by Brian Cane (1969: x) as: All those courses and activities in which a serving teacher may participate for the purpose of extending his professional knowledge, interest or skill. Preparation for a degree, diploma or other qualifications subsequent to initial training is included within this definition.

Morant (1981) categorised the need for in-service education into four: these are induction needs, extension needs, refreshment needs and conversion needs. The induction needs are to help the new teacher to start off and to enable him to adjust to his new career. The extension needs are those that will enable him to serve in professional positions as class or subject teacher, head of a department and later as a deputy or head in institution. Refreshment needs

are for the practising teachers who are being redeployed or promoted into new positions to enable them functioning effectively.

These in-service needs can be met through direct experience by the teacher himself, and/or through organised programmes. The organised programmes are run either after school hours or during the weekends, particularly to satisfy the induction and extension needs of teachers. The refreshment and conversation needs are often met through organised week-end, holiday time and full or part-time attendance at seminars or course, within or outside the school, and such require attendance over a number of weeks, months or even years. As expatiated upon by Henderson (178:13), such in-service programmes may involve a joint problem-solving exercise, perhaps in the curricular of the administrative field, with a small group for teachers from the same schools or locality. It may involve discussion on one-to-one basis with person whose role is encouraging the development of teachers' professional skills. It may involve a personal scheme of systematic reading or research. It may, indeed, involve any combination of these. It may lead to the acquisition of some professional qualification, it may be undertaken with a view to securing a particular type of appointment, or there may be no expectation of financial or academic reward. It may imply voluntary involvement or compulsion.

Teacher in-service education and training programmes are two of types, namely, the school-based in-service education, and external course-based in-service education. The school-based in-service education is developed by the school and carried out therein.

The external course-based in-service education is conventional type of teacher in-service education and training which include any activity which a teacher undertakes after he has begun to teach, which is concerned with his professional work' This type of in-service

education and training is often organised by external bodies to improve the quality of teaching and education in general. The external bodies offer the in-service education programmes in selected premises, colleges, universities and teachers' centres. These bodies have been grouped into three by Morant (1981: 15-18) as providing authorities, providing institutions and providing agencies. The proving authorities include the government departments at national, state and local governments responsible for education. Providing institutions include the universities, the polytechnics, colleges of education, institutes for higher education, and teachers' centres. The providing agencies on the other hand include the teachers' unions. Nigerian Audio-Visual Association (NAVA), Nigerian Association for Physical Health Education and Recreation (NAPHER), the curriculum organisation of Nigeria, etc. subject organisations or associations like those of English teachers, science teachers, geography teachers, mathematics teachers, history teachers, social studies teachers to mention a few, also organise seminars, conferences, workshops and symposia to help its members. These agencies organise their in-service programmes at local, state, national and international levels.

The mode of implementing the in-service programmes of these external course-based bodies include short or long duration programmes; formal lecture; plenary session at conference and symposia. Other methods are demonstrating; individual or group work; group and individual tutorials; guided individual reading; structured observation; and investigative sessions in libraries. Yet, some other methods often used are; sessions with an internal or external consultant, group and individual counselling/guidance sessions, distance learning through correspondence courses, television and/or radio instruction sessions, workshops on various subjects and administrative activities among others. In short, teacher in-service

education and training programmes are activities geared towards helping teachers to remedy their various deficiencies arising from technological, social and cultural changes taking place in the nation and the world at large. They are also designed to help them grow on the job as they perform their roles of educating the children and students in their care. The NCE by Correspondence course is one of such programmes aimed at improving the quality of primary education in Nigeria at large and the northern states of Nigeria in particular.

In-Service Education and Training at A.B.U Zaria

As stated earlier, the Ahmadu Bello University, Zaria, was a regional University established, among other objectives, to secure the diffusion of knowledge throughout Nothern Nigeria. Among its organs of achieving the objectives is the Centre for Adult Education and Extension Services, Centre, the Agricultural Extension and research Liaison Services Centre. These organs have been functioning to extend educational services to all parts of the region. With the take-over of the University as from 1976, the university extended its services to all parts of the country by admitting some of its students from the southern states. The Centre for Adult Education and Extension services offers courses for workers by organising evening courses through which the desirious workers upgrade their qualification up to G.C.E Advanced level. Coupled with this are the radio and television broadcast on education to enable listeners and viewers to advance their knowledge generally. In addition, correspondence courses are prepared to help workers in their studies for higher qualifications.

The Agricultural Extension and Research Liaison Services Centre broadcast instructions or talks over the radio on agriculture in addition to helping with farming in the

northern states. The Faculty of Education runs in-service part-time teacher training courses, which lead to the attaining of the bachelor's, master and doctoral degrees in education.

The Institute of Education makes the greatest efforts in the area of teacher in-service education and training. Such courses developed earlier aimed at improving teaching and administration at primary level of education. They include the TISEP (Teacher In-service Education Programme), School Administration and Planning (recommended by the Oldman Commission in 1961). The infant Method and PEIP (primary Education Improvement Project) was also intentionally supported to train Mobile Teacher Trainers who were in turn expected to help the practising teachers to perform more effectively their teaching functions in the primary schools. The running of the PEIP was been transferred to the northern states for which it was designed and the Infant Method and School Supervision and Administration Courses were both conducted as a sandwich course. It lasts for two contact sessions (during the long vacations) and the intervening year during which the student undergoes the internship or practicum in various local government areas.

The TISEP retains its mode of operation that includes contact sessions during the Easter and long vacations for a period of two and six weeks respectively at the various designated centres in the northern states. This is provided in addition to correspondence tuition which is made available in the study Guides on the various subjects being offered at TISEP 'B' (Grade III equivalent) and TISEP 'A' (Grade II) subjects, The TISEP course B is designed for untrained primary school teachers to raise their academic and teaching proficiency to the level of a Grade II trained teacher. The TISEP 'A' course is designed to enable Grade II trained but uncertificated teachers to pass their examination in the subject(s)

in which they were referred in order to enable them attain the Teachers' Grade II Certificate. The programme had 3,000 to 5,000 students in over 30 centres in 1982 and 1983.

Other teacher in-service education and training programmes being conducted by the Institute of Education include the Arabic Diploma, Diploma in Islamic Studies, and Diploma in Hausa and Certificate in Home Economics. These are courses organised to enable equip the grade two teachers teaching these subjects in the primary schools (and in some cases, in post-primary and vocational institutes) to acquire both the professional training for graduate teachers who desire to become professional teachers and educators. Certificate courses are also designed for Library Attendants, Library Assistants and Library Officers to guide, instruct and develop intermediate and junior library staff, by inculcating into the students the basic and intermediate skills necessary for the effective and efficient running of a library (Director's Annual Report, 1982/83, p.43). these courses are undertaken during two long vacations; and the intervening nine months serve as the practicum period during which the students acquire professional experience on the job.

The Nigeria Certificate in Education by correspondence course was introduced in 1976 to upgrade the grade two teachers acquire the Nigeria Certificate in Education (NCE) under the Ahmadu Bello University NCE regulations. What is unique about this course is that it combines the face-to-face teaching during five consecutive long vacations with correspondence course during the intervening four years. This arrangement is to provide ample time to cover the NCE syllabi in the various subjects being offered at full-time Advanced Teachers' Colleges/College of Education affiliated to the Institute of Education, Ahmadu Bello University, Zaria.

In addition to the Professional Certificate Course in Education started in 1983 long vacation term, the various in-service courses of the Institute of Education catered for total of 2,328 students out of which the NCE/cc had 1,564, or 67% (Director's Annual Report, 1982/83, p.12). Without mincing words, the NCE/cc is one of the most important teacher in-service education and training programmes of the Institute of Education, Ahmadu Bello University, and Zaria.

Teacher Training by Distance Education Methods

Distance Learning system is a common strategy in use to produce teachers for all levels of the education system. The major advantage of this is that the much-needed teachers are kept on their jobs while upgrading or improving them. Furthermore, distance learning system accommodates many students at a time, and thus promotes mass 'production' of teachers, one of the characteristics of correspondence instruction emphasised by Peters, (1971:225). The use of mass communication media in addition to correspondence materials makes it easy to reach many learners. It is also believed that it is cost-effective, as the unit costs are lower the larger the number of students compared to the traditional system of education. However, this lower unit cost may be severely constrained by the choice of media and the level of its sophistication. Rumble, (1982:120). The advantages to the teacher training using distance learning have been summarised by Jenkins (1980{a}:2) thus: Teacher learning on the job can apply what they learn immediately, and do not have to leave their classes for long periods to get trained; a few trainers can teach many trainers (teacher-students); the cost is low; innovations can be introduced rapidly to the classroom; schemes can be flexible, on a small or large scale as required.

The low quality of education in developing countries has been attributed in part to the poor quality and inadequate number of teachers, particularly at primary and secondary levels of

education (Kinyanjui, 1974:6) African countries, after independence, expanded education and even aimed at universal primary education and an expansion of secondary and higher levels of education by 1980 in order to promote economic and social developments (Makulu, 1971:32-47).

However, in spite of the huge proportion of the of the national resources devoted to education, the targets set for 1980 by the 1961 Addis Ababa Conference could not be achieved. And the returns to this investment have not been commensurate with the expenditures. Jolly (1969), Coombs (1981), Ansere (1982) and Wilson (1981), among other writers have agreed that the formal education system alone could not possibly solve the challenges posed by the targets. The advantages of the distance learning system over the conventional formal education places distance education in a vantage position as a means to produce teachers for all levels of education, and particularly the primary and post-primary levels.

As Beeby (1966:5) remarked, the educational background of primary school teachers in the developing countries is a major constraint on the quality of education they can offer. To compound the problem, the demand for education has out-stripped the supple of trained primary school teachers, a situation, which allows the untrained or under-trained teachers into teaching. With the inadequacies of the formal education system to cope with the production of adequate number of teachers, distance teaching has been recognised as a way of providing in-service education to the primary school teachers on a large scale (Perraton, 1979). This is attested to by the fact that nineteen of the listed twenty-eight African countries having distance education institutions run in-service teacher education programmes (Kabwasa and Kaunda, 1973). A few of these institutions provide teacher training up to degree level using distance learning systems. This list is by no means exhaustive, as there are some other institutions in Nigeria, which were

not listed. Similar programmes for teacher improvement and upgrading abound throughout the Third World.

Distance learning system is also being used to train specialist teachers in subjects such as science, mathematics, industrial arts among others, as the normal college based training programmes or large-scale in-service projects may not be able to cope with. A case in a point is the GUYANA project. The Emergency Science Programme, which was started in 1977 (Brophy an Budley, 1980). Course completion and examination success rates have been high for teachers enrolled in in-service training, partly owing to the incentives and award which are forthcoming on successful competition of the course, and partly because of the careful selection that is usually done before enrolment (Kinyanjui, 1974:14). This statement is justified by the achievements of programmes such as those of Uganda (Kaye, 1973). Tanzania's Distance Teacher Training Programme (Chale, 1980), the UNRWA/UNESCO Institute of Education, Beirut in Lebanon (PIres and Bartram, 1975). Others include the Universidad Abierut de Javeriana (Joup) of Colombia, the Lesotho Distance Teaching Centre (LDTC), Peru's In-service Teacher Training Scheme, Sri-Lanka's Correspondence Teacher Education scheme. The William Pitcher Teacher Training College Scheme of Swaziland and Francis-town Teacher Training Scheme of Botswana are among others. Further cases of such successful teacher training by distance teaching methods also abound in Australia, India, Russia and its former Soviet countries, USA and Europe, particularly at Diploma 'and Degree levels of education to produce both primary and secondary level teachers. A number of institutions now run post-graduate courses by distance learning strategies.

Most of the teacher training programmes using distance learning systems are closely tied to national needs; hence, entry requirements are virtually same as for the entrants into the

conventional teacher training institutions. The syllabi are virtually the same, as the distance students have to take the same final examinations before they are awarded certificates by the owner higher institutions or the nation's Ministry of Education. As noted by Kinyanjui (1974), any incentives that motivate the students to study by correspondence teaching involve extra costs to the nation's educational budget. The upgrading of such teachers often results in the payment of higher salaries to the upgraded teachers. This additional budgetary requirement put some constraints on the expansion of teacher upgrading programmes. According to Inquai (1980), Kenya felt it could not afford the increase in financial outlay for education, and therefore, abandoned the scheme. Botswana too had to abandon its own scheme after a one-off experiment, which was however seen as successful.

Distance Teaching Strategies

Various teaching strategies are being employed in distance learning systems. These include (A)-printed materials. (b) Audio-visual materials, (c) face-to-face contact, (d) practical activities and € Assignment. Each of these strategies is either being used singly or in combination with other one or all together. The choice of which to use depends largely on its stability for the programme and its objectives. Basically the strategy chosen will have to be considered on its merit. Such considerations include its capability to achieve the stated educational objectives of the programme; and the student population to be reached. The geographical spread of the are to be covered; the nature of the course(s) to be offered; availability and practicability of the strategy and the costs of providing teaching through such strategy are among others.

(a) Printed Materials

Printed material is the most commonly used method of teaching in distance learning. These materials include standard texts specially written on courses study guides written by the course lecturers and specially written and illustrated instructional texts. They also include set books already published, packets of pictures, directed reading guides using the resources of libraries (including newspapers and periodicals). Others include materials ancillary to the other modes of teaching used (if any) – either notes on broadcast programmes or instruction for the use of scientific kits (Mackenzie, et al, and 1975:55).

While some other print materials do supplement broadcasts or give instructions as to how kits should be used or how to carry out experiments or activities, the self-instructional texts and study guides tend to be complete means of learning for the student. Therefore, these are expected to be of high quality. Baath (1983) has modified Gagne's instructional design procedure he feels that the correspondence lectures should.

i. Arouse attention;

ii. Present objectives

iii. Link up with previous knowledge and interests, etc;

iv. Present the material to be learned;

v. Guide and structure

vi. Activate;

vii. Provide feedback;

viii. Promote transfer; and

ix. Facilitate retention.

The structure of the study guide, according to Baath, should also be of high quality. He posited that the cover should be striking and at the same time be attractive, the format should be special and it should be handy. This layout should be carefully planned and striking colours used. The typography should be easy to read and interest arousing and the illustrations- diagrams, drawings, and photographs – should be aesthetically composed. In a nutshell, the qualities of good study guides or instructional texts are the structural layout and the statement of the objectives of the course unit or lesson. Others are the language used in writing the lectures - such must be at the level of the students and the subjects being taught; the content of the lectures, the activities and the tutor-marked assignments. Also included are or computer-marked assignments, self-test, illustrations, and textbook references or reading list for enriching the lesson (Rowntree, 1979: IEC Manual for Writing Distance Education, 1979; Hartley and Burnhill, 1977; Jenkins, 1980 – CET Series Vols. 6-8, and Baath, 1983).

The use of print medium for distance teaching, according to Jenkins (1981:46-47), helps the course-writer to show on paper things which may not be easy to explain in words alone. As such, he resorts to the use of illustrations. Print also aids memory as it as it provides a permanent record of what is being learnt. One other advantage of the print medium is that people can learn at their own pace, going through the material as often as they wish, and moving systematically from one section to the next.

However, studying the printed materials has got it shortcomings. For instance, printed materials lack the warmth and vigour of the human voice, thus accentuating the loneliness of the distance learner. Secondly the preparation and production of printed materials take a long time as writers and printers may not keep to the schedules given to them. Thirdly, once printed and distributed, materials can only be altered by recalling and reprinting them, or by distributing

amendments. Both are considered undesirable by Jenkins. Sometimes, the initial distribution of materials can be difficult and costly, and this can limit the usefulness of print on a large scale'.

a. Audio-Visual Materials

Used singly or in most instances used jointly with printed materials are the audio and visual equipments. Audio equipment includes radio broadcasts, audiotape cassettes, slides, and the telephone. The audio-visual types include the television, sound films, videocassettes and videodiscs. Enable and satellite television. Others are the computer and the audio-graphic system such as the Cyclops.

Of all the audio equipment devices, the radio is the most accessible and most commonly set in many distance learning systems aimed at reaching very many people. It is useful in mass education programmes as both readers an non-readers can listen to a radio programme. The radio constitutes the principal mode of teaching in some distance learning systems. Examples are the Mauritius College of the Air and, Nicaragua (Radio Catholica and the Radio Mathematics Project), India's farm school-on-the Air and Dominican Republic's Radio Santa Maria to mention few. Most other distance learning systems make the use of the radio as supplementary to printed materials. The use of the radio as supplementing printed materials. To reinforce prints, to introduce new concepts and to reduce the distance barrier through voice. A radio-set is also cheap and within the reach of many. Other audio media such as the telephone and cassettes perform similar functions to that of the radio.

The audio-visual equipments such as the television, video apes and cassettes, Cyclops, video discs, the computer and the like have been used for similar purposes to enrich earning and to demonstrate practical lessons. However, the extent of the usefulness of broadcasts or telecast depend on the timing as the students have to create the chance for the allotted times in order to benefit from them. As succinctly put by Johnson (1985), "Radio and Television broadcasts like

radio conferences, mean participants must be free to listen at the fixed times. This can be a disadvantage especially if the broadcast matter is 'essential' for the subject matter". This problem is however reduced by using broadcast to cover only about 10% f the total tuition package by most distance teaching institutes. Many institutes use broadcasts to supplement printed materials and recorded tapes and cassettes rather than use them as the main mode of teaching.

(b) Face-to-face contact

This involves formal meeting of teachers and learners for the purpose of instruction. It may involve formal talk-and –chalk lecture type. Such contact sessions may also require formal attendance in schools where correspondence materials are adapted for instruction under a supervising teacher. Short group discussion usually for remedial purpose tutorial sessions; self-help group (i.e. small groups without a teacher) are included in contact sessions. Others are meetings for laboratory or practical work and the telephone conferencing (Sparkes, 1982). In such face-to-face sessions, audio-visual media can also be used to supplement or aid teaching.

The use of face-to-face contact teaching is often incorporated into teaching strategies by many distance teaching institutes as this affords chance of meeting with students to help them further with their learning. However, the intensity of use of this strategy varies with institutes and with subjects. Some institutes use face-to-face contact teaching to supplement their teaching while others use it to complement teaching. In Institutions where it is used to supplement teaching, little or no new topics are taught. The sessions serve to make up for remedial or counselling, practical work, seminar classes to explain further the lessons already taught using other distance teaching strategies, such sessions are held for very short time, say one week or two or at weekends and evenings. In some other distance teaching institutions, the face-to-face sessions are obligatory while in others, it is voluntary. For instance, attendance at face-to-face

teaching is obligatory for the entire foundation courses and certain others for the students of the UK Open University (Scupham, 1975). Where it is obligatory to attend, face-to-face teaching is often used to complement correspondence teaching as is the case with the NCE (CC) Ahmadu Bello University Zaria whose contact sessions lasts for as for long ten weeks at a stretch in a year.

Face-to-face teaching sessions have found to remove one of the cogent objections to correspondence education, that is, the deprivation of the students encounter between the student and the teacher humanising and motivating In other to promote social interaction among students, some institutes such as the U.K. Open University, courage the formation of students associations (Wheeler, 1985). The organization of the study centres and study groups also contribute to reducing student isolation while learning at a distance.

While some courses can be delivered through other distance teaching strategies, some courses, like the professional, technological and many science subjects are more effectively taught by face-to-face contact. For instance, Harlock (1982) argued that the conventional crafts will generally have to be taught locally, primarily on a face-to-face basis or a mixture of face-to-face and distance study. Holmberg (1982) also feels that for some kinds of learning. (Surgery, for instance) non-contiguous communication alone is not enough. The value of supplementing distance study by residential courses is evident such as cases. The combination of face-to-face teaching with distance with distance learning systems, particularly in in-service teacher training programmes ‘because it is dictated by the nature of many of the competencies with the teacher/trainees should be provided. Teacher/trainees for example, are expected to put the theory they learn in assignments into practice in the classroom, and to give practical demonstration of the designed performance skills… the absence of face-to-face teaching may defeat the main purpose of the in-service teacher education programme’. However, in situations where it is not

compulsory for students to attend face-to-face session's attendance is often poor. Even in some courses where attendance is mandatory, drop-out rate tends to be high because of the inability of students to attend, possibly due to limited financial resources, demand of place of work, or for some other reasons. On the institution's angle, organising the face-to-face sessions have been found to be laborious as provision will have to make for students accommodation, lecture/tutorial rooms, capable teaching staff, and other administrative machinery. Thus, it increases the cost of running the distance teaching institutions. This justifies the running of short duration face-to-face contact sessions (Perraton, 1979: 40; Rumble, 1982; Agboola, 1993).

(c) Practical Activities

These are activities which help the learner to undertake the practical aspects of his course, particularly the sciences and technological courses. These involve the use of home science kits, laboratory work, research activities and/or field work in the student's locality, the use of computing facilities, etc. These afford the opportunity for the application of techniques, skills, and concepts learned through other media to real' situations (Kaye, 1981). Apart from the home science kits, students are often assisted t get attached to laboratories close to them to carry out necessary practical work.. Much of the practical activities are organised by the institutions during the face-to-face contact sessions as well, so that the students may enjoy the guidance of lecturers who are experts in the various activities.

2.7.3 Tutorial Support in Open and Distance Learning

Tutorial support is used here to refer to the assistance provided by an individual (or groups of individuals) for a particular learner or group of learners to facilitate the study or learning of course materials. Tutorial support encompasses a broad range of teaching and coaching activities that help guide students through a course. The central role of the tutor is to help the learner to learn the course material. Literature review reveals that different terms are

used to refer to the role of the tutor in open and Distance Education. The most commonly used terms are: 'tutor', 'mentor', 'facilitator', 'guide', 'moderator', 'instructor', or 'teacher'..Although the role of the tutor or teacher is essentially creating rapport with students, the open and distance learning tutor's role is different from that of the face-to- face teacher. Some of the main differences are summarized by COL (2004:118) as follows:

Table 2.4: differences between face-face and distance learning teachers

Classroom teacher	Open and distance learning tutor
Planning and preparing content	Explaining content prepared by others
Being an expert	Being a helper/colleague
Teaching	Helping the students ton learn
Being in a classroom	Being at a distance
Working with class	Working with individuals
Marking and grading	Commenting on written work and advising on how it can be improved

Source: COL. (2004:118)

The course materials provide the content, while the tutors help lesrners to develop the skills needed to comprehend, assimilate, and apply the content. The tutor is very central to any tutorial support system. Tutors are the persons in direct contact with the students. They serve as the primary instructional contacts for distance learners. They help to give human face to the course materials.

According to Dennis et-al (2004) , 'important though all the services offered in Distance education are, however splendid the printed text and however smooth the organizational system, and however refined the quality measurement tools, it is the relationship between the tutor and the learner that determines success or failure'.

The characteristics of distance learners explained earlier imply that extra measures have to be taken to support and facilitate their learning.

Cowan (1994:59, argues that student support does not differ whether conducted in classical universities or in distance teaching university According to Cowan: As a learner, I have

experienced both face-to-face and distance tuition. In each situation, support, (for me) could be described in virtually the same terms. Sometimes it was the explanation provided when I found I could not understand, and has asked for help, sometimes it could be the prompting from which I benefitted, when I had been unable to make progress with a problem or task, yet wanted to do so in my own strength. Sometimes, it could be the encouragement which generated or sustained me (at times uncertain) motivation, sometimes it was the welcome, feedback, which advised me when I was uncertain about the soundness of my learning or of my work: on occasions it was the facilitative interventions which prompted further and possible personal development, though it was otherwise autonoumous. In each and all of those examples I have found effective support in both modes.to be the same in principle, although often very different in form'.

We have made this lengthy quotation because of the very vivid and empathic view it has given of tutorial support needs of the distance learner. Depending on the support system in place, various kind of personnel offer support to students, part- time tutors, full-time academic staff, councellors and advisers, administrative staff, library staff, stff of the collaborative institutions, other learners and friends and family. The role of the tutor varies with the support system in place. While some systems have designated councellors, tutors, mentors, etc, in other systems, the post of tutor may be expected to fulfil all of these functions. In many cases, the tutor is not expected to teach the course content as the course materials are expected to play this role. Whichever the case, the tutor generally represents one of the most crucial (if not the most crucial) contact points between the student and the institution.

Tutor roles

The main roles of tutors, according to Moore and Kearsley (1996) are:

Discussing course content; providing feedback on progress; grading assignments/tests; helping students plan work; motivating students; answerin administrative questions; supervising

projects; teaching face-to-face seminars; keeping student records; intervening with the administration on behalf of students and evaluating course effectiveness'.COL (2003) identifies four core open and distance learning tutoring skills that cover the responsibilities, skills and roles of tutors /councellors. These are:

- Supportive skills – helping learners deal with issues not related to content, that may affect their learning.
- Guiding learning – helping learners to understand the content and its relationship to their learning goals
- Enabling learning – helping learners to develop and apply appropriate learning process effectively
- Administrative skills – serving as a link between learners and institutions on administrative issues.Close rapport between students and teachers or tutors is important whether in distance learning systems or or in campuses. COL (2003:29) gives the academic administrative and support responsibilities of open and distance learning tutors as shown in table 2.5 below

Table2.5 Responsibilities of open and distance learning tutors

Role	**Responsibilities**
Academic advising	Advising learners about course choice , options for continuing or completing a study programme
	Advising learners about courses for specific qualifications or career choice
Academic instructions and coaching	Responding to questions from learners
	Clarifying course materials when necessary
	Developing additional resources or tutorial materials
	Helping learners develop specific skills
Academic facilitation	Providing remedial help to advise on where to obtain it
	Providing information about additional resources for learners
	Planning and guiding discussions among learners
Academic assessment	Setting assignment for learner assessment
	Clarifying assingnment tasks and options to learners
	Assessing, grading and providing feedback to learners on their assignment
	Setting examinations
	Marking examinations

Source: COL (2003:29)

2.7.4 The Effectiveness of Distance Teaching Strategies

The effectiveness of Distance teaching Strategies is in no doubt identical to that of the conventional teaching methods. For instance, Holmberg (2001) observed 1737 Hermonds students passed the university entrance examination with an average standard equal to that of all the Swedish grammar schools. Braithwaite and Batt (2005) noted that of those who 'survived' and sat their final examinations in the faculty of Arts of the University of New England (Australia) with the past rate of 85 – 93% between 1962 – 1972 was one percent higher than for internal students. Similarly, good examination results were observed for the students of the Macquarie University and the Western Australia institute of technology.

In France, Fawdry (2005) also noted that the Centres de Telenseign ement Universitarire of (CTUs) candidates achieve slightly better results in their examinations than do the conventional students. In Kenya, the students of the Correspondence Course Unit (CCU) of the University of Nairobi achieved results similar to those of the conventional students in the Kenya Junior Secondary School Examinations between 1968 and 1970. It was reported by Kinyanjui (2004) that the candidate who studied with the CCU performed better than the other candidates who sat at the same examinations. The average pass rates for the CCU candidates were 42% in 1968, 46% in 1969, and 51% in 1970, as compared to the school over the same period of time. Similarly, it was observed that the Korea Junior College of Correspondence (now Korea Correspondence University) has a greater pass rate of 22.2% compared to 6.6% pass rate of the conventional Junior colleges between 1973 and 1981.

The success rate observed for the U.K Open University, Mclntosh, (2003) noted that the graduation rate is at least 53% of the original intake of 1971. These cases, among others,

supported the effectiveness of distance teaching methods to achieve qualifications normaly earned by the product of the conventions institutions.

Parsons (1997) noted that correspondence seems to be more effective than conventional classroom teaching for promoting durable factual achievement, alone in abstract or highly verbal academics subjects. The effectiveness of the teaching methods to cope with large student numbers has also contributed to production of the much –needed manpower to solve national problems. Thus distance teaching institutions readily contribute immensely to the number of educated people. The fact that distance teaching strategies build a lot on work experience and maturity of the students make such educated people to be directly productive to the national economy. This also reduces to a minimum the period and cost of on-the-job training which will be needed by products of conventional institutions. Perraton (2002) points out the effectiveness of distance education in the old Soviet Union thus:

The peculiar strength of distance teaching there lies in its integration with work. As students study on their correspondence courses, so it appears, they are gradually promoted to better jobs. Their practical work is often done at their place of employment. The best factory managers regard the education of their employees in the same way as a parent does that of his children A true measure of output should measure not just the final standard achieved but value –added, the difference between initial and final standard. A university which creams off the most the most academically ably, may not necessarily have a higher value- added if it achieves more first class honors graduates than another, which has a less able intake. if indeed the final and academic standard to an Open University degree is the same as that of other institutions, then its teaching output per student as measured by value-added must by higher. The open access policy of the university results in a lower average educational standard of entrant than in conventional

higher education. So, if final standards are the same, the Open University can claim to have a higher value-added per student.

This higher value added achievement (as there has not been any noticeable criticism of the UK Open University graduates) is a confirmation of the achievement of one of the objectives of the open learning system. That is, to provide a second chance to those whom for one reason or the other would not have been admitted by the conventional institutions of learning.

In aspect of costs, a number of studies carried out report that distance teaching is cheaper, and thus more cost-effective, than the conventional institutions at all levels of education (Perraton, 1982), The economics of the UK Open University has attracted a lot of studies by the economists in attempting to establish a relationship between the costs of distance and conventional teaching strategies. came out with the result that the level of average costs in the U.K. Open University is only a little more than a quarter of those at conventional university Open University average costs are still a third of those at conventional universities". Even when adjustment is made for the high rate of dropout, the average cost per U.K. Open University graduate is in the order of one-half of the cost of conventional university graduate. . Laidway and Layard (2011) also confirmed that U.K. Open University courses cost substantially less than campus universities. Rumble (2001,) also found that in Costa Rica, the average cost of producing graduates is cheapest at the universidad Estatal a Distancia when compared to the costs at the conventional universities. While it costs (in 1980 prices) $765 at the UNED, the costs are $1,301, $2,033.and $4,361 at UCR, UNA, and ITCR respectively. Thus it can be concluded that distance teaching is cost-effective, and thus cheaper than the conventional teaching systems.

Furthermore, for non-degree level of education at the Korea Correspondence University (Korea Junior College of Correspondence, 1972-80), it was found that the correspondence

college was more cost-effective than the conventional junior colleges at a ratio of more than 6:1. It was also found to be more than three times more efficient with the pass rate of 22.2% to 6.6%. Using the National Qualification Examination as the criterion, the cost to the South Korean people could be almost 85% less than the alternative .

As put by Perraton (2002), "distance teaching project seems to have a clear, positive impact on educational equality in terms of making quality education more widely available, and in terms of making access to any education at all possible for previously excluded groups" this statement is also an attestation to the effectiveness of distance teaching.

2.7.5 Assessment of learner performance in Distance learning programme

There are two types of assessment: formative and summative. Formative assessment, i.e, 'activities designed to motivate, to enhance understanding and to provide learners with an indication of their progresses' COL (2003:162).

Formative feedback comes from various sources:

- Activities in course materials
- Self assessment tests and progress tests in course
- Tutors' assessment on assignment and other written material work
- Tutor's responses to specific student questions
- Comments during tutorials
- Comments from peers

According to COL (2004:162) the following are appropriate activities/questions for giving feedback:

- Case study with tasks or questions

- Complete a graphic outline
- Fill-in-the blank
- Guided reading with tasks or questions
- Interpreting graphs and diagrams
- Labeling diagrams
- Matching the correct answer
- Multiple choice
- Questions about a text passage
- Select items from a list
- Short-answer questions
- Tables for completion by the learner

Even in open and distance learning, exams are still common practice. They help to validateschool based assessment, check flagirisms, and give the institution respectability in the eye of the public. There are various types of examinations in open and distance learning.

Table 2.6 : types of examination in open and distance learning:

Exam type	**Indicative characteristics**	**Put a premium on**
Closed	Fixed time period	Working at speed
	No use of notes or text books	Knowledge
	Choice of questions	Exam technique
Open book	Fixed time period	Retrieval skills
	Can use own notes and textbooks	Synthesis skills
	Choice of questions	
Take-away topic	Topics set in advance to allow for preparation	Retrieval skills Selecting information
	Fixed time period when the examination is taken	
Take-away question	Question set in advance to allow for preparation	Retrieval skills Selecting information
	Fixed time period when examination is taken	

Source: COL (2004:165)

Tutor marked assignments serve both a formative and a summative purpose.

Apart from serving to motivate learner, marks are assigned to assignment which form part of final grading for the course.tutor- marked assisgnments should teach, engage the learner in dialogue and encourage the student to reflect on his performance. If the focus is on marks and their effect on on final grades, students will pay more attentionto the marks and their fairness than to the teaching functionof the assessment. Care must be taken to balance the formative and summative purposes.

According to COL. (2003:79), assessing learners' work and providing feedback that contributes to learning are the most visible aspects of the tutors' job. In open and distance learning, assessment is a very significant part of learning process. It is of greater impact in open and distance learning than in classroom situations. It is the centre piece of the tutor/learner interaction and an essential responsibility of tutors. Because assessment has such a significant impact on learners and their progress, it is important that assessment be helpful. It requires a positive attitude from the assessor, fairness in comment and in marking scheme, relevance in comments to the issues and goals of the programme, completeness and coherence of the feedback, comments on the work (not on the person) and relevance of comments to the learners' needs, context and concerns.

The methods of assessment used in open and distance learning include examination, tutor-marked assignment, portfolios, projects and on-line assessment. Assessment in open and distance learning is a significant focus of communication between tutors and learners. Assessment and feedback in open and distance learning serve as a guide to learners about the essential elements of the courses; indicators of learner progress and learner needs, a focal point

of dialogue between learner and tutor, a means of verifying and validating learners' achievements, indicators of the strength and weakness of the course materials and indicators to the educational institution of quality issues: COL (2003:81)

Marking and commenting on assignments are highly rated by students. In face-to-face classroom teaching, feedback on assignment is provided to the class as a whole and comments written on the assignments of students tend to be very brief. While in open and distance learning, direct face-to-face feedback mat not be possible, comments have to be extensive and individualized.

Open and distance learning organizations have, according to COL (2004:130), identified an extensive range of comment types that good tutors should use in their responses to written work. These are:

- Correcting of errors indicating the exact nature of their error.
- Directing the students to particular sections of the learning materials to enable them understand a particular point or to find additional material.
- Explaining how a higher mark could have been obtained in order for the students to improve their performance
- Commenting and advising on presentation e.g spelling, grammar, layout, etc.

Keeping records about learners

In open and distance learning, keeping notes and records of all contacts with leaqrners is important for many reasons. Contact with learners may not be frequent. The tutor is the one closest to the student and should be in a position to give up-to-date information about the learners' progress, such as assignment, submissions, marks and any special needs when other

people demand it.the tutor wil need to keep records that will support his/her work as a tutor. He needs to maintain formal records as specified by the institution so that information can be used for official purposes and to keep in view the programme of activities and deadlines set by the institute.

Serving as a link between learners and the institution

The tutor is usually the main contact between learner and educational institution, and so is often the first person a learner contacts if needing help with dealing with administrative issues. Although his primary role may be academic, he maybe asked to perform some administrative duties, or help to to answer administrative questionsthe students may ask.

In performing the linking role, the tutor will need communication and problem solving skills as well as working knowledge of academic and administrative policy issues, guidelines and roles of the open and distance learning administrators and their areas of responsibilities and how to contact them.

Tutor need to be familiar with the sequence of courses, prerequisites for courses, the rationale and purpose of assessment methods and on institutional requirement about a course, programme or assessment.

Recruiting, inducting, monitoring and supporting tutors

In recruiting tutors, the normal procedures for staff recruitment should be followed.

- Draw up a job specification, listing all the tasks to be performed.
- Draw up a person specification, list the knowledge, skills and attitudes needed to carry out the tasks in the job.

- Develop scoring system for measuring candidates's performance on each item in the person specification.
- Set a minimum total score for accepting a person as a tutor
- Decide whether , in addition to the minimumtotal score, you need to set a minimum performance level on certain items in the person specification
- Devise a set of methods to collect evidence.

COL (2004:124), admits that inducting and training tutors tends to be a difficult area in open and distance learning since (a) tutors are usually part time and (b) they tend to join at various time in the year. There is therefore very little published work on training of distance learning tutors.

Induction and training could be held as:

- Induction days are generally held before the tutor start work, during which introduction is made to the organization and its admininstrative system; tutors meet with the organization –based staff ; introduction to the course materials; marking and commenting procedures; running of tutorials.
- Workshops could be organized to cover the content of an induction day.
- On-the- job training : new tutors are usually given a hand book to guide them in their new roles. They might be attached to an experienced mentor. The tutor learns on the job while the mentor provides help as needed.
- Distance learning courses: some organization create their own distance learning courses and how to be an open and distance learnind tutor. These may be completed before the tutor can start work or as on-the-job training.

According to COL (2004:126), the open college of United Kingdom tried all the methods listed above and found that induction workshops were by far the most effective.

Tutors' work needs to be monitored as part of the quality assurance system of any open and distance learning organization. Factors to be monitored, according to Thorpe (1993) quoted in COL (2004:127), are:

- Efficiency – completion of the 'mechanical' aspects of tutoring rateb of assignment turn around, prompt commenting non assignment, maintenance of records.
- Grading – in accordance with marking guidelines
- Relationships with students- ability to establishe a warm supportive relationship at a distance.
- Overall appraisal of students' work
- Detailed comments on students' work

In order to be effective in performing their roles, tutors need information, support, resources and opportunities for skill and knowledge development. Tutor needs in a specific open and distance learning situation are affected by the organizational and social contexts, the type of programme and the tutors' and organisatins' level of open and distance leaning experiences.

2.8 Empirical Studies

In his Ph.D research presented to the Imo State University, Owerri, Yaya, D.O (2011), researched into the tutorial support of the National Teachers' Institute's NCE by Distance Learning, being one of the delivery strategies adopted by the Institute. The main aims of the research were to ascertain the levels of competences of the personnel involved in tutorials

support services, availability ofmaterials and their, accessibility, adequacy and utilization and the problems facing the performance of tutorial support roles.

Nine research questions and five hypotheses were formulated as follows:

1. How do the course tutors, students and supervisors perceive the tutorial support given to students in NTI NCE (DLS)?
2. To what extent do the perception of the respondents with regards to the tutorial support given in NTI NCE (DLS) differ among Akwa Ibom, Bayelsa and Edo states?
3. Do the perceptions of the respondents in rural areas differ from those in urban areas with regards to the tutorials support given in NTI NCE (DLS)?
4. Is there any difference between female respondent's perception of the tutorial support given in NTI NCE (DLS)?
5. Is there any joint effect of state, location and gender on the respondents's perception of tutorial support given in NTI NCE (DLS)
6. What tutorial support materials, equipement and facilities are available, accessible and used in NTI NCE (DLS)?
7. What records are kept for tutorial support in NTI NCE (DLS) study centres?
8. What methods and activities are frequently used in the tutorial support in NTI NCE (DLS) Students?
9. What problems militate against the effective performance of tutorial support roles in NTI NCE (DLS)?

As guide to the study and were answered by 171 course tutors, 13 supervisors and 255 students in the 13 study centres Situated in the South – South Geopolitical Zone of Nigeria.

The Instruments used in gathering the data for the research include, interviews and observation using checklist and were administered by trained field officers used for the study.

The data collected was analysed using frequency counts, percentages, ranking and means as appropriate for the research questions, while the one- way ANOVA was used in testing hypothesis 1 and 2; and the t-test for hypothesis 3 and 4; while multiple regression analysiswas used to test hypothesis 5 at 0.05 level of significance.

The findings showed that course tutors, students and supervisors agree that the overall level of performance of the tutorial support roles by course tutors was significantly higher than the acceptable theoretical mean. There were, however, significant differences between the mean ratings of course tutors, supervisors and students respectively on the one hand, and between respondents in rural areas and those in urban areas for the 51 tutorial support roles combined, as well as a significant joint effect of the 3 variables. No significant difference was found in the mean ratings by state and by gender.

It was found that most of the study centres (60%) had most (over 50%) of the tutorial support materials listed and had access to even more, but the materials were never used or only sparingly used for tutorial support. Computers based resources were the least available, in over 75% on the centres, and were found to be of good quality. The methods of activities most frequently employed during tutorials were questioning, learning and class discussion. Other identified or prescribed activities and methods were sparingly used. The problems considered very serious with regards to the effective performance of tutorial support roles in NTI NCE (DLS) bordered mostly on finance, poor students attitude and poor facilities.

He recommended that the tutorial support identified by this study should be used for preparing manuals for training, monitoring, assessing and supervising course tutors in their tutorial roles; and for preparing a Tutors' Guide or Handbook for the NCE (DLS) and other programmes of the institute. As a teacher education programme, these support materials are not only needed for facilitating instruction but also for modelling good teaching and learning practices. It was therefore recommended that the National Teachers' Institute should give priority to the provision of the support materials, monitor their use, provide written guides or notes for their use and adopt various other strategies for strengthening tutorial support in the programme.

Similarly, in 1992, Yaya, D.O researched into the development of distance learning course materials for NCE by DLS of NTI Kaduna, which also is the main delivery medium of the NCE Distance Learning materials of the Institute.

The aims of the research were to find out the efforts made by the National Teachers' Institute (NTI), Kaduna to ensure that the NCE by Distance Learning System course materials are of good standard. It focused mainly on:

1) The course materials so far produced in the NCE by DLS of the NTI;
2) The procedure employed in developing the course materials;
3) The method used for identifying, selecting and training the personnel used in developing the materials;
4) The features of the NCE by DLS course texts that present the greatest problem in writing; and
5) The constraints militating against the effective development of the course materials.

Five research questions were raised as follows:

1. What course materials have so far been developed and produced for the NCE (DLS) of the National techers' Institute?
2. How are the NTI NCE (DLS) course materials developed and produced?
3. How are the personnel used in course development identified, selected and trained?
4. What kind of personnel were used for developing the NTI NCE(DLS) course materials?
5. Which features of the NTI NCE (DLS) course materials pose the greatest difficulty to the writer?

The research questions were answered by forty-seven (47) part-time writers, thirteen (13) chairpersons, twenty-three (23) editors and sixteen (16) full-time NTI subject officers that participated in the NTI, NCE by DLS writing and Editing Workshops held in June 1992 were served questionnaires. The resource person that coordinated the development of the Oral English audio cassettes was interviewed.

The findings include:

1) Only course books and Oral English audio cassettes have been produced in the three years of the programme.
2) There is no clear-cut policy guidelines' concerning the design, development, production and utilisation of the support materials.
3) The Institute does not at present have all the expertise, finance, time and institutional will-power needed to produce the materials.
4) The stages followed in the development and production of the course materials are:
    - Production of the NCE by DLS sequencing charts.
    - Preparation for the writing and writing of the course texts.
    - Writing the course texts.
    - Editing the course texts.
    - Production of the course materials.
5) None of the course materials so far developed and produced has been trial tested.
6) Only very few of the course developers had any previous training in distance education, yet majority of them considered the NTI training as inadequate.
7) The writers, chairpersons and editors are well qualified, very experienced and teach in institutions of higher learning.

8) Inspired of the strategy role expected of the full-time NTI subject officers, they are the least qualified and least experienced among the course developers. Only few of them ever read a journal in Distance Education (DE) and done any study in DE.

9) The writers, the chairpersons and editors had different perceptions of the features of the course text that present the greatest difficulty in writing.

10) Although none of the workshop conditions was considered as completely poor, nor excellent, training and availability of reference materials were rated lowest.

Based on the findings, it is recommended that:

1) The course books should be field tested and the feedback be used in developing, materials.

2) A workshop should be convened to produce a blueprint that will guide the planning, development, production and utilisation of the support materials for each subject.

3) For the proposed B.Ed. by DLS, the course books and support materials should be planned and produced together using a team and integrated approach.

4) The course developers should be better identified, selected and trained.

5) Given the pivotal role expected of the full-time subject officers, there is need to give them sound academic and professional training locally and overseas.

6) The Media Resource Centre needs to be better stocked with appropriate and relevant books.

7) Remuneration of the writers, chairpersons and editors should be reviewed amicably.

Shehu, (2014) researched into the Learner Support Services in the Nigeria Certificate in Education by Distance Learningunder the National Teachers' Institute, Kaduna with a view to determining the adequacy quality of the NTI Learner Support Services; determining the extent to

which the NTI Learner Support Services are being utilized by the Institute in its Nigeria Certificate in Education by Distance Learning System (NCE/DLS); determining the capacity of the NTI personnel and Course Facilitators on effective implementation of the NTI Learner Support Services; and determining the perception of students and Course Facilitators on the impact the NTI Learner Support Services on their learning.

An ex-post factor research design was usedd in which questionnaires with the reliability index of 0.87 co-efficient were administered to a sample population of 2,696 from a total population of 9,752 based on the Morgan & Kreycie (1971) table of sampling, from which 2,036 representing 75.52% were returned.

The Data from the respondents was subjected to statistical testing using the Analysis of Variance (ANOVA) and Independent t-test and the findings revealed that;

- ✓ The Learner Support Services/Facilities being used in the Institute in its Nigeria Certificate in Education by Distance Learning are not adequate.
- ✓ The Learner Support Services/Facilities being used in the Institute's Nigeria Certificate in Education by Distance Learning are not qualitative.
- ✓ The Learner Support Services/Facilities in the Nigeria Certificate in Education by Distance Learning are under utilized by the Institute in the training of its teachers through its distance learning system.
- ✓ The learner support services by the Institute's distance learning programme do not significantly impact on students' performances.
- ✓ The staff and Course Facilitators are not constantly trained by the Institute in most aspects of its distance education.

Consequently, two (2) levels recommendations were given thus:

i. Firstly,is the need for a National Distance Education Control Agency to regulate and standardize the practice of distance education nationwide;

ii. Secondly, is the need to strengthen the operational bases with adequate facilities for both students and course facilitators to use to facilitate the delivery of the content of education through distance learning;

iii. Thirdly, is the need for regular editing and critiquing/evaluation of learner support services/facilities with a view tocontinuously injecting the quality required of learner support services;

iv. Fourthly, is the need to monitor and ensure proper and efficient use of the learner support facilities by both students and course facilitators in the study centres; and

v. Fifthly, is the need for regular capacity training and motivation for staff and course facilitators who are the pivots of the institute's distance learning system in all aspects of distance education to make them strongly inclined to discharging their assigned roles.

2.9 Summary

The review attempted to give some conceptual views of distance education in relation to delivery modes as expressed by various authorities. It considered distance education as a form of study without the immediate supervision of the tutors in the teaching process, and sees it as an industrialized fom of teaching and learning emphasizing the separation of the tutor and the learners which differentiates it from other forms of education. The review identified essential elements that are basic to all forms of distance education as the learners and the separation, influence of an educational organization in planning and organization of learning materials, the use of technical media.

Effective tutorials and contact sessions, and adequate quality assurance mechanisms are identified as core elements in the operation of distance education system apart from the various forms of correspondence delivery modes; the individual correspondence study is identified and considered the most common.

The review considered the basic principles behind correspondence study as crucial especially in the preparation of course materials, and that the techniques are mechanically the same but the choice of a particular from depends on the institutional provider. The study suggested the need for well structured course materials that will assist in reducing ambiguities and confusion before isolation learners.

Crucial to correspondence study, according to this review is the course writing, the subject, the learner, the lesson, study guide, syllabus and personal relationship between the tutor and the learners. Course development and writing, the review considers vital and should involve the use of experts of various discipline to help in the writing especially the course of writers, designer, course tutors editors and to ensure that the stage in course writing and development are followed strictly.

It showed that for effective correspondence system, teaching materials must be well structured and adequate assessment of students' performance. Using any form of delivery mode in distance education programme depends on the ability of the institutional provider to be able to afford it.some identified constraints of delivery modes include ineffective tutorials and contact session, inadequate funding. Operational difficulties inadequate trained personnel, poor and inadequate quality assurance mechanisms, library and laboratory facilities and poor quality of course materials among others. The tutor is very central to any tutorial support system.

Apart from giving human face to the course materials, they are expected to maintain close rapport with the students, give academic advice, facilitate learning, coach and instruct the students, assess their performance, maintain distance learning institution. They therefore need to be carefully selected , inducted, monitored and supported.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter vividly describes the procedure of this research work. It contains a clear explanation of the research design of the study, population of study, sample and sampling procedure, instruments for data collection including validation and reliability procedures and data analysis procedure.

3.2 Research Design

The research is a descriptive survey type entitled "*an assessment of the National Teachers'Institute's Nigeria Certificate In Education by Distance Learning System (DLS) in the NorthWest geo-political zone of Nigeria.* Ex-post-facto design was chosen for this study. Ex post facto design or after- the-fact research is a category of research design in which the investigation starts after the fact has occurred without interference from the researcher. The majority of social research, in contexts in which it is not possible to or acceptable to manipulate the characteristics of human participants, is based on ex post facto research designs.

The data will be obtained from three (2) main groups of respondents that are directly concerned in the assessment of the research variables relating to the quality and adequacy of the Nigeria Certificate in Education by Distance Learning of the National Teachers' Institute.

3.3 Population

The target population for this research includes students of (2003/2004 Session) undergoing the National Teachers' Institute's Nigeria Certificate In Education By Distance Learning System (DLS) programme in the NorthWest geo-political zone; staff of the academic services and field operation and student's services departments in the National Teachers' Institute's Headquarters, state coordinators as well as all the centre supervisors, course tutors

and monitoring officers of the National Teachers' Institute numbering 2,980. This is presented in a table below: table 3.3.1

Locations	Stds	C/T	Population Coords	S/visors	Staff	M/ Officers	TOTAL
HQTRS	Nil	Nil	Nil	NIL	35		35
Kaduna	575	22	1	15		2	615
Kano	430	18	1	8		2	459
Katsina	466	15	1	8		2	492
Kebbi	380	13	1	6		2	402
Sokoto	288	12	1	5		2	308
Jigawa	304	15	1	6		2	328
Zamfara	318	12	1	8		2	341
TOTAL	2761	107	7	56	35	14	2980

SOURCE: NTI STUDENTS ENROLMENT STATISTICS. 2014

3.4 Sample and Sampling Procedure

In view of the large number of the population, a purposive random sampling technique was used across the zone. Accordingly, two (2) study centres per state, 40 students per centre , 5 staff of each of 3 departments used in HQ and 5 course tutors per centre in 14 centres were selected in the study.. In all 14 study centres were selected. In each of the 14 study centres 40 students were selected meaning 40 students per centre.. In addition to HQ staff 15 and 70 tutors, representing 22.5% of the total population based on the suggestion of Asika (2004). The breakdown of the sample is shown in the next table 3.3.2:

Table 3.3.2: Sample size

S/no	State	No of Study Center selected	No of students selected	No of staff selected from the HQ	No of tutors selected	No of monitoring officers selected	No of course supervisors selected	
1	**Kaduna**	2	80		10	1	2	95
2	**Kano**	2	80		10	1	2	95
3	**Katsina**	2	80		10	1	2	95
4	**Kebbi**	2	80	15	10	1	2	110
5	**Jigawa**	2	80		10	1	2	95
6	**Zamfara**	2	80		10	1	2	95
7	**Sokoto**	2	80		10	1	2	95
TOTAL			**560**	**15**	**70**	**7**	**14**	666

3.5 Instrumentation

Questionnaire was used throughout the study in which the respondents indicated their opinions. The instrument was broken into five sections.

Section A: Information on the respondents.

Section B: Effectiveness of tutorials

Section C: Effectiveness of contact sessions

Section D: Quality assurance

Section E: Success rate

3.5.1 Validation of Instrument

The instruments for the study were face validated by my supervisors and ABU Curriculum and Test and Measurement Specialists and their comments and observations greatly enriched its content and construct reliability index.

3.5.2 Pilot Study

The pilot study was conducted using the non participants respondents across the North West Geo-political zone and the results were said to be very consistent with the objectives of the study.The instruments were found to be very comprehensive in eliciting the required details from the respondents which led to a well informed analysis of the data collected in the study.

3.5.3 Reliability

The reliability of the instrument for this study was obtained by subjecting responses of the pilot study to a statistical analysis using chi-square . The analysis of the data showed reliability co-efficient of 0.74 which is considered highly satisfactory according to Kerlinger's (1986) reliability level of plus- minus 0.40 to 0.70 in behavioural sciences.

3.6 Procedure for Data collection

Part of the research Instruments were personally administered by the researcher in Zamfara and parts of Kebbi states and the Headquarters of the Institute in Kaduna, while some course tutors were used as research assistants who after being sensitized on their roles, did so on behalf of the researcher. The instruments were impressively returned after two weeks interval without casualities making it possible for the results to be analysed within a short span of time.

3.7 Scaling of the Questionnaire

The instruments were tabulated on the basis of the five-point Likert scale in order to translate responses provided by the respondents into numerical interpretations as indicated below:

Five Point Scale

Strongly Agree (SA) = 5

Agree (A) = 4

Undecided (UD) = 3

Disagree (D) = 2

Strongly Disagree (SDA) = 1

3.8 Data Analysis Procedure

Both descriptive and inferential statistics were used in analyzing the data. Frequency distribution, percentages, mean scores and standard deviation feature prominently in the analysis of of the results.

Chi-square (X^2) statistics was used to test the hypotheses because the computed test variable (dependent variable) was answered by two different groups of respondents (students and facilitators). All the hypotheses were tested at 0.05 alpha level of significance.

CHAPTER FOUR

PRESENTATION, ANALYSIS AND DISCUSSIONS OF RESULTS

4.1 Introduction

This chapter presents, the results of the data generated in the pursuance of the study.A sample size of 666 respondents responded to the instrument out of the total population size of 2,980 for this study. The analysis is presented in four sections in this chapter. The first section presents the frequencies and percentages of the bio data distribution while the second answers the research questions using mean and standard deviations including the frequencies of responses to each item. The third section tests and interprets the four research hypotheses using Chi-square (x2) statistics to determine differences among the opinions of the two different groups of respondents. All hypotheses were tested at 0.05 alpha level of tolerance. The fourth section outlined the summary of the major findings of the study.

421: Distribution of bio data variables

Table 4.1.1 Distribution of respondents by their state

Respondents' Locations	Number	Percentages
Kaduna	93	14.0
Kano	93	14.0
Katsina	93	14.0
Kebbi	93	14.0
Jigawa	93	14.0
Zamfara	93	14.0
Sokoto	93	14.0
Staff from academic service, field operation and students' service departments	15	2.3
Total	666	100.0

Table 4.1.1 above revealed that there was a total of 93 respondents from each of the states of Kaduna, Kano, Katsina, Kebbi, Jigawa, Zamfara and Sokoto States (that made up the North West geo-political zone) each making a 14.0% of the sampled respondents. The rest 15 (2.3%) of the respondents were staff sampled from the academic service, field operations and students' service departments.

Distribution of respondents by their locations

Table 4.1.2: Location of respondents centres

	Location	**Frequency**	**Percent**
	Urban	415	62.3
	Rural	251	37.7
	Total	666	100.0

A total of 423 (62.2%) of the respondents centers were located in urban locations while the rest 258 representing 37.8% said their centers are located in rural locations

Table 4.1.3 Designation of respondents

Table 4.1.3: Distribution of respondents by their category status

Category/ Status	Frequency	Percentage
Students	560	84.1
Course tutor	70	10.5
State monitoring officer	7	1.1
Course supervisor	14	2.1
Academic department	5	0.8
Field operation department	5	0.8
Students service department	5	0.8
Total	666	100.0

The table 4.1.3 above shows the number and percentages of the respondents based on their designations. Students accounted for 560 (84.1%) of the total sampled respondents. The course tutors numbering 70 accounted for 10.5%, a monitoring officer totaling 7 (1.1%), while 14 (2.1%) others were course supervisors, as against 5 (0.8) each sampled from academic departments, field operations department and students service department from the headquarter in Kaduna office.

4.3 Research Questions

1. **Research Question 1:** How effective in the opinions of the respondents are the tutorials being used in the programme?

Table 4.3.1: effectiveness of tutorials

S/N	STATEMENT	RESPONSE CATEGORIES					Mean	STD
		SA	A	UD	D	SD		
1	Tutorials being used in the DLS programme is one factor for achievement of the objectives of distance learning programme	525	41	**-**	**45**	**58**	**3.54**	**0.79**
2	Poor programme implementation in relation to service delivery in tutorials is affecting the effectiveness of DLS programme	**150**	**290**	**6**	**140**	**80**	**2.77**	**0.36**
3	The methods adopted in handling tutorials in DLS programme need overhauling in order for it to achieve its objectives.	**389**	**69**	**8**	**89**	**111**	**3.12**	**0.72**
4	The delivery mode adopted by the NTI in its DLS programme is responsible for its effectiveness in facilitating the achievement of the set objectives	**136**	**290**	**2**	**147**	**91**	**2.71**	**0.89**
5	DLS programme should adopt modern delivery strategies in its tutorial programme to be adequately effective	**280**	**142**	**5**	**158**	**155**	**2.62**	**0.80**
	Cummulative Mean							**2.95**

Table 4.3.1.1above revealed those tutorials used in NTI/DLS programme are effective having attracted the highest mean of 3.54. The details showed that 525 of the respondents

considered this as most agreeable outcome, meaning that the tutorials being used in the DLS programme is an important factor for achievement of the objectives of distance learning programme. The cumulative mean for effectiveness of tutorials equals 2.95 which is higher than the decision mean of 2.50.

Research Question 2: What in the opinions of the respondents is the adequacy of the contact sessions being used in the programme?

Table 4.3.2: adequacy of contact sessions

S/N	STATEMENT	RESPONSE CATEGORIES					Mean	STD
		SA	A	UD	D	SD		
1	New approaches in contact session towards course delivery are required to make the DLS programme result oriented	250	131	**4**	**125**	**156**	**2.72**	**1.23**
2	Contact periods between students and course tutors need to increase for meaningful impact	**231**	**173**	**5**	**136**	**121**	**2.78**	**1.56**
3	The assistance given by course tutors during contact sessions is inadequate	**259**	**141**	**8**	**127**	**131**	**2.81**	**0.10**
4	Contact sessions will require a little more time to be very effective.	**230**	**118**	**4**	**132**	**182**	**2.60**	**0.24**
5	New approaches to contact sessions are required to make the programme more result oriented	**99**	**212**	**9**	**169**	**177**	**2.35**	**1.82**
	Cummulative Mean			**2.65**				

According to table 4.3.2 above, contact sessions is adequate in view of the the cummulative mean of 2.65 which is higher than 2.50 decicion mean set for determining the effectiveness of contact sessions in the NTI/DLS.

Research Question 3: How effective in the opinions of the respondents on the quality assurance mechanisms being used in the programme?

Table 4.3.3 quality assurance

S/N	STATEMENT	RESPONSE CATEGORIES					Mean	STD
		SA	A	UD	D	SD		
1	Course tutors require off-season refresher courses in DLS programme for sustainable quality assurance of the programme to be very effective.	230	178	**1**	**136**	**121**	**2.78**	**1.56**
2	Adequacy of the support services being used in DLS programme could guarantee quality assurance.	**160**	**280**	**9**	**137**	**80**	**2.76**	**0.36**
3	To ensure quality assurance of the DLS programme efficiency should be maintain in the provision of support services	**98**	**190**	**8**	**180**	**190**	**2.28**	**0.59**
4	Course tutors should adequately compliment dearth of support services in order to ensure quality assurance.	**171**	**166**	**8**	**120**	**199**	**2.44**	**0.78**
5	Support services for DLS programme are not sufficient enough to guarantee quality assurance.	**390**	**75**	**1**	**89**	**110**	**3.12**	**0.72**
	Cummulative Mean			**2.68**				

Details in the table 4.3.3 above showed that the cumulative mean on quality assurance is 2.68 which is higher than the decision mean of 2.50. The accord between the cumulative mean, the mean response of the students on the sufficiency of support services is indicative of the high rating of the quality assurance entrenched in the NTI/NCE DLS.

Research Question 4: What is the success rate of students of the Nigeria Certificate in Education by Distance learning system?

Table 4.3.4 Success Rate of NCE/DLS

S/N	STATEMENT	RESPONSE CATEGORIES					Mean	STD
		SA	A	UD	D	SD		
1	The curriculum of DLS programme needs to be strengthened in order to realize set objective.	292	136	**2**	**145**	**91**	**2.71**	**0.89**
2	The performance of those trained under DLS programme on the field is a good measure of the success rate of the programme	**208**	**171**	**5**	**160**	**120**	**2.44**	**0.76**
3	The support given to participants on DLS programme by various state governments is a confirmation of the success recorded by the programme.	**234**	**158**	**3**	**140**	**131**	**2.68**	**0.08**
4	Majority of those registered for DLS programme successful complete the course	**528**	**58**	**3**	**42**	**41**	**3.54**	**0.78**
5	Adequacy of facilities/equipment in the various study centres contribute significantly to the success rate of NTI/DLS programme.	**208**	**80**	**8**	**180**	**190**	**2.02**	**0.55**
	Cummulative Mean			**2.68**				

According to thecummilative mean of 2.68 in table 4.2.4 above which is higher than the decision mean of 2.50, the success of NTI/DLS appeared to be acceptable

4.4 Testing of Hypotheses

Hypothesis 1: *There is no significant difference between the opinions of the respondents on the effectiveness of tutorials in the Nigeria Certificte in Education by Distance Learning System;*

Chi-square (X^2) statistics was used to test the hypothesis because the dependent variable (effectiveness of tutorials in the Nigeria Certificte in Education by Distance Learning System) was answered by two different groups of respondents (students and Course facilitators).

Table 4.4.1: The opinions of students and course tutors in the effectiveness of tutorials in the NCE by DLS

Variable	Type of Respondents	N	Mean	Std.dev	Std.err	Df	X^2cal	X^2crit	Sig (p)
Effectiveness of tutorials in NCE/DLS	Students	560	95.6100	15.91892	1.59189	628	1.441	43.77	.150
	Course tutors	70	14.0300	5.38263	0.56998				

Results of the Chi-square (X^2) statistics showed that there is no significant difference in the opinions of students and course tutors in the effectiveness of tutorials in the Nigeria Certificte in Education by Distance Learning System. Reason being that the calculated p value of 0.150 is higher than the 0.05 alpha level of significance, while the X^{2-}cal value of 1.441 is less than the 43.77 X^{2-}critical value at df 628. Hence the null hypothesis which states that there is no significant difference between the opinions of students and course tutors in the effectiveness of tutorials in the Nigeria Certificte in Education by Distance Learning System is hereby retained.

Hypothesis 2: There is no significant difference between the opinions of the respondents on the level of adequacy of contact sessions used in the programme.

Chi-square $(X)^2$ statistics was used to test the hypothesis because the dependent variable (effectiveness of contact sessions in the Nigeria Certificte in Education by Distance Learning System) was answered by two different groups of respondents (students and Course facilitators).

Table 4.4.2: chi-square statistics on the opinions of students and course tutors on the adequacy of contact sessions being used in the programme;

	Type of Respondents	**N**	**Mean**	**Std.dev**	**Std.err**	**Df**	X^2cal	X^2crit	**Sig (p)**
adequacy of contact sessions	Students	560	52.0500	13.6689	0.681	628	52.973	43.77	0.003
	Course tutors	70	9.7950	2.6124	0.031				

Results of the Chi-square (X^2) statistics above showed that there is significant difference in the opinions of students and course tutors on the level of adequacy of contact sessions being used in the programme. This is because the calculated p value of 0.003 is less than the 0.05 alpha while the X^2-calculated value of 52.973 is higher than the X^{2-} critical value of 43.77 at df 628. Hence the null hypothesis which states that there is no significant difference in the opinions of students and course tutors on the level of adequacy of contact sessions being used in the programme is hereby rejected.

Hypothesis 3 There is no significant difference in the opinions of the respondents on the level of effectiveness of quality assurance mechanisms used in the programme.

Chi-square (X^2) statistics was used to test the hypothesis because the dependent variable (effectiveness oquality assurance in the Nigeria Certificte in Education by Distance Learning System) was answered by two different groups of respondents (students and Course facilitators).

Table 4.4.3: chi-square statistics on the opinions of students and course tutors on the level of effectiveness of quality assurance mechanism being used in the programme

Variable	Type of Respondents	N	Mean	Std.dev	Std.err	Df	X^2cal	X^2crit	Sig (p)
Effectiveness of quality assurance mechanism	Students	560	52.8400	11.3620	0.568	628	53.822	43.77	0.00
	Course tutors	70	8.9500	1.0100	0.020				

Results of the Chi-square (X^2) statistics showed that significant difference exists between the opinions of students and course tutors on the level of effectiveness of quality assurance mechanism being used in the programme. The calculated p value of 0.000 is lower than the 0.05 alpha while the X^{2-}calculated value of 53.822 is higher than the X^{2-}critical value 43.77 at df 628. It showed from the mean returned by the students that level of effectiveness is higher than that returned by the course tutors. Hence the hypothesis which states that there is no significant difference between the opinions of students and course tutors on the level of effectiveness of quality assurance mechanism used in the programme is hereby rejected.

Hypothesis 4: There is no significant difference in the opinions of the respondents on the success rate of the Nigeria Certificate in Education by Distance Learning students.

Chi-square (X^2) statistics was used to test the hypothesis because the dependent variable (success rate in the Nigeria Certificte in Education by Distance Learning System) was answered by two different groups of respondents (students and Course facilitators).

Table 4.4.4: chi-square *statistics on the opinions of students and course tutors on the success rate of the NCE by DLS*

Variable	Type of sports	N	Mean	Std.dev	Std.err	Df	X^2cal	X^2crit	Sig (p)
success rate	Students	560	95.6100	15.91892	1.59189	628	1.441	43.77	.150
	Course tutors	70	4.0300	1.38263	0.03799				

Results of the Chi-square (X^2) statistics showed that there is no significant difference between the opinions of students and course tutors on the success rate of the Nigeria Certificate in Education by Distance Learning students. The reason being that the calculated p value of 0.150 is higher than the 0.05 alpha while the X^{2-}calculated value of 1.441 is less than the X^{2-} critical value 43.77 at df 628. Hence the null hypothesis which states that there is no significant difference between the opinions of students and course tutors on the success rate of the Nigeria Certificate in Education by Distance Learning students is hereby retained.

4.4 Summary of major findings

1. Tutorials being used in the programme were confirnmed to be very effective.The cumulative mean for effectiveness of tutorials equals 2.95 which is higher than the decision mean of 2.50.

2 .Contact sessions were also found to be adequate, in view of the the cummilative mean of 2.65 which is higher than 2.50 decicion mean set for determining the effectiveness of contact sessions in the NTI/DLS

3. The quality assurance mechanisms in Distance learning programme were rated high. The cumulative mean on quality assurance is 2.68 which is higher than the decision mean of 2.50. The accord between the cumulative mean, the mean response of the students on the sufficiency of support services is indicative of the high rating of the quality assurance entrenched in the NTI/NCE DLS.

4. The success rate of the Nigeria Certificate in Education by Distance Learning System was equally high. Mean of 2.68 is higher than the decision mean of 2.50

4.6 Discussion of findings

The outcome of this study revealed that there is no significant difference in the opinions of students and course tutors in the effectiveness of tutorials in the Nigeria Certificte in Education by Distance Learning System. Reason being that the calculated p value of 0.150 is higher than the 0.05 alpha level of significance, while the X^{2-}cal value of 1.441 is less than the 43.77 X^{2-} critical value at df 628. Hence the null hypothesis which states that there is no significant difference between the opinions of students and course tutors in the effectiveness of tutorials in the Nigeria Certificte in Education by Distance Learning System was retained. One of the reasons for this is because of self interest on the part of each category of respondents. Besides, it is possible that while the course tutors vouch safe for the tutorials organized for the students as meeting their needs the students might have found the product of the tutorial useful to the extent that it has continued to help them move forward in the course of study. This finding and the earlier submission of Brophy and Dudley (1999) are in tandem as they have maintained that when what is given is related to what is required positive relationship could be inferred. That there is no difference in the opinion of the two groups could also be likened to what Evans (1994) referred to as systemic balance equation in curriculum implementation process. Also

Keegan (1983) in his attempt to define distance education had alluded to relationship between course materials and dictate of the corse curriculum as significant in reaction to distance learning activities. It is therefore to be understood against the background of the foregoing why no significant difference was found in the opinions of students and course tutors in the effectiveness of tutorials in the Nigeria Certificate in Education by Distance Learning System.

The findings also showed that there is significant difference in the opinions of students and course tutors on the adequacy of contact sessions being used in the programme. Results of the Chi-square (X^2) ^{statistics} showed that there is significant difference in the opinions of students and course tutors on the adequacy of contact sessions being used in the programme. This is because the calculated p value of 0.003 is less than the 0.05 alpha while the X^2-calculated value of 52.973 is higher than the X^{2-} critical value of 43.77 at df 628. Hence the null hypothesis which states that there is no significant difference in the opinions of students and course tutors on the adequacy of contact sessions used in the programme was rejected.

The significant difference in the opinions of students and course tutors on the adequacy of contact sessions used in the programme as reported in this study is to be expected by the very nature of the DLS programme. Unlike in the conventional system of education that allows people staying together over a reasonable period of time full of constant interaction, DLS programme by its periodic nature may have denied students sufficent interactive opportunities needed to further the course of learning. This position is in line with an earlier position through Wikipedia (2013) lamenting the limitation of distance learning system of education in not providing enough of students-teachers interaction as is possible in 'normal' education system. Talking about "key facts" the University of London External Programme in its website http://www.londoninternational.ac.uk/about us/facts.shtml maintained that differences are bound

to occur between students and course tutors in any distance education system because of inherent ideological difference between the learners and the learned. This in itself may have among other reasons been responsible for the reason why students and course tutors opinions on the adequacy of contact sessions used in the programme differ significant as found in the outcome of this study.

Results of the analysis also showed that significant difference existed in the opinions of students and course tutors on the level of effectiveness of quality assurance mechanism used in the programme. Results of the Chi-square (X^2) statistics showed that significant difference existed between the opinions of students and course tutors on the level of effectiveness of quality assurance mechanism being used in the programme. The calculated p value of 0.000 is lower than the 0.05 alpha while the X^{2-}calculated value of 53.822 is higher than the X^{2-}critical value 43.77 at df 628. It showed from the mean returned by the students that level of effectiveness is higher than that returned by the course tutors. Hence the null hypothesis which states that there is no significant difference between the opinions of students and course tutors on the level of effectiveness of quality assurance mechanism being used in the programme was rejected One reason why this may have been so relate to the fact that assessment of quality assurance is relative depending on who is doing the assessment and what criteria are being considered. It is probably difficult for the students who are at the receiving end to appropriately determine how qualitative the programme they are running is because of lack of reference. By this it is meant that since they did not have the benefits of service delivery of similar programme elsewhere that could provide for comparison they may not be judicious in their assessment regarding quality control. Whereas for the course tutors who are not permanently scheduled to teach in the distance education programme because of being gainfully employed elsewhere and possibly in similar academic environment their assessment could be more objective having had benefits of

hindsight. This may be further justified from Holmberg's (2005) point of view on the basis that interaction and maturity do not guarantee incorporation of what is experienced and what is observed into one's cognitive structure.

The findings also showed that there is no significant difference in the opinions of students and course tutors on the quantity of the success rate of the Nigeria Certificate in Education by Distance Learning students Results of the Chi-square (X^2) statistics showed that there is no significant difference between the opinions of students and course tutors on the success rate of the Nigeria Certificate in Education by Distance Learning students. The reason being that the calculated p value of 0.150 is higher than the 0.05 alpha while the X^{2-}calculated value of 1.441 is less than the X^{2-}critical value 43.77 at df 628. Hence the null hypothesis which states that there is no significant difference between the opinions of students and course tutors on, the success rate of the Nigeria Certificate in Education by Distance Learning students is was retained. . That no significant difference was found in the opinions of students and course tutors on success rate of the Nigeria Certificate in Education by Distance Learning students depends on the angle from which each group look at success. Students may look at success from what they get at the end of the day from their investment of time in studying. Once a student succeeds in an examination which he invested much time on the tendency is to assume he has had enough for his investment whereas a course tutor will assess success from the point of view of percentage pass. No wonder therefore that Nkom (2001) maintained that students and teachers will constantly be at variance in their assessment of any given phenomenon because of difference in age, experience and knowledge. All of these may have added together to contribute to the reason why no significant difference was found in the opinions of students and course tutors on success rate of the Nigeria Certificate in Education by Distance Learning students as in this study.

CHAPTER FIVE
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This chapter summarizes the study, concludes and offers recommendations as well as suggestions for further studies in the related field.

5.1 Summary

This study titled "Assessment of the National Teachers Institutes' Nigeria Certificate in Education by Distance learning programme in the Northwest zone of Nigeria was presented under five chapters. Chapter one presented the introduction and general background of the study including the statement of problems. The study was delimited to the students, course tutors, state monitoring officers, course supervisors, academic services department, Field Operations department and the Students' Services department in 7 states in the North West geo-political zone of Nigeria.

Chapter two reviewed related literature including empirical studies on distance learning courses in around Nigeria.Chapter three dealt with on the research methodologies. As the study was a survey one questionnaire was the main instrument used. The population, sampling technique and sample size was presented in this chapter. The methods of data analysis used included frequencies and percentages for the bio-data variables and the use of chi- square statistics to test the research hypotheses at 0.05 level of tolerance. Chapter four was on result presentation, interpretation and discussion of the data analysis. The four hypotheses postulated were tested. Significant difference was established among the respondents on account of their states as well as on account of their status/position.Chapter five summarizes, and concludes the study. It also offers recommendations based on the findings. Suggestions were also made for further study in related field.

5.2 Conclusions

The opinions expressed by the respondents on the variables of the research have revealed outstanding results that relate adequately to all the research objectives, research question and hypothesis.

The computed data, which have been statistical analyzed using inferential and chi-square statistics of the data, have proportionately upheld and rejected the formulated guesses made and provided rational grounds for an informed recommendations that would revitalize and strengthen the delivery of the NCE Distance Education content of the National Teachers' Institute.

Most of the respondents have agreed that tutorial contacts are adequately provided by the National Teachers' Institute. This has gone to show that one of the most important features of open and distance learning (ODL) is being addressed by the Institute thereby becoming compliant to the globally acceptable standards in distance education operation.

This notwithstanding, the least opinions expressed should not be overlooked as they send a strong message that more need to be done to go closer to perfection.

In a similar finding on the success rates of the programme, implementation in the north-west zone,the general opinions of the respondents have held positively. This is attributable to a robust implementation strategy put in place by the Institute via sound policies, guidelines, regular appraisal monitoring and other quality assurance measures which have all seemed to have worked so well. This also does not mean that rooms are not there for improvements, especially in view of the dynamic considerations of distance education delivery strategies and opinions of some of the respondents in the research.

Some serious apprehensions have been expressed by the respondents regarding the effectiveness of tutorials for which the research hypothesis was rejected. Their opinions may not be unconnected with the experiences having emerged from sit-tight regimented institutions and their poor attitude to the proper understanding and effective utilization of tutorial sessions to enhance their performance. Continuous orientation and induction on proper utilization of tutorials needs to be given to students to appreciate and make good use of tutorials to make a difference in their attitudes to learning, especially as distance learners.

The opinions of the respondents on quality assurance mechanisms of the Institute is not a surprise in view of their expectations for an overhaul in some strategic issues such as review course books, increase in tutorial hours prompt release of results, resolution of complaints, etc. These are issues which have all been identified as important and urgent but for some unavoidable reasons could not be handled immediately by the Institute. Efforts will need to be intensified to actualize all the recommendations of the outcome all quality assurance reports conducted by the Institute.

5.3 Recommendations

The nation expects the National Teachers's Institute to transform itself into an institute for the development and improvement of the professional skills of teachers in the country. The following recommendations are hereby given based on the findings of this research work for the improvement of the delivery systems of distance education systems by the National Teachers' Institute and other similar institute that run similar programme.

1. Need to limit face to face tutoring and expand media

There seems to be so much reliance on the use of course books and face to face mode of programme delivery during tutorials at the study centres. The use of information and and communication technology (ICT), Audio and Video cassettes need to be integrated effectively into the programme. As the communication system improves, the Institute should be able to introduce multi-media learning including video and audio

Comferencing; computer based learning, radio and television technologies, to further enrich the programme delivery. The centres for educational technology at the various study centres and state offices need to be put in place and be fully integrated into the programme.

1. **Need for Prompt and Adequate Supply of Course Materials and Use of More Professional Personnels during Contact Session**

   There is need for prompt and adequate supply of course materials. Being the main course delivery medium, the course books should be received by students as they register for the courses. No distance learning system can function without the course materials upon which it is based. Most of the personnels used during contact session need to be well-groomed in distance learning techniques. The course tutors are drawn from conventional institutions and may not have very serious training in distance education or tutorial techniques. The centre supervisors will need assistance in counseling principles and techniques.

3, Total Quality Management

Quality assurance is set of activities that an organization undertakes to ensure that standards are specified and reached consistently for a product or service. The National Teachers Institute and other institutions which run similar programme should undertake a systematic review of their operations based on the findings of the research to ensure quality. Learning materialsshould be reviewed on the basis of feed-back from learners, course tutors and subject experts and they should be updated by the Institute. The Institute should also set a separate system evaluation unit which will conduct regular studies and monitoring of different aspects of the delivery modes and implementation processes of the Institutes' programme.

2. **Strengthening the Delivery of Distance Learning Systems**

Based on the decision of the respondents on success rate variables, which was returned with a accumulative mean of 2.68, it is fair to suggest that lots of impending factors exist that seemingly make it difficult for many students to pass out successfully from the programme. These need to be identified and eliminated so that more of the required teachers to manage the basic education sector could be produced through Nigeria Certificate In Education by Distance Learning System and alson those willing to enroll into the programme could be attracted to join the programme.

Government and spirited individuals including the non-governmental agencies should be encouraged by relevant government agencies to support the distance education programme in its efforts to train and upgrade all qualified grade II teachers to NCE level.

5.4 Implication for quality teacher education

The implication of this study and its outcome is that the NTI/DLS programme requires proper monitoring for the quality of service delivery to be greatly improved thereby making distance learning programme of the National Teachers' Institute the hub upon which distance learning programme will draw from in Nigeria educational system.

One of the issues dominating the debate on current educational crisis is teacher quality. There is an increasing concern that teachers' level of preparation is not adequate. Their training has not prepared them for the realities of the classroom and the new challenges posed by the new information and communication technology, students'new learning needs and the expectations of the state and the labour market. It is argued that the revatilization of education and the improvement of the quality of of tuition provided through distaqnce learning system by the National Teachers' Institute and other similar institutions require strict enforcement of standards.

5.5Contributions of the research to knowledge

1. This research has added to the existing body of knowledge in the theory and practice of the distance education quality assurance of the National Teachers' Institute It provides a basis for discussion on quality assurance in distance education programmes.
2. A better understanding of the concept, tutoring and its diverse practical approaches have been unearthed and presented as best practical options in distance education practice, which can be relied upon by institutions practicing ODL in Nigeria.
3. The research was able to point that increasing success rate and effectiveness of teacher training through distance education is a result of a firm political will and commitment to commit enormous resources and energies by the distance education institutions managers; course facilitators and students in particular.

4. The research also opened up strategies to be adopted to increase success rates of the Institute's Distance Learning System not necessarily from the quantum perspectives of resource sourcing and utilization, but also in the strife to get course facilitators trained in diverse implementation of distance education strategies

5.6 Suggestions for further studies

It is suggested that a study to establish the relationship between Effective Distance Learning Programme and Socio-economic characteristics should be undertaken.

- Also, a study to determine the role the establishment of more study centres could play in facilitating the realization of the main objective of the distance learning programme is desirable.

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Appendix 1

ASSESSMENT OR THE NATIONAL TEACHERS' INSTITUTE'S NIGERIA CERTIFICATE IN EDUCATION BY DISTANCE LEARNING SYSTEM IN THE NORTHWEST GEO-POLITICAL ZONE OF NIGERIA: IMPLICATION FOR QUALITY TEACHER EDUCATION.

QUESTIONNAIR INSTRUMENTS

LETTER OF INTRODUCTION

Dear Respondent,

This questionnaire is meant to generate information for a research work. The accuracy of the information provided will enable us draw relevant and meaningful conclusions that will be used to improve our educational system, I therefore implore you to be as accurate and as honest as humbly possible, I value your contribution to the success of this research work.

Thank you as you patiently read through and responds to each item as required.

Yours faithfully,

Bala Ibrahim

SECTION A

QUESTIONNAIRE

THE ASSESSMENT OF NTI/DLS PROGRAMME

Section A: Respondents Data

State

Kaduna [ ]

Kane [ ]
Katsina [ ]
Kebbi [ ]
Jigawa [ ]
Zamfara [ ]
Sokoto [ ]

1. Location of Centre
   Urban [ ]
   Rural [ ]
2. Designation (Staff Only)
   Course tutor [ ]
   State Monitoring Officer [ ]
   NTI Staff in: [ ]
   Field Operation Department [ ]
   Students Services Department [ ]
3. Circle of Study (Students Only)
   One [ ]
   Two [ ]
   Three [ ]
   Four [

SECTION B

EFFECTIVENESS OF TUTORIALS

S/N	STATEMENT	RESPONSE CATEGORIES					
		SA	A	UD	D	SD	
1	Defective tutorials being used in the DLS programme is the bane of achieving the objectives of distance learning programme						
2	Poor programme implementation in relation to service delivery in tutorials is affecting the effectiveness of DLS programme						
3	The methods adopted in handling tutorials in DLS programme need overhauling in order for it to achieve its objectives.						
4	The delivery mode adopted by the NTI in its DLS programme is responsible for its effectiveness in facilitating the achievement of the set objectives						
5	DLS programme should adopt modern delivery strategies in its tutorial programme to be adequately effective						

SECTION C

EFFECTIVENESS OF CONTACT SESSIONS

S/N	STATEMENT	RESPONSE CATEGORIES SA	A	UD	D	SD
1	New approaches in contact session towards course delivery are required to make the DLS programme result oriented					
2	Contact periods between students and course tutors need to increase for meaningful impact					
3	The assistance given by course tutors during contact sessions is inadequate					
4	Contact sessions will require a little more time to be very effective.					
5	New approaches to contact sessions are required to make the programme more result oriented					

SECTION D

QUALITY ASSURANCE

S/N	STATEMENT	RESPONSE CATEGORIES					
		SA	A	UD	D	SD	
1	Course tutors require off-season refresher courses in DLS programme for sustainable quality assurance of the programme to be very effective.						
2	Adequacy of the support services being used in DLS programme could guarantee quality assurance.						
3	To ensure quality assurance of the DLS programme efficiency should be maintain in the provision of support services						
4	Course tutors should adequately compliment dearth of support services in order to ensure quality assurance.						
5	Support services for DLS programme are not sufficient enough to guarantee quality assurance.						

SECTION E

SUCCESS RATE

S/N	STATEMENT	RESPONSE CATEGORIES					
		SA	A	UD	D	SD	
1	The curriculum of DLS programme needs to be strengthened in order to realize set objective.						
2	The performance of those trained under DLS programme on the field is a good measure of the success rate of the programme						
3	The support given to participants on DLS programme by various state governments is a confirmation of the success recorded by the programme.						
4	Majority of those registered for DLS programme successful complete the course						
5	Adequacy of facilities/equipment in the various study centres contribute significantly to the success of NTI/DLS programme.						