EVALUATION OF LEARNER SUPPORT SERVICES IN THE NIGERIA CERTIFICATE IN EDUCATION BY DISTANCE LEARNING UNDER THE NATIONAL TEACHERS' INSTITUTE, KADUNA

BY

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A DISSERTATION SUBMITTED TO THE SCHOOL OF POSTGRADUATE STUDIES, AHMADU BELLO UNIVERSITY, ZARIA IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE AWARD OF A DOCTORAL DEGREE IN CURRICULUM AND INSTRUCTION

Declaration

I hereby declare that this dissertation entitled *“Evaluation of the Learner Support Services in the Nigeria Certificate in Education by Distance Learning under the National Teachers’ Institute, Kaduna”* was undertaken by me in the department of Educational Foundation and Curriculum.

The information derived from the literature has been duly acknowledged in the text and list of references provided. No part of this dissertation was presented for another degree or diploma at this or any other institution.

Zubairu Shehu ***--------------------------***
Signature

Date:…………………...

Certification

This dissertation, titled "***Evaluation of Learner Support Services in The Nigeria Certificate in Education by Distance Learning under the National Teachers' Institute, Kaduna***" undertaken by *SHEHU*, Zubairu meets the requirements governing the award of the Degree of Philosophy in Curriculum and Instruction of the Ahmadu Bello University and is approved for its contribution to knowledge and literary presentation.

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Dedication

This work is humbly dedicated to my parents (Safiyyah and Muhammad), brother, (Alhaji Umar), wife, (Raliyah), Children (Yusuf, Suleiman, Hafsat, Zainab, Fatimah and Muhammad), and indeed, to the service of the National Teachers' Institute and the nation at large.

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Abstract

This research examined the Learner Support Services in the Nigeria Certificate in Education by Distance Learning under the National Teachers' Institute, Kaduna.

Five research objectives were articulated and centred on 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 adopted 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 to continuously 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.

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Operational Definitions of Terms

The following terms are operationally defined as follows:

Evaluation – A process in curriculum practice used to determine whether or not the objectives are being achieved; whether or not the curriculum content have been properly organized to achieve the curriculum objectives; whether or not the curriculum objectives have been properly stated in general and specific terms in consideration of the national objectives; whether or not the content delivery methodologies have been appropriately identified and articulated to meet curriculum and content objectives; whether or not the learning experiences have been properly selected and used based on learners' abilities; and whether or not the evaluation process itself is appropriate and comprehensive to provide sufficient information that would lead to the desired modifications and review of the entire curriculum process. Thus, evaluation is a cyclical process.

In the context of this research work, the concept was used to determine the efficacy of delivery strategy of the content of education by the National Teachers' Institute in its Nigeria Certificate in Education by Distance Learning.

Distance Learning System:- is used to mean a method or strategy of content delivery to students that study at a distance in remote and isolated conditions with less physical contacts with teachers. Open and Distance Learning and Open and Distance Education are interchangeably used in the context of this research to mean the same and one thing.

Learners Support Services/Facilities: - in the context of this research work, is used to mean the essential information and facilities that would close the gap between the distant student and the distant teacher and also create enthusiastic emotions, confidence, zeal and determination to succeed in their learning task in spite of their nature and characteristics of studies.

List of Abbreviations

ABU	-	Ahmadu Bello University
ADB	-	Asian Development Bank
B.Ed	-	Bachelor of Education
CHOGM	-	Commonwealth Heads of Government Meeting
COL	-	Commonwealth of Learning
COSI	-	Correspondence and Open Studies Institute
COSU	-	Correspondence and Open Studies Unit
DLS	-	Distance Learning System
EFA	-	Education for All
ICT	-	Information and Communication Technology
IGNOU	-	Indira Ghandi National Open University
IJOL	-	India Journal of Open Learning
LSSs	-	Learner Support Services
NCE	-	Nigeria Certificate in Education
NOUN	-	National Open University of Nigeria
NTI	-	National Teachers' Institute
NTV	-	National Television

ODE - Open and Distance Education

PGDE - Postgraduate Diploma in Education

SRS - Stratified Random Sampling

TC II - Teachers Grade Two Certificate

TISEP - Teachers In-service Education Programme

TOJDET - Turkish On-line Journal of Distance Education

TOJET - Turkish On-line Journal of Educational Technology

TV - Television

UNESCO - United Nation Scientific and Cultural Organization

CHAPTER ONE

INTRODUCTION

1.1 ***Background to the Study***

Distance Education has a worldwide application, including Nigeria. It started as a correspondence programme vide postal services to prepare oversea candidates for General Certificate in Education and update the capacities of the middle manpower between the late 50s and early 60s especially in the newly independent countries. Distance Education Institutions around the world sprung up since then to address the issue of improved access to education arising from the surge in population and dwindling economy. It was also clear to most governments that providing and maintaining the required physical infrastructure in educational institutions were becoming increasingly difficult in both basic and higher levels of education. Distance education is now seen as a remedial strategy to redress the issue of inaccessibility, which will amount to slow pace of development.

The practice is still being used to train personnel on job worldwide in proficiency and lifelong skills that are essentially required for personal and corporate development of societies. It is thus seen as a catalyst for personal and societal development.

The National Teachers' Institute (NTI) has been using this approach to train large number of teachers in order to address the challenge of inadequacy of qualified teachers in the basic educational sector in the country which was initially witnessed as a result of the expansion of the primary education in 1976. As the Institute continues to do so, it has remained focussed in the entrenchment of learner support services to address the unique characteristics of distance learners who by the convention of the programme study in isolation in remote and distant places with little help compared to their counterparts in conventional institutions. These range from tutorial (tuition), administrative and counselling services in operational blue-print and in the study centres and the peer support, which is equally an essential part of the learner support services.

These services are so important that they can affect or mar the success of distance learners. Whatever is needed to be done to effectively deliver the services to distance learners, must be done with precision and in total cognisance with the distance education practice. Learner Support Services is indeed the bedrock for the success of any Distance education practice because it addresses the challenges of competency of the people involved in its planning and implementation; its impact on the learning achievements of the learners.

The researcher views the practice of distance education with emphasis on learner support as not been clearly understood by the operators of the programme at different operational levels. This is seriously impeding on the effective utilization of the services and negatively impacting on students' performances in the NCE distance learning system of the National Teachers' Institute. Undertaking a research into the learner support services of the National Teachers' Institute is important as a positive step towards highlighting the various issues/challenges that are directly connected with its practice. The capacities of the various personnel involved in its operation will be strengthened and students will be provided with ample opportunities to maximise their successes vide utilisation of variety of learning packages meant to enhance their studies.

It is in line with this that the Evaluation of Learner Support Services in the Nigeria Certificate in Education under the National Teachers' Institute, Kaduna was made to uncover serious issues relating to adequacy, quality, utilisation, capabilities of personnel operating the distance education of the institute and impact of this important service being offered by the Institute.

Several efforts have been made in the past (Olufisan, (1992) and **Koul,** (2008) at both lower and higher academic levels to appraise some specific areas with a view to providing a guide or light towards enhancing the quality of the delivery approaches and the strength of the distance education content in relation to the national aspirations. The results of the researches have been quite revealing and have indeed led to series of discussions and attempts at addressing those gray areas highlighted in the researches.

1.2 Statement of the Problem

It has almost become the tradition of NCE/DLS students across the country and indeed students of conventional institutions to smuggle prepared answer materials or torn course materials into the examination halls or engage in other dubious means of cheating in examinations like girrafing, impersonation to earn objectionable grades without working for it. This bad habit is becoming increasingly disturbing to educationists and people imbued with the vision and mission to secure Nigeria and its development in all sectors of the economy. This ugly trend has set a phase in which the very foundation of development, i.e. justice and uprightness is eroded and in its place, corruption and inequity becomes the bane for our development. This very heinous act must be subdued at all cost and changed for the better and there is no better way to doing it except through the education sector.

Distinct from the strategies being advocated by the various groups of concerned citizens of this great country, Nigeria, in which laws are promulgated to curb this unwholesome behaviour of our students nationwide, it is believed that addressing the issue from the approach of effective use of learner support services, the trend could be averted and completely be eliminated.

In a nutshell, a clear problem of quality assurance in our examination system which is the basis for certification in Nigeria is established and that nothing should be left undone to secure its lost glory for the sake of our development.

Course facilitators and students alike who are expected to partake in the effective utilization of learner support services to overcome the serious problems of examination malpractice and forestall sanity in the entire education sector do not seem to understand the promising effects of this strategy. Thus, the problem continued unabated, thronging the entire nation into disarray and in dire need for a solution.

This particular misgiving about the perception of course facilitator and students about learner support services and the powers that go with it in addressing the nation's developmental problems constitute yet another problem for this study which must be changed if education is to be of any meaning for our development.

The general outcry over the quality of NCE/DLS and the use of Open and Distance Education to train teachers effectively is without doubt the outcome of insensitivity of the nature of distance education itself in terms of its inherent potentials through the optimal utilization of learner support services to make remarkable difference in the training of teachers. *(Daily Trust, Monday, August 28th, 2006)*

Because education is a general public enterprise for which everyone has a stake in, it is necessary that the general perception of public be lit with clear explanations about this important strategy of teaching so that the much needed support they are expected to give towards making the effort worthwhile is assured.

Evident from the performances of NCE/DLS students in the North West zone especially, is an indication that there is poor reading habit among the students. Students hardly get prepared before writing any examination and are ever ready to cheat at all cost to pass their examinations.

Poor reading habit among student constitute another problem necessitating this study so that variety of other learning resources could be understood by the students from the perspective of learners support services. As important as it is to depend on the usual print-based materials, which is just an aspect, and indeed, not sole determinant of effective distance education delivery, especially as it affects the performance of distance learning students, it is equally necessary for the students to explore other means by which they can consolidate and expand their knowledge and skills in learning.

All things being equal, the services and facilities under learner support cannot by themselves impact meaningfully in students' learning or change the present status quo to a better one. It is essentially important that the capacities of the personnel involved in the planning and production of the required learner support materials is continuously built to be able to deliver the services effectively to students at a distance. This has clearly brought out the capacity problem of the personnel involved in the implementation of the Institute's distance education and that which must necessarily be tackled by this study.

The aim of this research is to evaluate the learner support services in promoting and enhancing distance education delivery in the NCE Distance Learning Programme conducted by the National Teachers' Institute, Kaduna.

1.3 Objectives of the Study

The main objectives of the study are to:

1. Investigate the adequacy of learner support services provided in the Nigeria Certificate in Education by Distance Learning System (NCE/DLS) in the NTI.
2. Determine the quality of learner support services utilized in the Nigeria Certificate in Education by Distance Learning System (NCE/DLS) in the NTI.
3. Find out the extent to which learner support services are being utilized by the Institute in its Nigeria Certificate in Education by Distance Learning System (NCE/DLS).
4. Identify the capacity of the NTI personnel and Course Facilitators in NCE by Distance Learning under the NTI.
5. Find out the views of students and Course Facilitators on the impact of learner support services in the NCE by Distance Learning of NTI.

1.4 Research Questions

The research questions for this study are:

1. How adequate are the learner support services of the National Teachers' Institute's NCE through Distance Learning?

2. How qualitative are the learner support services provided in the National Teachers' Institute's on its NCE/DLS?
3. What is the extent to which Learner Support Services are being utilized in the NCE by Distance Learning of the NTI?
4. What is the capacity of NTI staff and Course Facilitators involved in the NCE by Distance Learning in the NTI?
5. What are the views of students and course facilitators on the impact of learner support services in the NCE by Distance Learning of the NTI?

1.5 Research Hypotheses

1. There is no significant difference between the perception of staff and students on the adequacy of Learner Support Services of the NCE/DLS.
2. There is no significant difference between the perception of staff and students on the quality of Learner Support Services of the NCE/DLS.
3. There is no significant difference between the perception of staff and students on the effective utilisation of Learner Support Services of the NCE/DLS.
4. There is no significant difference between the opinions of course facilitators and students on the impact of Learner Support Services on students' learning.
5. There is no significant difference in the opinions of staff and Course Facilitators on the capacity of NTI Personnel and Course Facilitators in the effective implementation of learner support services;

1.6 Basic Assumptions

1. Successful distance education practice is not possible with inadequate learner support services.
2. Successful distance education practice to a large extent depends on qualitative learner support services.
3. Effective utilization of learner support services is *sin-qua-non* to the implementation of successful distance education system.
4. The ability of the Institute's personnel and course facilitators to implement effective learner support services depends to a large extent, on their knowledge and skills in distance education delivery approaches.
5. Learner Support Services, if effectively managed, is capable of impacting positively on students' performance.

1.7 Significance of the Study

It is expected that by the time this research is concluded, the result will provide a genuine basis for the Institute to review and improve its learner support services with regards to its Nigeria Certificate in Education by Distance Learning System.

Distance and conventional institutions in the country will similarly benefit by utilizing the outcome of the research to enhance the delivery of their programmes. The outcome of the research will provide opportunity for the education administrators (Federal/State Ministries of Education) to have a clear focus on proper budgeting and procurement of all the necessary resources for the effective utilization of learner support services in their respective teacher education programmes.

The Distance Learners will learn from variety of resources to strengthen their quality of knowledge and experiences making their learning easier.

The credibility of the Institute and indeed any other organization doing similar work will be bolstered if they care to utilize the outcome of the research to enhance their effectiveness in the implementation of standard learner support practices.

Teaching and Learning will be revolutionised and significantly improved in accordance with expectations of curriculum planners and the vision and mission of the Federal Ministry of Education;

The study will impact on teachers' capacity in the classroom through proper handling of resources meant for the improvement of teaching and learning

The research outcome will promote the effectiveness and efficiency of learner support services of the Institute in the implementation of NCE DLS.

Finally, it will be of tremendous significance to textbook writers to streamline their writings of various NCE programmes to suit the learners' expectations.

1.8 Scope of the Study

The research is restricted to the Learner Support Services of the National Teachers' Institute's Nigeria Certificate of Education by Distance Learning System and restricted to only North West where students performance over the years, have consistently skewed to the left.

The study is targeted at the key personnel that are directly connected with policy formulation and implementation of learners support services at the Headquarters of the National Teachers' Institute. They include deputy directors, assistant directors and chief education officers and their assistants; the seven state coordinators and their education officers who coordinate and monitor the implementation of this important service in their respective states; and the course facilitators, centre managers and students.

For some obvious considerations, not all course facilitators, centre managers and students will be sampled for the study. Care was taken to ensure that the sample used were representative enough by the use of efficient sampling technique;

The research could have been extended to cover more than one geo-p*olitical* zone, but for the ease of data collection and processing.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

This chapter focuses on the Evaluation of the Learner Support Services provided by the National Teachers' Institute for the Nigeria Certificate in Education by Distance Learning. In line with this, the chapter focuses on reviewing literature that relate to the title of the study.

The key terms that will interchangeably be used are Distance Education, Open and Distance Education and Distance Learning System. The three terms are synonymous in their meanings and are used to denote the same and one thing by Distance Education practitioners around the world. The National Teachers' Institute, Kaduna chose to call it Distance Learning System.

2.2 Distance Education: A Conceptual Framework

Latchem & Robinson (2003), define distance education "as an educational process in which teachers and learners are separated in space and/or time for some or all of the time of study and in which the learning materials take over some of the traditional role of the teacher. Learning materials play a central role, incorporating a variety of media and, in most systems, provision is of support".

In this definition, it is clear that distance education can totally be an exclusive educational process by which the most important factor in any educational process is excluded and replaced by learning materials and/or educational media in form of support. In as much as distance learning can be undertaken by students at a distance without physical involvement of the teacher, it would be better done with the teachers' because of the facilitation and counselling roles they are expected to play in any educational transaction. More so, the whole idea of learning will continue to be incomplete without the teacher as a pivot.

Adeyemi (2005) sees it "as a learning oriented program that is design through an integrated multi-disciplines and multi-media system". This definition presupposes the idea of instructional design in distance education that is approached from a multi-dimensional perspective popularly referred to as 'team approach.

Dewar (1989) on the other hand sees open learning as "a meaning learning without usual restriction and constraints imposed by traditional classroom style education; the 'open' means that many traditional barriers to learning-prerequisite, time, distance- are removed. With open learning, you can create your own schedule and study at a time , place and pace that suit you"

Falade (2004) pointed that "distance education referred to all arrangements for providing instruction through print or electronic communication media to persons engaged in planned learning in a place or time different from that of instructor".

The word distance learning, distance education, open education or open learning are often used inter- changeably.

UNESCO (2002) define Distance education as "any educational process in which all or most of the teaching is conducted by someone removed in space and/or time from the learner, with the effect that all or most of the communication between teachers and learners is through an artificial medium, either electronic or print"; and "as an educational process in which a significant proportion of the teaching is conducted by someone removed in space and/or time from the learner. Open learning, in turn, is an organized educational activity, based on the use of teaching materials, in which constraints on study are minimized in terms either of access, or of time and place, pace, method of study, or any combination of these".

The definition above did not completely remove the possibility of contact between the distant learner and the tutor, but simply asserted that most often; the teacher does less than the mediums (study and other electronic materials).

The structure of the NTI's Distance Learning System is such that the learners do most of their studies privately for a minimum of two hours per course per day for a period of fifty two weeks, which will translate into 2 x 7 x 52 = 728 private hours and participate in tutorials, practicals and assignments with their other colleagues and course facilitators at the study centres for another 80 contact hours. Looking at the proportion of hours that teachers are expected to have physical contacts with the students and the hours for personal readings by the students, it is sufficient to understand that the National teachers' Institute has ordinarily accepted to operate its distance learning system within the frame reference of this definition.

For Sims (1977:4) in Harry & Rumble (ed) (1982), the unique distinguishing feature in the correspondence education process is that the learner is at a distance from the teacher for much, most or even all of the time during the teaching-learning process".

There seems to be high level of concurrence in this definition with the preposition about the concept advanced by UNESCO above. Teacher factor is not completely ruled out in distance education operation, but is occasioned minimally and occasionally required.

Keegan (1980: op cit) however suggested six distinguishing elements of distance education thus;

a. The separation of teacher and the learner which distinguishes it from face – to face lecturing;
b. The influence of an educational organization which distinguishes it from private study;
c. The use of technical media, usually print, to unite teacher and the learner and carry the educational content of the course;
d. The provision of a two-way communication so that the student may benefit from or even initiate dialogue, which distinguishes it from other uses of educational technology;
e. The teaching of students as individuals and rarely in groups, with the possibility of occasional meetings for both didactic and socialization process;
f. The participation in a more industrialized form of education…

COL & Asian Development Bank (1999), holds that “there is no one definition of Open and Distance Education, but there are approaches to defining the term viewing from the following characteristics:

i. ***Separation of teacher and learner*** in time or place or in both time and place;
ii. ***Institutional accreditation;*** that is, learning is accredited or certified by some institutions or agency.
iii. ***Use of Mixed-media courseware***, including print, radio, television broadcasts, video and audio cassettes, computer-based learning, and telecommunications. Courseware tends to be pre-tested and validated before use;
iv. ***Two-way communication*** allows learners and tutors to interact as distinguished from the passive receipt of broadcast signals. Communication can be synchronous or asynchronous;
v. ***Possibility of face-to-face meetings*** for tutorials, learner-learner interaction, library study, and laboratory practice sessions, etc.

Ordinarily, as a researcher, I associate myself with the above profound description of distance education by COL & Asian Development Bank (1999) because of the following reasons:

1. The definitions so far cited appeared to be contextual and relative to the operational bases/experiences of the distance education scholars. Perhaps, the emphasis laid on synchronous technologies is associated with the level of technological advancement of their respective operational areas which the developing nations seem to be too far away, Nigeria inclusive. To think of distance learning from the perspectives of the definitions would mean agreeing to what would hardly be practicable viewing from the level of our development. This description provides chances of integration of elements of traditional and the practical norms of distance education;
2. The National Teachers' Institute is not alone in the practice of Distance education. It collaborates with national and International organizations that are assuring to its desire for maintenance of quality through accreditations and monitoring. In this sense, the distance learning programme of the Institute has continued to gain national and international acceptance;
3. According to the descriptions, distance learning must be supported with ample of learner support services/facilities to support independent study by the students and ensure easy access to resources and course tutors and colleagues which has been generally agreed upon as the most important and indispensable components of distance education practice, the world over. Indeed the success of any distance learning programme is dependant largely on the effective use of learner support services;
4. There is possibility of face-face meetings between the course facilitators and students and other students to enable them socialize and share ideas on most important issues in their educational interactions. Face to face (F2F) meetings have come to make sense

in providing significant tutorial and couselling services that require physical presence of student and their teachers and such other important platforms for socializations, orientations, etc. ;

5. Distance education is mostly technology based on which both the clients and the service providers rely heavily on, especially in the training of teachers in line with the globalization trend. This being the acceptable practice, NTI has demonstrated a strong will to facilitate learning by using the available and feasible technological outlets in all its operational locations to effectively train its students. Also going by the downward trend in the reading culture of students in the country and the growing interest among Nigerians in scouting for information using ICT, it is hoped that meaningful learning through distance education would take place.

Other definitions which are undoubtedly relevant to the discussion on distance education and those that could be especially relevant to the practice of distance learning in the National Teachers' Institute, include the following:

Cassel (2006) sees "distance education", which is often referred to as "Distance Learning" as well as "a field of education focusing on andragogy and pedagogy instructional system and technology which endeavours to deliver an education to students who are not physically in a classroom or campus setting"

Holmberg (1977) suggested that the term 'distance education ' covers the various forms of study at all levels which are not under the continuous, immediate supervision of tutors present with their students in lecture rooms the same premises, but which nevertheless, benefit from the planning, guidance and tuition of a tutorial organization". "Distance Education includes all those teaching methods in which, because of the physical separateness of learners and teachers, the interactive, as well as the pre-active phase of teaching is conducted through print, mechanical or electronic devices" he continued.

According Holmberg (1980) also, the practice of distance education should be based on didactic interaction theory in which incorporate the following key ODE elements;

- A theory of conversation, based on empathy;
- Print publication NOT like discourse on subjects;
- Conversation like tone;
- Personal anecdotes;
- Personal disclosure;
- Opportunity for one to one interaction;
- Synchronous F2F;
- Asynchronous – post

This latest Holmberg's idea corroborated his position on the ODL with the exception that emphasis on the learner support to support the theory has not been detailed thoroughly in the assertion.

Perraton (2000: 13) in IRFOL (2004) sees open learning as “an organizational activity based on the use of teaching materials, in which the constraints on study are minimized either in terms of access or of time and place, pace methods of study or any combination of these”.

The Wikipedia Encyclopedia defined Distance education, or distance learning, as “a field of education that focuses on the pedagogy, technology, and instructional system designs that aim to deliver education to students who are not physically on site in a traditional classroom or campus;... 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." In other words, distance learning is the process of creating an educational experience of equal quality for the learner to best suit their needs outside the classroom. Distance education courses that require a physical on-site presence for any reason (including taking examinations) is considered a hybrid or blended course of study.

Describing the elements involved in distance learning, UNESCO (2002) puts that “open and distance learning can usually be described as made up of a range of components such as: the mission or goal of a particular system, programmes and curricular, teaching/learning strategies and techniques, learning material and resources, communication and interaction, support and delivery systems, students, tutors, staff and other experts, management, housing and equipment, and evaluation”

The description brought out in clear terms the spectrum considerations of the system that makes distance learning distinct from the perspectives of the earlier definitions such as correspondence learning, home study, etc.

The development of computers and the internet made distance learning distribution easier and faster and have given rise to the 'virtual university, the entire educational offerings of which are conducted online. This emerging technology is becoming widely used in universities and institutions around the globe. With the recent trend in technological advancement, distance learning has become more recognized for its potentials in providing individualized attention and pedagogical theory of distance education is that of "transactional distance".

The identification of Open and Distance Education above with its inherent elements sufficed our intention of assessing the Learner Support Services of the Institute’s Nigeria Certificate in Education by Distance Learning System from a holistic angle. A clear explanation of the concept of distance education by the National Teachers’ Institute is given in the book covers below. Accordingly, it is viewed as not any other thing than a system of delivering the content of education to a virtually isolated student from the real classroom teacher/student interaction conditions using a variety of learner support facilities. The prevalence of course books, audio/video facilities including cassettes, CDs, radio, Television, computers and internet facilities and the information manual and course books are emphatic on their intensive usage by the Institute in the training of its distance students and suggestive as well of the Institute’s adherence to international practice of distance education. In a unique distance education style, the Institute views the integration of face to face contact between the course facilitators and distance learners where tuitions are supplemented in a real class contact sessions as a hallmark of distance education practice.

It is in this line that a critical evaluation of how these facilities/services are being entrenched and their effectiveness would be undertaken in addition….

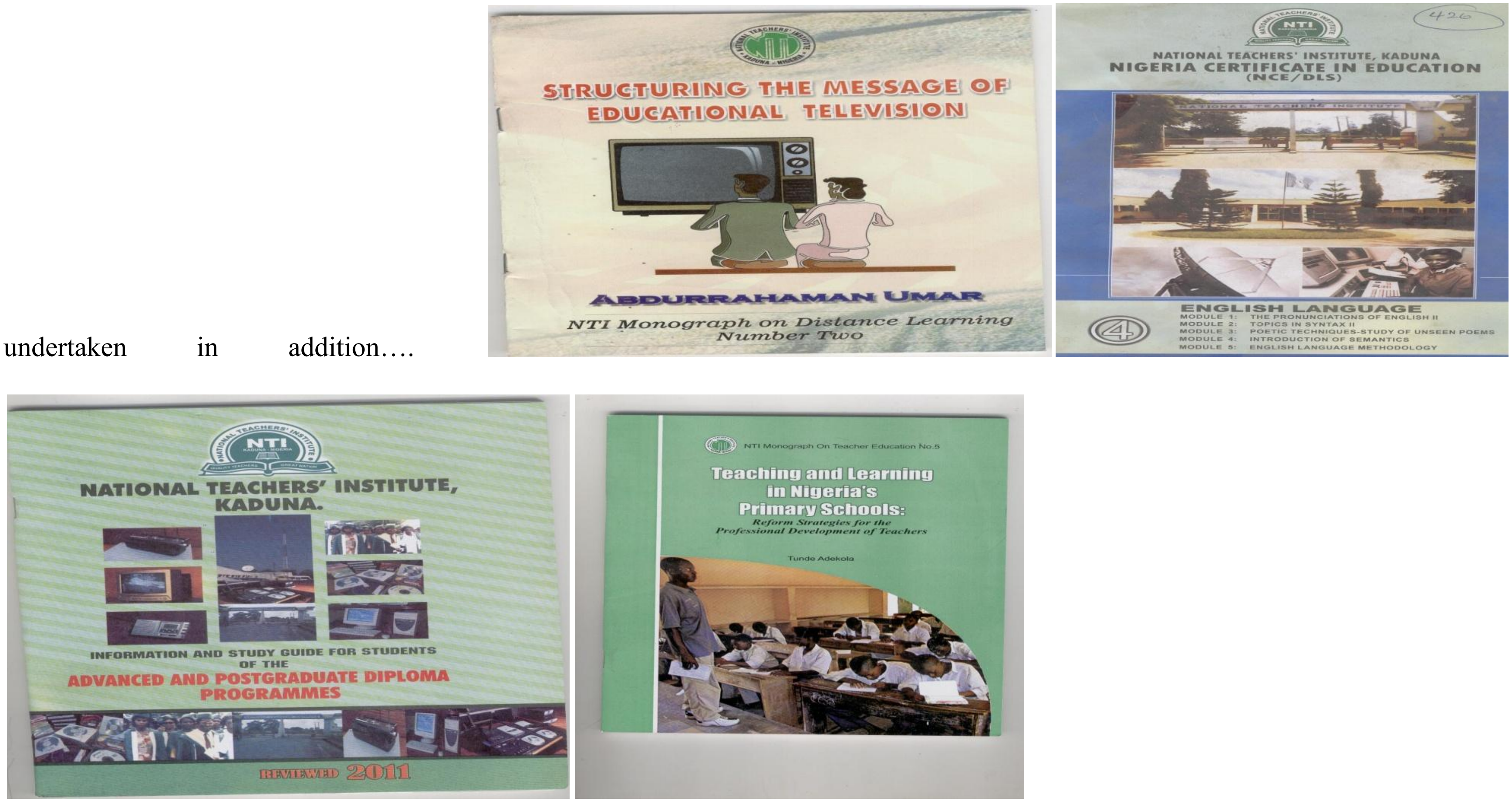


Figure 2.1 Pictorial indicators of the National Teachers' Institute's concept of Distance Education and learner support services

In the researcher's view, the inferences given above have assumed a process dimension rather than the traditional content approach. This means that the content of education or what may be considered as subject matter in physical/social sciences can as well be taught and learnt using the process approach which emphasized the use of different course media to enhance knowledge and skills acquisition. The approach entailed enormous challenges for distance educators, teachers and indeed students in general to be proactive and versatile in the utilization of information and communication education technology (ICT) as a viable tool in the enhancement of teaching/learning process.

The application of the approach in our educational system is highly required now more than ever before and Government and other agencies of education, including the private sector need to be supportive in terms of provision of physical inputs and training of personnel to effectively make it workable in line with current global trend.

2.3 Significance of Distance Education

Most nations of the world, including the developed economy have clearly viewed the rapid population expulsion and the inability of most governments to adequately cater for the various concerns of their people, especially education to be the greatest threats to world peace and development.

In his submission at the 2nd Annual Conference on Distance Education and General assembly, with the theme Open and Distance Learning for Sustainable Development, Aladejana, F.O asserted that “ It is becoming increasingly imperative to have open and distance learning to cater for teacher development in Nigeria- largely due to the fact that the universities cannot cope with admission of all eligible applicants and that it is virtually impossible for serving teachers to leave their jobs for the desired higher qualifications”.

It is therefore clear from the above that distance education has the capacity to train personnel on the job without having to leave their primary assignment, which is one of the reasons for establishing the National Teachers' Institute, i.e. to provide in-service to serving teachers without having to leave their jobs.

Allsop & Raza, (2006) argued that "the 'open' characteristics of ODL makes it attractive vehicle for delivering education to many governments and international agencies. The lack of constraints in the learning process potentially offers opportunities for different types of learners who have difficulty accessing conventional learning where they may be limited to a particular place, and/or are constrained to particular periods of time and place"

Education in any part of the world is listed in the concurrent list including Nigeria and is seen as a highly expensive venture which must be accorded high priority. To make education affordable to entire citizenry, resort to distance learning could as reassuring or even more than what is normally assumed to be the only way of schooling is through conventional learning.

The EFA (Education for All) Goals (1990) in UNESCO (2008), clearly underscored the need for nations especially the developing nations to adequately provide education to their children and youth by 2000. Whether the goal is achievable or not within the time frame, it leaves that much is needed to make it realizable. Good/comprehensive policies and commitment through sufficient funding need to be mobilized at all levels of government to support this collective and universal goal.

The National Policy on Education (NPE) 1989, expressed importance of teacher education thus, “teacher education will harmonize the realization of the national objectives and the philosophy of Nigerian education through activities and attitudes that will ensure self realization, better human relationship, and individual and national consciousness (patriotism), national unity as well as social, cultural, economic, political, scientific and technological progress”

The most important factor to realizing all these objectives has always been teachers. Training teachers through distance learning, in addition to the conventional pattern of teacher training in Nigeria is another veritable and viable option for the realization of both the national and EFA goals.

The Millennium Development Goals (MDGs) on education would have been better achieved if adequate fund been provided for the training of teachers’ on long term basis through the Institute’s Distance Learning System which holds promising results in the revitalization of the educational sector through training of teachers, especially at the basic level rather than the short term training provided to teachers across the country. The provision of adequate facilities would have been addressed across the length and breadth of the country for the training of teachers using the distance education approach.

The rising prohibitive cost of education and its resultant consequences if not properly addressed would inadvertently result into economic stagnation and thwart genuine development of any given nation. This trend if allowed, would invariably lead to degeneration of polity and quality of life of any given nation. Thus, there are now deliberate efforts by governments to use distance education strategies to address the education imbalances in their respective countries, especially the workforce that essentially require on the job training.

In Nigeria, the National Teachers' Institute uses Distance Education to support Government's desire to provide adequate number of trained teachers to man the already expanded primary education sector by providing in-service training for those of them that are already in the service but are to be upgraded to the required minimum teaching qualification in the country, the Nigeria Certificate in Education (NCE). The programme of study for these teachers was designed to accommodate their personal exigencies and in consideration of their importance to remain on their jobs so that there would be an immediate application of the newly acquired knowledge and skills through the distance education practice. In this way, Government may not have to resort to any alternative seeking arrangement to replace the teachers should they abandon their children for full time learning in the conventional Colleges of Education.

Other special benefits accruing to distance education include:

i. *Expanding access*: Distance education is consistently and continuously becoming a rallying ground worldwide for addressing perennial demand for education and training in the face limited education infrastructure to accommodate the surge in population expulsion. It offers the general populace and businesses the much needed possibilities and flexibilities to accommodate the impeding time-constraints imposed by personal responsibilities and commitments. *Source: COL & ADB, 2002*

ii. *Alleviate Institutional capacity constraints*: Except where it is not entirely open, or where a physical contact venue is provided for physical contact between and among students and distance educators, the system reduces the demand on institutional infrastructure such as buildings. . *Source: COL & ADB, 2002*

iii. *Capacity to offer Quality Education:* Institutions that offer distance education courses draw substantial financial benefit from an increasing acceptance from the population of the value of lifelong learning beyond the normal schooling age. Such institutions can stand with little government financial subvention. It is common for these kinds of institutions to rely heavily on their generated revenue which though may not be sufficient to fully finance their operations. . *Source: COL & ADB, 2002*

iv. *Catalyst for institutional transformation:* Distance education institutions have in no doubt brought about tremendous innovation in the dimension of delivery approach and have indeed spurred competition towards the quest among world's major operators of distance education institutions. (COL & ADB, 2002). In the same manner it is hoped that Nigeria will be.

Owing to these and the development of information and communication technology (ICT), which transformed the world into a global village and coupled with increased quest for institutional and personal development, distance education would continue to be seen as the only viable option that would meet the aspirations of most nations.

It can be understood from the briefs advanced in the preceding paragraphs that distance education holds promising grounds in the desire to transform education sector, expand and maximize its enormous inherent potentials. It is not wondered therefore that even the conventional institutions in Nigeria can benefit by utilizing the pedagogical elements of distance education strategies in their training of teachers.

2.4 Global Overview of Distance Education

The practice of Distance education, though as a correspondence programme, started from the early attempts and practice of Isaac Pitman who taught shorthand in Great Britain via correspondence in the 1840s and in the United State as early as 1728 with "an advertisement in the Boston Gazette by 'Caleb Phillips, Teacher of the new method of Short Hand".("*http://en.wikipedia.org/w/index.php?title=Distance_education&oldid=604470606*)

Thereafter, the University of London offered courses leading to the award of degrees through distance learning by establishing its External Programme in 1858. The University of Chicago supported the practice of Distance Education by developing the concept of extended education, and in 1892 encouraged the concept of correspondence school courses to further promote education, an idea that was put into practice by Columbia University. In Australia, the University of Queensland established its Department of Correspondence Studies in 1911. In 1969, the Open University of London was established. The University initially relied on radio and television broadcasts for much of its delivery. (*http://en.wikipedia.org/w/index.php*)

Germany's FernUniversität in Hagen followed in 1974. The university offered courses of instructions to mostly adult learners through television-based programmes (telekolleg) and radio-base programmes (funkkolleg). There are now many similar institutions around the world, often with the name Open University (in English or in the local languages).

The Open University of Japan, popularly called University of the Air was established in 1981. Soon after, it became a member of the International Council for Distance Education. It was popular in the use of broadcast media such as the television, FM Radio Stations and the Satellite in providing tuition to its students in remote locations. The University proudly trained 80,799 Undergraduates and 6,245 Postgraduates in 2007 (http://en.wikipedia.org/wiki/The_Open_University_of_Japan)

The Indira Gandhi National Open University, (known as IGNOU) was established in 1985 by an act of Parliament of India IGNOU Act 1985) to impart education by means of distance and open education, provide higher education opportunities particularly to the disadvantaged segments of society; to encourage, coordinate and set standards for distance and open education in India and strengthen the human resources of India through education. The Institution soon became the largest university in the world with over 3,500,000 students. Apart from teaching and research, extension and training formed the mainstay of its academic activities. It also acts as a national resource centre and serves to promote and maintain standards of distance education in India. (http://en.wikipedia.org/wiki/IGNOU)

The promotion, coordination and strengthening of distance education practice and coordination at the international level came about as a result of the establishment of the Commonwealth of Learning (COL), among others. The Wikipedia Encyclopedia gave a vivid account of the formation thus “The Commonwealth of Learning (COL)- an intergovernmental organization of the Commonwealth of Nations headquartered in Vancouver, British Columbia, Canada was founded at the 1987 Commonwealth Heads of Government Meeting (CHOGM) and inaugurated in 1988. COL's mandate includes promoting and developing the use of open learning and distance education knowledge, resources and technologies throughout the Commonwealth's 53 member states. It soon evolved into one of the world's leading distance education provider and led the international development in distance education along with UNESCO. COL is the only intergovernmental organization solely concerned with the development of distance education", according to the report. *(http://en.wikipedia.org/wiki/Commonwealth_of_Learning)*

The streaming of Distance Education practice in Ghana was a replica of the same scenario elsewhere around the globe. The report of the unedited case study conducted against the inability of the universities in Ghana to admit their admission seekers due to the infrastructural inadequacies clearly underscored the need to flout this momentous edifice. The report stated that "For the past ten years or so, the universities in Ghana have had the unpleasant duty of turning away a large number of qualified applicants every year as a result of their inability to admit not even half of these applicants. This situation has been attributed to limited and deteriorating facilities".

Coupled with this limited facilities, was *the rising cost of providing quality education* at the secondary and tertiary levels. The government of Ghana was finding it increasingly difficult to fund tertiary education all alone. As a result of these reasons and many others more, the government of Ghana adopted distance education as a viable complement to the conventional face-to-face education. This step was inspired by the vision that all Ghanaians should have access to all forms of education and training regardless of where they live", the report continued.

In 1986, the University of Nairobi launched a Bachelor of Education (B.ed) by Distance Education Programme. The aim of this programme was to “upgrade the academic and professional competencies of experienced non-graduate secondary school teachers in response to the rapid expansion of secondary education which had outrun the supply of graduate teachers. The programme made a substantial impact on teacher supply in Kenya, adding that 66% success was achieved”. (www.col.org/worldreview/volume6.htm)

TOJET (October 2008) stated that “the history of distance education in Nigeria dates back to the correspondence education as a means of preparing candidates for General Certificate in Education, a prerequisite for the London Matriculation Examination. The first indigenous distance learning programme was the English by Radio programme of Nigeria Broadcasting Corporation in 1960 which was primarily targeted at primary and secondary school levels and covered core courses at both levels with more emphasis placed on the teaching and learning of Science, Mathematics and English. The technology driven distance learning came into existence almost the same time with the first indigenous distance learning with the emergent of Educational Television programmes of the then National Television of Nigeria (NTV). There was also Schools Educational Broadcast of the Radio Nigeria stationed in Lagos and relayed all through the federation. All radio stations were required to hook at specific times of the day during school hours.

In the last 31 years, University education programmes in the country began to witness lots of changes in terms of instructional delivery mode in some of Nigeria’s tertiary institutions. The Correspondence and Open Studies Unit (COSU) of University of Lagos that started in 1974, which later changed to Correspondence and Open Studies Institute (COSI) and now known as Distance Learning Institute was the first attempt made to establish a distance education unit as part of a University in Nigeria. It began initially to offer programmes in science education at first degree level in Biology, Chemistry, Mathematics, Physics and Postgraduate Diploma in Education (PGDE) for degree holders that did not possess teaching qualifications.

The National Teachers' institute was preceded by Ahmadu Bello University (ABU) which started its distance education in November, 1972 through a training programme known as Teachers-in-Service Education Programme (TISEP) for Grades Three and Two teachers and later the Nigerian Certificate in Education (NCE) by correspondence. Substantial number of teachers across northern Nigeria benefitted immensely from these programmes. This was followed by the establishment of the University of the Air Programme for teachers in secondary schools and teacher training colleges.

The National Teachers' Institute (NTI) started as a distance education institution in1976 as the first dedicated distance education institution with the support of UNESCO. It began by training Grade Two Teachers (TC II). In 1990, the Nigerian Certificate in Education by Distance Learning System (NCE/DLS) was introduced to facilitate the acquisition minimum teaching qualification by serving teachers, the Nigeria Certificate in Education (NCE). This was again followed by the introduction of Postgraduate in Education (PGDE) programme in the year 2005.

The Distance Learning Institute of the University of Ibadan which started in1979 as External Degree Programme of the university was another institution that adopted the distance learning mode in delivering the content of its degree programmes.

The National Open University of Nigeria (NOUN) was established in July, 1983 by an Act of the National Assembly as the first distance learning tertiary institution in Nigeria when it became crystal clear to the then Federal Government that the ever growing demand for education by her people cannot be met by the traditional means of face-to-face classroom instructional delivery. The institution was closed down few weeks after its establishment and the Act that established the University was suspended in 1984 by the then Federal Military Government. Many years after the closure, the compelling reasons that informed the earlier establishment of the university as well as the need to fill the gap created by the Federal Government clamped down on mushroom outreach study centres of many conventional universities all over the country and the need to take advantage of emerging developments in the field of ICTs which have revolutionized the techniques and methods of instructional deliveries in the distance learning mode necessitated the reactivation of the suspended *NOUN Act of 1983 in 2002.* This paved the way for the resuscitation of the NOUN".

"All open universities use distance education technologies as delivery methodologies and some have grown to become 'mega-universities', a term coined to denote institutions with more than 100,000 students". (The Turkish Online Journal of Educational Technology – TOJET October 2008 ISSN: 1303-6521 volume 7 Issue 4 Article 7)

Modern distance education which initially relied on the development of postal services in the 19th century is now synchronous and asynchronous.

Looking at the factors that informed the plotting of distance education as a fall back strategy for addressing the challenges of limited access etc, one would suggest that though its introduction in Nigeria took the same scenario, its institutionalization could not have come at a better time than now. Even with increased expansion of education at different levels, the need will continue to be felt in view of surge in population and the dwindling resources to support this growing need.

2.5 Instructional Design in Distance Education

The practice of Distance Education has for several decades been evolving as a worldwide formidable strategy for teacher and competency trainings in various fields of education endeavours with varied unique design systems generally agreed by Distance Education Practitioners. To really understand this uniqueness, attempt at defining Instructional Design in Distance Education would be worthwhile. Accordingly, the University of Michigan (1996) described Instructional Design as:

1. A systematic development of instructional specifications using learning and instructional theory to ensure the quality of instruction. It is the entire process of analysis of learning needs and goals and the development of a delivery system to meet those needs. It includes development of instructional materials and activities; and tryout and evaluation of all instruction and learner activities.

2. As a systematic and continuous application of learning principles and educational technology to develop the most effective and efficient learning experience for students. *(http://www.umich.edu/~ed626/define.html Revised: October 18, 1996)*

Distance education stresses on these important key questions:

(a) What is the need for the educational program? (needs assessment);

(b) What are the goals and objectives? (goals and objectives);

(c) Who will be the learners? (learners/audience);

(d) What will be the subject content (message)? (content);

(e) What teaching methods and media (technology) will be used? (teaching methods and media)

The references above have provided bases for discussion on learner support in Distance Education and elucidations on few more elements related to the topic of the research. It is important therefore to note that the success of Distance Education Programme is largely dependent on the articulation of the Distance Learners' Profile, peculiarities of the Distance Education Process and crystallizing the ideas, thoughts and plans of distance education experts popularly referred to as "Distance education Team" or "Team Approach" all of which are aimed at remediating the boredom of distance learners. In this regard, it is necessary that the Instructional design approach of any to Distance Education Organization or Institution include experts with related experiences and backgrounds in distance education practice in what is called "Team Approach" in the design of the learning packages and addressing the learning approaches of Distance Education from integrated perspectives.

Verduin & Clark, (1991) suggested that "a team approach to the development of learning materials is often considered the most appropriate for distance education. The team would be responsible for assessing adult needs, designing learning packages, providing guidance, and assessing performance, and would include academic content specialists, instructional designers, writers and editors, media specialists, and specialists in adult learner behavior and curriculum development" (http://www.digitalschool.net/edu/edulinks.html)

This approach may be seen as complex though, it has the potential to providing unique study materials or modules that would adequately incorporate the expectations of the Distance Learners and simplify their difficulties in their learning process and ensuring the quality of the educative process in general through such things as quality assurance initiatives.

Wagner, 1990, p. 62, supported this idea by saying that “The roles of academic content specialists, instructional designers, writers and editors, media specialists, and specialists in adult learner behavior and curriculum development can be seen to overlap and not be very clearly defined. An educational technologist may have skills in instructional design; as a media specialist, in media technology; as a specialist in adult learning behavior, in adult learning behavior; as a curriculum experts, in curriculum development, and their job may begin with assessing program needs and end with product implementation”. (http://www.digitalschool.net/edu/edulinks.html)

The role of the team should not be perceived as working primarily to implement electronic technology into the learning system, but rather as important complement to the entire distance education process from integrated perspective. The process of Instructional design in Open and Distance Education is thus complex and entails the application of integrated experiences of relevant experts/specialists and differ considerably from conventional approaches of just knowledge based publications.

Based on the considerations given to the design process of distance education materials which seek to maximize cognate and cogent expert experiences, the distance learning packages are considered unique, comprehensive, self-instructional and enviable in the face of authorship of distance education course materials.

The National Teachers’ Institute started its distance education with the Grade two teachers certificate course using the design approach cite above. Local experts and international cooperating partners that have scaled deep in the related areas of distance education design process were assembled to design and produce self instructional course texts that would meet the goals of the expected targets. The extension of this approach to the Nigeria Certificate in Education programme in the later years was a culmination of the huge success recorded in the implementation of the approach. Since then, distance learning approach came to be viewed as the only viable option for serving teachers in the country and remained so for their employers who may not need to replace them in case of full-time learning in conventional colleges or universities. What remains to be seen at the moment is how well this tempo has been sustained and improved upon by the Institute all these years that it has been operating its distance learning system. What are the field reaction/challenges that need to be considered in the review or overhaul of the practices to reflect the changing expectations of the distant learners undergoing or about to undergo the institute’s distance education programmes.

Having discussed distance education design, another crucial component of distance education practice which formed the major theme of this research to be considered is the learners support services in distance education. The first most important obvious question to ask is definitely what the support services in distance education really are and the positions taken by distance education experts on it. This will then be followed by what the Institute claims to be doing in the area of providing adequate support to its learners in relation to what is conventionally viewed as the approved practice by distance education experts.

2.6 Learner Support Services in Open and Distance Education

The successes of Distance Education recorded by the practitioners of Open and Distance Learning across the world were as a result of systematic attempt to articulate and integrate all the critical elements that address the uniqueness associated with the practice of Distance Education, Learner Support Services being one of the most important factors. The Indian Journal of Open Learning described the important roles students support services play in Distance education practice thus, “Students Support Services in Distance Education play very crucial role for the success of the system as well as progression curve of the learners” *(IJOL, 2010)*

Keegan (1983) emphasized that “with increased access that open distance institutions offered, enrollments were high, but with little support for learners, attrition rates were as well high”, apparently referring to a research report.

Gupta and Garg *(Op-cit)* listed the following as the indispensable functions of learner support services in distance education:

a. Promoting learner autonomy with focus on capacity and capability building of learners;

b. Empowering learners to make their own choices of courses and decide on their progress as well as pace;

c. Identifying good institutions as learner centres and reputed teachers as counselors with due weightage for experience and seniority;

d. Developing a reliable database on academic counselors and an automated information system for monitoring various activities;

e. Arranging for pre-admission counseling to enable learners to understand the implications of being distance learners…;

f. Providing information to learners on the system of assessment and evaluation, registration schedule, conduct of examinations, declaration of results and such other important events;

g. Developing an effective network for two-way communication to break learner isolation;

h. Arranging opportunities for and access to technology mediated and/or face-to-face interaction amongst peers and with counselors;

i. Providing feedback to course developers on the deficiencies/difficulties pointed by the learners and academic counselors;

j. Acting as effective link between the Headquarters and field functionaries, etc. *(IJOL, 2010)*

It is thus not baseless to suggest that distance education practice in any given country that fails to articulate and fully incorporate learner support services in its operational design will potentially be shrouded in the mythical practice of Distance Education and will not merit being considered as a distance education practitioner in the real sense. Learner Support Services is therefore a peri-pesu (important ingredient) in the development of any distance education programme. The Turkish Online Journal of Distance Education affirmed this statement thus “distance education program must design and applicate effective learner support services and systems” (*TOJDE, October 2004)*

Garrison, et al (1987, 7), defined learner support “as the resources that learners can access in order to carry out the learning processes”, and believes as well that in distance education, "support is concerned with a range of human and non-human resources to guide and facilitate the educational transaction", pointing out that “these resources may be library facilities, various media and software programs, community leaders, or they could be various socio-economic variables such as student's financial self-sufficiency and capacity to cope with their roles and responsibilities in the family and community”. He continued that “the most important form of support in an educational transaction is the teacher, who through guidance and direction can assist the students to achieve their goals and develop control of the educational process”. (Garrison, (1989)

Gunawardena, (1988) lent support to the rationale for support services in distance education practice viewing from the general outlook of the features of Open and Distance Education (ODE) thus; “the dominant feature of distance education is the physical and often temporal distance that separates the teacher from the learner. Because distance students are often placed in a unique situation in which neither teachers nor fellow students are physically present to clarify, discuss, or provide feedback, effective distance education requires a sound learner support system”.

Wright (1991) describes learner support as “the requisite student service essential to ensure the successful delivery of learning experiences at a distance”.

Thorpe (1988) described learner support as “the elements of an open learning system capable of responding to a particular individual learning”.

Hui (1989) interprets learner support as the" support incorporated within the self-learning materials, the learning system and assignment marking, focusing very specifically on the courseware, the exercise of learning and assessment". This definition appeared to be limited to inbuilt support structures in the students' self study course learning materials. In a uniquely designed distance education practice, it is essential that varieties of support facilities/services are assembled and provided for distance learners to access to maximize their opportunities to enhance their success and alleviate their learning difficulties. Distance Education experts believe in addressing learners support issues from a comprehensive perspective emphasizing on both the inherent and external services that are specially conceived, planned and delivered to aid distance learning by the personnel within the system (full and part-time inclusive).

The significance of learner support according to Robinson (1995), include providing interactivity and dialogue; personalizing a mass system; mediating between learner and materials; institutionalising responsiveness to individuals; and differentiation of support according to different needs with diverse ways of achieving them. He listed the learner support activities involved as essentially the:

1. Personal contact between learners and support agents (people in variety of roles with variety of titles);
2. Individual or group face-to-face or via other means;
3. Peer contact;
4. Feedback to students on their learning;
5. Additional material such as handbooks, advice notes or guides;
6. Study groups and centers – actual or virtual (electronic);
7. Access to libraries, laboratories and equipment;

8. Communication networks.

The challenges for distance education institutions in handling the activities outlined by Robinson include the following:

i. Knowing the students profile.
ii. Establishing what their needs are.
iii. Deciding on how to meet the differing needs.
iv. Using different tools to address the needs, etc.

Tait (1995) describes student support as “a range of activities which complement the mass-produced materials which make up the most well-known elements in open and distance learning and listed tutoring (all modes), Counseling, Organization of study centres, and Interactive teaching through TV and radio Broadcasts as other special and equally most important elements”.

Keegan (1990) explained that “it is the planning and preparation of learning materials and the provision of student support that distinguishes distance education from private study and teach yourself programmes – correspondence education”.

The definition given by Keegan highlights the commonalities described by Tait (2000) as the rationale for learner support which he broadly classified as “cognitive – supporting and developing learning; affective – that which is related to the emotions that support learning; and systemic – helping students to manage rules and systems of the institution in ways that support persistence”.

Learner Support Services (LSSs), according to Chander, & Venkaiah (1998), mean “complementary services provided to the learners such as personal contact programmes, counseling, organization of resource centres, library facilities, telephone teaching, interactive teaching through TV and Radio, and other similar activities that form components of Learner Support Services (LSS)”; and pointed the objectives of Learner Support Services as “*first,* to provide all information learners need; *second,* to encourage students to fully utilize the available facilities; *third,* to motivate learners to assimilate what they learn; *fourth,* to provide necessary counseling; and *fifth,* to create a friendly environment among students…” *TOJDE (October 2004)*

These essential services as constituents of distance education systems have the power “to contribute to the process of course as do the learning materials", argued Hodgson, 1986, pg. 56 (op cit); and “help the distance learner becomes competent and self-confident in learning; achieve social interactions and self-evaluation” according to Rae, 1989. *(Op cit)*

Prideaux (1989) observed that students’ support services need to be evaluated to ensure their effectiveness in distance and open learning. Specifically, the following areas have been identified as keys issues in learner support:

a. Record keeping and administration, pre-admission counseling

b. Admission and registration information-administrative assistance

c. Books dispatched by mail, library service

d. Tutoring and counseling

e. Weekend courses and study centers

f. Electronic communication technologies such as phones, radio, audio tapes, video, television, etc.

It is believed that the inherent problems of distance learners such as family pressures; worries about work and money; lack of books and libraries; lack of own study space; isolation; lack of transport to get to tutorials; lack of confidence; no undistributed study time; low level of reading ability; and too busy to attend tutorials can be addressed through a variety of learner support services some of which have been outlined above by Prideaux.

Similarly, the following additional support services would most certainly create a wholesome learning among distance learners. These are:

i. Information to help learners to relate to the Institution and understand its system;
ii. Contact with tutors to help maintain motivation and overcome learning problems;
iii. Institutional identity that links the learners with a remote institution so as to feel that they are part of a body of learners rather than studying in isolation; and
iv. Advice on how to study. *(COL & ADB, 1999)*

The views expressed above by Prideaux (1989) and *(COL & ADB, 1999)* have not only highlighted areas of tremendous significance in distance education practices, but also requires instructional designers and other distance education experts to institute mechanisms through which all the issues raised can be addressed in the entire organizational process of distance education design and implementation strategies. The print and all the supplementary support services/facilities must be designed in such ways that the learner would feel belonged and encouraged to undergo his/her distance education programme with less stress.

Tuition and counseling

Although the learner support in distance education consists of wide spectrum of materials and services, it is important to point that their utilization can mostly be at the levels of tuition and counseling so long they have been entrenched into the distance education educative process. Accordingly, COL & ADB (2002) discussed the two tiers of learners support practice as the most basics supplementary support services in the distance education practice. These are:

1. ***Intellectual support (tuition)*** featuring face-to-face contacts at study centres, residential weekends, and summer schools; telephone; e-mail and computer conference; fax and postal services; and audio conference, audio cassette, and video conference.

In addition providing intellectual support in form of tuition, the basics in this support service should be embedded in study materials. For example,

a. *Tutor contact*: Learners need to be prompted in the learning materials to contact their tutor at frequent intervals by whatever means is made available. This contact might be to discuss a particular issue, to plan for a major assignment, or to discuss a returned assignment. Instructions that use icons are helpful; for example, a telephone icon for telephone contact or a stamped envelope for correspondence;

b. *Assignment dispatch and grading*: Learners need clear, complete and accurate information about when and how to submit an assignment, what to submit, where to send it, and how long they can expect to wait before it is returned. Research indicates that ‘turnaround’ times of two weeks or less have an optimal effect on learner motivation to continue, as does the requirement for submitting an assignment early in the course. Most learners who get over this first hurdle will end up completing the course;

c. *Grading criteria*: In the learning materials, learners need to be told the criteria by which their assignment will be graded, and which aspects of their answer will receive particular emphasis. In turn, the tutors who grade assignments must be explicit in grading according to these guidelines, and provide comments and reasons for their grade that display all the characteristics of effective support (warmth, honesty, empathy, organization, explication…);

d. *examinations*: The learning materials must also provide clear, complete, and accurate information on when and where learners will be sitting examinations;

e. what kind of examinations these will be: multiple choice, short answer, essay, and;

f. What material the examinations will cover; and what the examination grade will contribute to the overall grade for the course.

Much of the information needed by learners such as dispatch of complete course materials in a timely fashion; information of a variety of kinds; how much fees are and when they are to be paid; when the course begins and ends; who the tutor is, and how to contact him or her; who to contact when things go wrong; who to contact for certain kinds of information and services; for example, library; when and where course tutorials take place; when and how assignments are to be submitted; and when and where examinations are scheduled, etc. can readily be included in the course materials, if not in the study guide then in another publication such as a learner handbook. Such a publication needs to be designed with the same level of care and instructional clarity as the remainder of the learning materials. Accurately written information provided at the beginning of a course can prevent a great number of problems later on.

Additionally, the following can also of tremendous importance in disseminating such information. For example:

a. *audio cassettes*: tutors can use these for introducing themselves;

b. *video cassettes*: can show distant learners the building to which they send their queries and some of the key staff with whom they will be dealing;

c. *e-mail*: learners can e-mail their queries to administrative staff for responses that are independent of time zones, unlike the telephone, and faster than the post; and *Websites*: a growing number of institutions have Websites on which they post up to date information on courses, programmes, fees, staff, and so on. In some cases a Website may also provide access to the institution's library catalogue.

2. ***Organizational and emotional support*** (Counseling) involving mostly personal attachments/discussions information manuals and proper use of the support facilities. These will include:

a. giving the learner information; for example, about fees, availability of courses;

b. giving the learner advice; for example, about appropriate course choice;

c. exploring an issue with the learner; for example, helping potential learners set their goals;

d. taking action to help a learner; for example, arranging transport for a disabled learner; and

e. Advocating on behalf of a learner; for example, giving a reference or waiving an institutional rule.

f. explaining to the learner; for example, clarifying a concept or an instruction;

g. exploring issues with the learner; for example, how the course material applies to the learner's own situation and experience; and

h. Giving feedback to the learner; for example, commenting on and grading assignments. *Source: COL, (1999)*

Great deal of counseling material can be made available in print or other media. For example, a variety of booklets can be prepared on common problems faced by learners, including;

i. making sure distance study is the right choice;

ii. how to choose the right course;

iii. how to apply for a course;

iv. financial assistance and how to apply for it;

v. coping successfully with unfamiliar technologies;

vi. how to write essays;

vii. how to prepare for examinations;

viii. strategies for overcoming 'exam anxiety'; and

ix. Planning for a new career.

Again, technologies other than print can be used creatively to provide this support. For example,

a. *audio cassettes*: can be used to engage learners in a ‘dialogue’ about some common problem, its diagnosis and possible solutions;
b. *video cassettes*: some institutions have produced video cassettes of learners talking about their experiences as learners, to let other learners know they are not the only ones who have a particular problem;
c. *computer conferences*: computer conferences, both staff- and learner-led, can provide timely and personalized help; in addition, ‘lurkers’ in the conferences who read but do not post messages can also benefit from the discussions; and
d. *Telephone counseling*: the telephone can be a very intimate and personalized medium for discussion of personal problems.

Peer support

Learning materials can also identify other learners within same or different communities and social networks (co-workers, friends, family members, and community members) who can help them,

a. Some institutions, for example, publish lists of learners and the courses they take, along with their telephone numbers, e-mail addresses, postal addresses, and so on. However, it is essential to obtain the permission of any individual before publishing this kind of information about them, since these data are frequently protected by privacy legislation.

b. Tutorials that involve other learners (for example, at study centres, by audio conference or computer conference) can be used as much for purposes of providing peer support such as intellectual and other kinds of support.

c. Learning materials can even require learners to seek out other learners to work as a team on a particular assignment, for example.

d. Learners may also be required to find someone from their immediate social network to interview, for example, or to seek information from in some other way.

2.7 Management Requirements for Various Support Structures

Distance Education whether operated synchronously or asynchronously require a management-based structure that incorporates the peculiarity of distance education and guarantees the effectiveness of learner support facilities/services chosen to deliver the education content to the distance learners. The requirement of the structure below is typical to the synchronous and asynchronous based distance education practice and limited to high tech facilities with due consideration to the high technical skills of the operators of the system. The structure is however suggestive and could be modified to suit the operational context of the institutions managing the distance education practice. This is crucial so as to ensure the entrenchment of effective system specifications with ensure high precision in the implementation of learner support structures. Toward this, the Common Wealth of Learning (COL) and Asian Development Bank (ADB) (1999) put across a management system requirement for various support structures and stressed on its requirements thus;

Table 2.1: Management Requirements for various support structures

Characteristic	**Requirements of system**
Synchrony *Example: face-to-face tutorial sessions, residential schools, audio conferencing and video conferencing*.	High requirement for detailed scheduling; High need to monitor technical performance of delivery medium as breakdown is a critical problem; High need for on-hand technical support; High training requirement so learners will master medium.
Asynchrony *Example: independent study and computer conferencing.*	Highly desirable to provide flexible temporal access to system; Lower need for monitoring technical performance than for synchronous systems, as downtime can be overcome later and learner can re-enter the system; Technical skill or operation of system by learners can be gained over a longer period, because mistakes are not as critical as in synchronous systems.
Tutor-learner interaction only *Example: one-on-one telephone tutorials and tutorials by post.*	Higher need to guarantee learner access to some minimum guaranteed amount of time; High need to ensure tutor availability at regular times; Lower need to schedule interaction in a precise manner.
Tutor-learner and learner-learner interaction *Example: any of the conferencing media, face-to-face tutorials.*	Requirement to provide inter-group access; High need to schedule group interaction if interaction is also synchronous; High need to ensure consistent technical performance of technology being used as downtime will affect multiple users.
Home-based interaction *Example: computer Conferencing.*	Learner needs to be informed of how and when to access system; Scheduling is critical if synchronous group interaction is to occur; Learner needs to be trained at a distance to use the system.

Access centre-based interaction *Example: face-to-face.*	High need to organize a facility at which learners meet; High need to schedule group meetings and inform learners; High need to ensure performance of technology used.

Source: COL & ADB (1999)

The structure above is by no means independent and un-modifiable. Distance education institutions can freely design their learner support management structures based on their peculiar practices and technology in use. It should be emphasised however that much is needed in terms of resources and personnel training to support the structure and make it workeable.

In a paper titled 'policy frameworks for distance education: implication for decision makers', King, J.W & ital in Online Journal of Distance Learning Administration (2000), construed distance education management structure to be same as policy frameworks for distance education. Accordingly and as adapted from the works of Gellman-Danley and Fetzner, 1998; Berge, 1998, the policy framework that should guide distance education administrator must reflect on the following seven key issues:

Table 2.2: Policy Framework for Distance Education

Policy Area	**Key Issues**
Academic	Calendar, Course integrity, Transferability, Transcripts, Student/Course evaluation, Admission standards, Curriculum/Course approval, Accreditation, Class cancellations, Course/Program/Degree availability, Recruiting/Marketing
Governance/Administration/ Fiscal	Tuition rate, Technology fee, FTE's, Administration cost, State fiscal regulations, Tuition disbursement, Space, Single versus multiple board oversight, Staffing

Faculty	Compensation and workload, Development incentives, Faculty training, Congruence with existing union contracts, Class monitoring, Faculty support, Faculty evaluation
Legal	Intellectual property, Faculty, Student and institutional liability
Student Support Services	Advertisement, Counseling, Library access, Materials delivery, Student training, Test proctoring, Videotaping, computer accounts, Registration, Financial aid, Labs
Technical	System reliability, Connectivity/access, Hardware/software, Setup concerns, Infrastructure, Technical support (staffing), Scheduling Costs
Cultural	Adoption of innovations, Acceptance of on-line/distance teaching, Understanding of distance education (what works at a distance), Organizational values

Source: Gellman-Danley and Fetzner, 1998; Berge, 1998, in On-line Journal of Distance Learning Administration (OJDLA), 2000, Vol. 3, Issue 2 pp. 5.

In yet another Policy framework analysis model for distance education administration called three tiered PAFDE, the key issues are clearly illustrated thus;

Table 2.3: Three Tiered PAFDE

Policy Area	**Key Issues**
Faculty (including Continuing education and Cooperative Extension)	Rewards (e.g., stipends, promotion and tenure, merit increases, etc.); Support (e.g., student help, technical assistance, training, etc.); opportunities to learn about technology and new applications (e.g., release time, training, etc.); Intellectual property (e.g. ownership of materials, copyright, etc.)
Students/Participants	Support (e.g., access to technology, Library resources, registration, advising, financial aid, etc.); Requirements and records (e.g., residency requirements, acceptance of courses

	from other places, transfer of credit, continuing education, etc.)
Management and Organization	Tuition and fee structure; Funding formula; Collaboration (e.g., with other departments, units, institutions, consortia, intra-and inter-institutional, service areas, etc.); Resources (e.g., financial resources to support distance education, equipment, new technologies, etc.); Curricula/individual courses (e.g., delivery modes, course/program selection, plans to develop, individual sequences, course development, entire program delivery, interactivity requirements, test requirements, contact hour definitions, etc.)

Source: On-line Journal of Distance Learning Administration, Vol. 3, Issue 2 pp. 5

The approaches to the administration of distance education put across in the preceding pages are to be considered based on their strength and the relative analysis of the institutional conditions and recourses. It may be possible for such organizations to design it peculiar administrative standards against which it hopes to realize the goals of the distance learning it operate. This will provide a frame of analysis and research for effective and efficient review/enrichment of open and distance learning programmes and would afford proper institutional accreditation and appraisal of its entire distance education packages. The National Teachers’ Institute will to have to keep phase with one peculiar distance education administrative structure that would best make its programme workable and of tremendous impact.

2.8 Qualities of support personnel

The tasks above suggest that distance educators might need the following qualities to succeed in their work of supporting learners:

a. *warmth:* the quality in a person that communicates welcome, respect, comfort, and willingness to give time to another;

b. *genuineness:* meaning honesty and openness about one's own strengths and failings;

c. *acceptance:* being able to accept another person for who they are, as someone worthy of respect;

d. *empathy:* sensing the hurt or pleasure in another as they sense it;

e. *organizational skills:* the ability to manage time well, and to diagnose problems and take appropriate action to solve them;

f. *explicatory skills:* the ability to help the learner break a problem into its component parts and then see how they fit back together; and

g. *Listening skills:* the ability to give one's entire attention to another and to respond in ways that do not judge but demonstrate you understand what has been said.

In like a manner, Williams, P. in OJDLA (2000) identified in the table below, the roles and specific competencies considered very important for support personnel.

Table 2.4: Role/Competencies Specification

Role	**Competencies**
Administrative Manager	Managerial Skills, Budgeting Skills, Marketing Skills, strategic Planning Skills
Instructor/ Facilitator	Content Knowledge, Teaching Strategies/Models. General Education Theory, Skill with Internet Tools for Instruction, Instructional Design for Interactive Technologies, Library Research Skills, Modeling of Behavior/Skill
Instructional Designer	Instructional Design Skills, Instructional Design for Interactive Technologies; Media Attributes Knowledge; General Education

	Theory; Text. Layout skills; skill with Internet Tools for Instruction; Teaching strategies/ Models, Web Related Programming skills; Learning style and Theory, HTML Authoring skills.
Technology Expert	Computer Hardware skills; Technology Operation/Repair skills; skill with Internet Tools for Instruction.
Site Facilitator/Proctor	(Consensus not reached on any competencies as very important.)
Support Staff	Advising/Counseling skills
Librarian	Librarian Research skills.
Technician	Technology Operation/Repair skills; Computer Hardware skills; Computer Networking skills
Evaluation Specialist	General Education Theory
Graphic Designer	Graphic Design skills; Text Layout skills; Media Attributes knowledge. Skill with Internet Tools for Instruction
Trainer	Training skills; Modeling of Behavior/skills; General Education Theory; Teaching strategies/Models; skills with Internet Tools for Instruction; Advising/Counseling skills
Media Publisher/ Editor	Skills with Internet Tools for Instruction; Graphic Design skills; Media Attributes knowledge
Leader/Change Agent	Modeling of Behavior/Skills; Managerial skills; Marketing skills; strategic Planning skills, Policy Making skills; General Education Theory

1ssue 2, article 3 OJDLA (2000)

The two literatures above confirmed that distance education cannot be approached from the perspective of a traditionally narrow based convention. It will take various teams of specialized experts to design and implement the learning packages in a coherent manner before any remarkable difference impact could be made in the training of distant students.

Support for support personnel

In distance education, emphasis is made on the needs of learners which the regular and part time personnel are expected to cater for in addition to the inbuilt support mechanisms in the self instructional study materials. The personnel concerned with the provision of these needs to the learners equally require support since they are on part-time having major affiliation and commitment to some other institutions; their roles are frequently diffused and ill-defined and decisions on policies and procedures are often made without due attention to their particular circumstances and needs. This support should be provided by means of measures such as the following:

a. clear role descriptions, expectations, and reporting lines;
b. a thorough induction into the programme, its history, goals, policies, and procedures;
c. frequent and effective two-way communication (e-mail is an excellent medium for this where available);
d. opportunities for face-to-face meetings;
e. frequent performance review and monitoring;
f. accurate and efficient records systems;
g. continual updating on changes in policies and procedures; and
h. opportunities for input into decisions that affect their work. Op-cit

2.9 Standards for Learner Support Applications

The application of learner support theories/assumptions requires distance education institutions to set up standards or policies by which review can be based. The National Teachers' Institute has shared in this opinion viewing from its diverse operational manuals on which this study was made. It is equally important to note that the whole process of quality assessments will depend squarely on these standards for quality assessment.

Wisconsin (1999), agreed that "learner support application is dependent on the definition of distance education as planned teaching/learning experience in which teacher and students are separated by physical distance". In distance education courses and programmes, student-teacher interaction and course materials delivery may occur in an asynchronous or synchronous mode over a wide spectrum of existing and evolving media; and the principles that "academic and student support services for distance education courses should adhere to system-wide standards to assure high quality distance education programming". Op-cit

Reference to the benchmarks is made hereunder:

Curriculum and Instruction

a. The institution assumes responsibility for and exercises oversight over distance education ensuring both the rigor of programs and the quality of instruction;
b. The institution ensures that materials, programs, and courses are current;
c. The institution ensures that the technology used is appropriate to the nature and objectives of the programs;
d. The institution provides appropriate training for those who teach in distance education programmes;

e. The institution provides appropriate facilitator support services specifically related to distance education;

f. Programmes provide timely and appropriate interaction between students and facilitator, and among students;

g. The institution is responsible for quality assurance for all aspects of the programmes;

h. The institution's distance education policies must be clear concerning ownership of materials;

i. The institution provides a statement to students of its commitment to offer the course sequence advertised. Students need to know at the time that they are admitted what stipulations or conditions exist regarding the offering of courses in the program so that they can make an informed decision about enrolling; etc.

Evaluation and Assessment

a. The institution provides students with information about the expectations of the programme. It is preferable to offer an orientation for students, which helps them assess their readiness for a distance education course/program. This may include an assessment, which evaluates such characteristics as attitude, motivation, and time management skills. Information about programme requirements should also include technical requirements that students must meet in order to participate in the course and have access to services;

b. The institution provides each student with a statement outlining the parameters of support;

c. The institution evaluates the educational effectiveness of its distance education programmess (including assessment of student learning outcomes, student retention, and student satisfaction) to ensure comparability to campus-based programmes;

d. The institution ensures the integrity of student work and the credibility of the degrees and credits it awards. Distance education programmes undergo programme reviews in a comparable fashion to traditional programmes. This may include an external review by specialists;

e. The institution is responsible for ensuring that all distance education programmess and courses meet the *Standards for Academic and Student Support Services;*

Library and Learning Resources

The institution ensures that students have access to and can effectively use appropriate library resources. This includes but is not limited to:

a. Authentication process for validation and identification;

b. Interlibrary loan and document delivery service;

c. Access to electronic resources in the Library's collection,

d. Electronic reference services, direct reference service via email and telephone;

e. World Wide Web Distance Education Home Page with direct linkage to library services, self help modules, and appropriate electronic request forms;

f. Facilitating instruction to enhance student's information-seeking skills;

g. The institution monitors whether students make appropriate use of learning resources;

h. The institution provides laboratories, facilities, and equipment appropriate to the courses or programmes.

Student Services

a. The institution provides adequate access to the range of student services appropriate to support the programmes, including admissions, financial aid, academic advising, delivery of course materials, and placement and counseling;

b. The institution provides an adequate means for resolving student complaints;

c. The institution provides to students advertising, recruiting and admissions information that adequately and accurately represents the programmes, requirements and services available;

d. The institution provides timely and complete information for students on the equipment and knowledge required to use the technology employed in the programme;

e. The institution provides "help desk" services that meet the needs of students in the programme. This may be required for only certain number of hours in week days and/or weekend by most students.

Facilities and Finances

a. The institution ensures that the appropriate equipment, facilities, technical expertise and financial planning exist to design and make the programme sustainable over a period of time;

b. The institution's long range planning, budgeting, and policy development processes reflect the facilities, staffing, equipment, and other resources essential to the viability and effectiveness of the distance education program; etc.

(Source: www.wisconsin.edu/acss/acis/destandards.pdf)

In consideration of all the succinctly argued held perceptions, considerable amount of political will, resources and commitment would be needed to ensure total application of this important element of distance education. It is equally the opinion of the researcher that although the relevance of the wide-range of resources/equipments and finances are undoubtedly significant in the effective implementation of efficient learner support services, it is hardly conceivable to think of one distance education institution that tunes to these ideas totally. Some of the literature cited confirmed this by pointing to the exclusive use of television broadcast by the University of the Air in Japan, while others rely heavily on few combined delivery strategies to reach out to their distant students.

It is also the researcher’s opinion that relative considerations of countries operating distance education is essential especially as regards to the level of their development which is in itself a factor that determines the kinds of resources to be put together for their distance learning operations. Such institutions can still be as effective as those that to use most of the suggested delivery strategies. Some distance education institutions cited in the preceding discussions have relied heavily on asynchronous strategy in their ODL operations. The combination of both (synchronous and asynchronous strategies) appear to be the standard practice in line with the learner support requirements of distance education. Even in doing so, it should not be assumed that there is no one given institution that can explore and make comprehensive use of all the entrenched and diverse ICT strategies involved in operating synchronous and asynchronous applications. Perhaps, the use of all or combinations of parts thereof could suffice defending on the level of the technological development of the countries and clients involved in the distance education practice. As a distance education institute, commitment to the use of possible outreach resources for the delivery of effective distance education courses is essentially required.

2.10 Current trends in the Learner Support Service Delivery of the National Teachers' Institute

The National Teachers' Institute has indeed made an indelible mark print in the history of teacher education in Nigeria. Its teacher education programme, especially the Nigeria Certificate in Education by Distance Learning has been over twenty two years now (two decades) and a considerable number of teaching force in the country have benefitted from the programme. Having reached thus far, it is high time to review all the structures put in place and practiced by the Institute in its learner support services operation so that a basis is established for an empirical evaluation of this critical and most crucial element in the Distance Education Delivery.

Administrative Structure

There are five main departments in the Institute, each complementing the other in areas of policy formulation and implementation. The Administrative Department handles staff sourcing, retention and discipline, general office management, and establishes edicts/codes to regulate staff behaviour. In addition, there are subordinate units such as transport unit, staff clinics and conference facilities under the department that provide essential services to staff, which aimed at facilitating their work.

The Academic Services Department serves as the engine house for distance education delivery in the Institute. Its main functions are:

a. Instructional Design/ Course Materials development;
b. Structuring standards for Distance Education Delivery;
c. Establishing empirical standards for Distance Education Quality Assurance assessments of the Nigeria Certificate in Education by Distance Learning System;
d. Reviewing of the entire distance learning packages in accordance with the emerging global trends in distance education practice on the basis of changing national policies;
e. Relating/cooperating with national and international bodies/agencies and organizations;
f. Monitoring of the Institutes' Distance Education Programmes, etc.

The department is central to the Institutes' activities and is being further supported by the Computer/typesetting unit and the printing division.

The Bursary Department services the entire process by way of keeping and making available the financial resources needed to service the institutes' programmes and structures in accordance with the decisions of management and policies of the institute. It prepares the budgetary requirement of the institute and presents same to the national assembly for due appropriation on yearly basis, in addition to sourcing for additional funds over and above the government budgetary allocations using financial outlets of the Institute.

Support Services in the NTI Study Materials

The features of distance education learning packages consists among others, inbuilt support services that address the specialties and challenges of the distant learners (profile) are designed for self learning essentially. The self instructional study materials floated by the Institute for its distance learning system have inbuilt counseling tips that spelt out most of the salient issues for students to know about their expectations. For example, The NCE-DLS Handbook explained the general information about the philosophy and rationale of distance; objectives of the NCE/DLS Programme; resources earmarked for the development and implementation of the Programme; media and methods for running the programme; continuous assessment schedule; course weighting; course duration; grading system; and grade point average. The rules and regulations governing the Nigerian Certificate in Education by distance learning system; guide to admission/additional entry requirements; courses offered and structure; method of application; and course text production have equally been explained. Towards getting students informed prior to their admission, the handbook enunciated on the procedure of registration for the programme; course evaluation procedure; guidelines for practical; eligibility for the award of Nigeria Certificate in Education; and the expected students code of behaviour.

The required details about the administration of the programme, ranging from the operations of field and study centres; the roles of study centre managers and course facilitators have been stated in the relevant pages in the handbook. In addition also, students have been taken through on change of names; correction of wrongly spelt names; omission of names on computer print outs; change of courses; withdrawal and re-admission issues as necessary guidance and counseling tips. The self instructional study guide spelt what to study, where to study, when to study and how to study by the students, etc.

Source: NCE (DLS) Handbook, 2010 edition)

2.11 Definitions of evaluation

Evaluation is a necessary aspect of any curriculum process involving a variety of actions in and outside classroom-based instructional activities. The title of this research studies is clearly based on the need to evaluate the resources put in place to effectively implement the distance education practice of the National Teachers' Institute, vis-à-vis their adequacy, quality, utilization and the overall impact they have been having on the general performances of their students. In a nutshell, it is a way aimed at fulfilling of the requirement of the distance education curriculum process.

In the first instance, the concept of evaluation needs to be fully understood from the different angles perceived by different curriculum experts. Several definitions have been given thus:

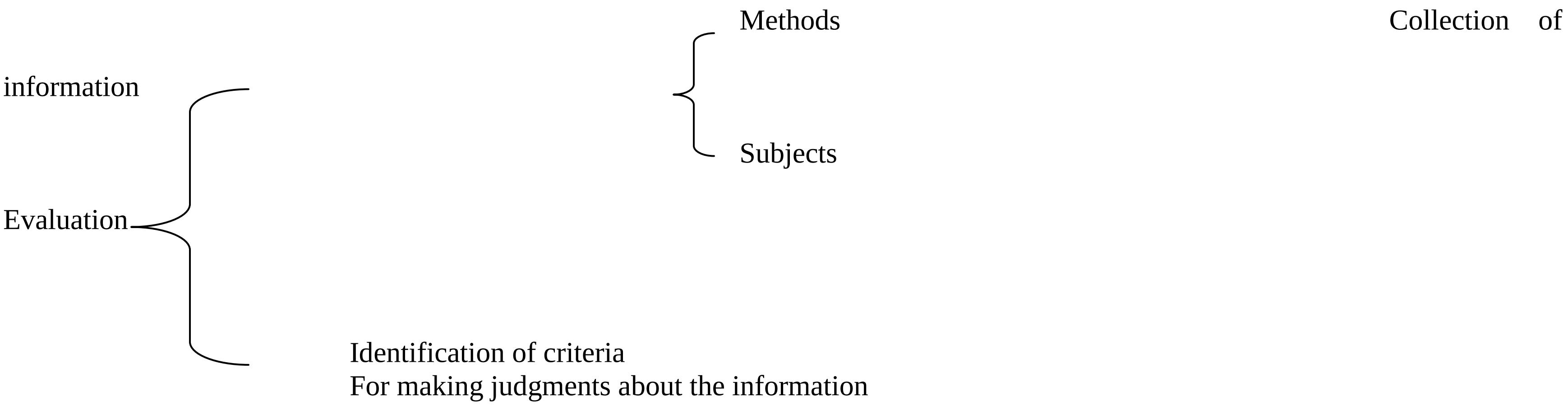
Umoren & Iyang (1995) see curriculum evaluation as "a process whereby a systematic and scientific approach is used to assess the strength and weaknesses of curriculum", which can mean programme in the context of distance education "it has as its major objective that of estimating whether learning experiences provided in the school curricular are meeting the set goals and objectives in bringing about socially desirable development among students".

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"

Summarily, she pointed that “evaluation involves:

- ✓ Appraisal o the worth or value of a programme and making decisions on the basis of such appraisal;
- ✓ Evaluation is a process;
- ✓ Evaluation involves identifying, obtaining and providing information (data);
- ✓ The information collected must be based on stated objectives of the programme to be evaluated;
- ✓ Such information is made available to decision makers;
- ✓ On the basis of the information provided, the decision maker makes decision as regards the programme evaluated”. Pg. 125 - 126

Harlen.W in Straughan & Wrigley (1980), 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”.

This definition presupposes that the central issue in every evaluation process is the collection of information based on some outlined criteria for the purpose of making informed decision. The aim of this research work is gather as much of such information that relate to the research objectives based on benchmarks set in the operation of the Institute’s Nigeria Certificate in Education by Distance Learning System. The information, it is hoped, would be used to enrich the NCE by distance learning operation by addressing the adequacy, quality and utilization issues of learner support, etc.

Another definition of evaluation by Onwuka (1996), for example, sees it as an indispensable task in curriculum development and implementation processes. It is clearly marked by “intensive analysis of the entire educational situations comprising of the environment, facilities, subject matter, methods of assessment for the sake of improvement as well as staff engaged in the educational process”.

The curriculum issues being addressed by this research study centre essentially around the facilities being used as learner support in the Nigeria Certificate in Education by the National Teachers’ institute as well as the staff at two ends (Headquarters and Study Centres) involved in distance education operation. It is thus a clear attempt based on the specification of related issues in curriculum evaluation.

In yet another attempt at defining the concept, Wheeler, D.K (1980) says “evaluation in the broadest term includes not only the process of determining what the actual educational outcomes, but it involves judgement about the nature and desirability of any demonstrated changes”.

Lewy in Onwuka (1985) also sees the concept as “essentially the provision of information for the sake of facilitating decision making at various stages of curriculum development”. This definition underscored evaluation from developmental and implementation perspectives in which the entire curriculum development stages are evaluated. There is no doubt that information got at every stage would aid constructive decisions during the development and implementation processes.

Bloom, et al (op cit) viewed evaluation also as “the systematic collection of evidences to determine whether in fact certain changes are taking place in the learners as well as to determine the amount or degree of change in individual students”. This definition restricts evaluation to determining what happens during the teaching/learning situation and its impact on students’ behaviour in relation to the set goals and objectives.

The NTI NCE by DLS Education Course Book, Module 4, Cycle 3 (2000) defined educational measurement and evaluation as “the process of assigning values to attributes and making value judgment based on such numerical values. It is the process of collecting quantitative (numerical) data or information on students’ learning and using such data in making appropriate judgments or decisions about the extent to which instructional objectives are being achieved”. There is no doubt that this definition corroborates bloom’s opinion about the concept in scope.

Stufflebeam (1971) sees it as “the process of delineating, obtaining and providing useful information for judging decision alternatives”. In the case of this study, it is expected that the outcome which will be obtained through a well defined evaluation process would be used to take important decisions regarding the delivery strategy of the NCE/DLS, learner support being its chief means.

On the other hand, Bloom, et al (1971) 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”.

Ronald (1978) defined evaluation as “a broad and continuous effort to enquire into the effects of utilizing educational content and process according to clearly defined goals”. P.433

He (*ibid*) went further to argue that “at the more formal level, it involves carefully collecting and treating data about progress toward prescribed goal’ p.434

Lastly in the series of definition of the concept, ‘evaluation’, the UNESCO conference (1990) defined it as “the process of ascertaining the decision to be made in selecting related information and collecting and analyzing information in order to report summary data useful to decision makers in selecting alternatives”

The conclusions to be made from the definitions above are that:

1. Evaluation is a process that aids decision making;
2. Standards or criteria against which the decisions will be based must be outlined; and
3. The decisions to be taken are normally aimed at reviewing and strengthening the curriculum development and or implementation process of the curriculum in formative stages or the outcome of the entire educational process at the end of the programme (certification), etc.

2.12 Empirical Studies

Ashok and Sethy (2010), conducted a search on learners' perception towards information and communication technologies: a case study of Indira Ghandi National Open University to determine the Information and Communication Technologies liked by the learners; how learners perceived that they will be benefitted and in what sense; how far they are acquainted with all these ICTs before registering/admitted to their respective programmes through ODL mode; and whether it benefit them in true sense. The idea behind the research was to:

i. *Ascertain the awareness of online/distance learning programmes;*
ii. *Find out which teaching delivery model is preferred by the learners most;*
iii. *Examine learners' accessibility to online programmes;*
iv. *Study learners' level of skills for study through online; and*
v. *Know the learners' preference for the support services through ICTs.*

Towards accomplishing the research study, a descriptive sample survey method was used on the respondents scattered over the entire country. The findings of the study ware revealing and positively aided decisions on the leaner support suited for the learners. The summary of the findings include:

a. Majority of the respondents of all the programmes were having basic knowledge of ICT in general and computer skill in particular before registration with IGNOU;

b. Learners had given their preference to receive support services through Audio/Video and CDs/DVDs followed by online/e-Learning/Web based Programmes;

c. More than 90% of IGNOU's learners of respondents were having mobile phones followed by access to FM Radio (80%), Desktop Computers (67%), TV with Cable DTH and Gyan Darshan on it (77%) , TV without cable connection (66%), MP3 player (70%), telephone landline (63%), audio, video, CD/DVD player (55%), and Desktop with internet facility (53%). About one forth learners of all programmes were having the accessibility of laptop and laptop with internet facility;

d. Mixed reactions on the availability and use of ICT were reported. 60% of the respondents expressed skepticism but acknowledged the advantages and disadvantages of ICT while studying online.

Mishra, Vijayshari and Garg (2010) conducted a study on evaluation of Student Support Services of IGNOU Undergraduate Physics Programme using context-input-process-product evaluation model (CIPPM) to study the quality and effectiveness of academic counseling; availability and use of technology in academic support; use of assignment as a learning tool; timely receipt of learning materials; and timely declaration of term-end-examination results (TEE) and dispatch of grade cards. In depth analysis of the primary responses from (learners, counselors, programme developers, functionaries engaged in learner support services on various aspects of the programme) and examination of institutional records, documents and databases on learner enrolment, assignment submission and receipt of materials was made. The survey aspects of the study dealt with administration of questionnaires as well as interviews, and analysis of the responses obtained using multiple channels of communications. The major findings of the study reveal that majority of undergraduate Physics students were not satisfied with the existing arrangement of counseling sessions, assignment evaluation, use of assignment as a teaching tool and the time taken to declare and dispatch grade cards, which they agreed takes longer time. The result further suggested that although majority of the learners had personal access to radio, TV, CD/VCD, yet the usage of Gyan Darshan, interactive radio counseling and other high end technologies such as video conferencing through EduSat and internet had been very limited. In view of the findings of the study, the researchers recommended that:

(a) To increase receptivity during counseling sessions, the University may need to increase the number of counseling session and make academic counselors to teach as well;

(b) Regular face-to-face interaction with various levels of functionaries, including academic counselors need to be strengthened to improve science teaching-learning at a distance;

(c) To facilitate better utilization of available electronic media facilities and create opportunities for interaction between learners and academic counselors/faculty, the university should activate an information interface at all regional centres and high enrolment study centres. Alternatively, by creating a cyber café with free e-mail facility for learners at identified locations, the university can provide a forum for learners to reach the faculty/academic counselors/mentor synchronously and asynchronously;

(d) Web page for each course with features such as bulletin board, chat sessions and use of e-mail for learner-faculty interface should be created to facilitate interaction between and among students, faculty and counselors/mentors;

(e) To improve the quality of services provided, the student support division should be strengthened with full-time competent human resources in adequate numbers, among others.

Olufisan (1992) piloted a research on the development of Distance Learning Course materials for the Nigeria Certificate in education of the National Teachers' Institute (NTI), Kaduna, which was presented to the Department of Teacher Education, University of Ibadan in partial fulfillment of the requirements for the award of Masters Degree in Educational Technology. Based on the research question that "there is no clear-cut policy guidelines concerning the design, development, production and utilization of the support materials; and the Institute does not at present have all the expertise, finance, time and institutional will power needed to produce the materials" among others, the following wide range recommendations were made:

1. A workshop should be convened to produce a blue print that will guide the planning, development, production and utilization of the support materials for each subject;
2. 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, etc.

It should be emphasized here that though the scope of the research centred narrowly on the development of the Institute's Distance Course Texts, nonetheless, it dwelt heavily on the most important Learner Support Services in which most of concerns of Distance Education practice need to be addressed. The focus of this research was much more than looking at the development of Distance education materials but rather at the entire institutionalized practice of support in the Institute's Distance Education Practice.

Similarly, Yusuf & Falade (2005) conducted a study to find out the media in use by the National Teachers' Institute in its Teacher Training Programme in Oyo State, Nigeria and the factors militating against its effective use. The study was descriptive one using survey method. It employed the use of questionnaire administered on the respondents consisting of 255 Teacher Grade II Certificate and NCE distance learners, drawn from the 60 NTI study centres in Oyo State. The two major research questions for the study were:

1. What types of instructional media do distance learners enrolled in NTI programmes use?
2. What are the factors militating against effective use of media in NTI distance education programmes?

The findings showed that distance learners used mainly print media in their learning. In thinking about how to promote greater level of use of modern technology, it is important to improve access to ICT in both urban and rural areas of Nigeria, improve learners' computer expertise and those who are using those technologies should be encouraged to share their experience with non users. Study centres should be linked to the internet and distance learners should be given training on the use of those technologies. NTI should develop more instructional packages apart from the print packages. Infrastructural facilities like electricity, libraries with ICT facilities, and telecommunication should be provided in towns and other rural areas to facilitate the use of modern technology products by distance learners located in those areas. In addition, NTI should collaborate with established institutions close to their study centres so that distance learners enrolled in their programmes can have access to the facilities and equipment in such institutions. This will further enrich distance learners' learning.

Koul (October 24, 2008) also reviewed the tutoring support provided by the National Teachers' Institute, Kaduna, Nigeria to its distance students at the instance of the Common Wealth of Learning, COL. The report of the study was quite revealing on the prevailing practices of the institute which can be construed to be below the norm as against the standard in Distance Education practice.

The 51 page report discussed intensively the rallying points to be considered in learner support applications in distance education practice which was later adapted by the institute as training manual for its Distance Part Time Course Facilitators and managers. The manual was first piloted in 2010 with the training of Centre Managers and Course Facilitators in the North East and centred squarely on Tutoring in Distance Learning. This means that the Institute has just started the training of its ad-hoc staff in the required direction, though.

In a similar research study on the use tutorial support materials in the distance learning system of the National Teachers' Institute, conducted by Yaya, D.O (2006), an assessment was made on the availability, accessibility, adequacy and use of these resources in the programme. The study found that over 60% of the study centres had more than 50% of the items and had access to even more. They were however, not adequate. Most of the support materials, though available and accessible, were never used or sparingly used. As a teacher education programme, he continued, these support materials are not only needed for facilitating instruction but also for modeling teaching and learning practices.

He therefore recommended that the National Teachers' Institute should give priority to the provision of the support materials, monitor their use and provide written guides or notes for their use.

Summary and Implications

The literature in the preceding pages gave insight into the meanings of evaluation, distance education related concepts such distance learning and its unique features and implications, instructional design in distance education and the expertise that go with it, the concept and constituents of learners support services without which the practice may not be wholesomely accepted to be so, etc.

Learner support facilities/services is a distinctive characteristics of any distance education practice which must be organized and carried out by distance education experts in accordance with the ideals spelt by the institutional policies. The consequences associated lack of meticulous handling of this prime task is adversely great on the sector for which the training is given. The expertise of the operators must continue to be built on continuous basis to be able to move and make the required impact in any given changing circumstance and environment.

In a nutshell, the effective implementation of any distance education practice is hinged on the proper planning and assembling of adequate and qualitative resources backed by efficient utilisation by distance education experts.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter dealt with the outline of the research in line with the established standard of Ahmadu Bello University, Zaria. The plan provided deep insight into the research design and articulated the processes through which it was conducted, analyzed and reported. The research instrument and the suggested statistical methods for the analysis of the data were listed under specific sub-titles for ease of reference.

3.2 Research Design

The study was an ex post facto survey research which examined the multifaceted dimensions of learner support services on the Nigeria Certificate in Education by Distance Learning System of the National Teachers' Institute with the standard practice in Open and Distance Education. This is particularly important because the focus of the research was reviewing what had been incorporated and implemented in the effort of the Institute to entrench a qualitative distance education practice in its NCE by DLS. Ex post facto being a Latin word is retroactively applied to events that have occurred in the past as well as the reoccurring ones.

Survey research method was used in the study because of its flexibility of using various experimental techniques, encompassing a variety of accepted methods and structures, e.g. large population and use of questionnaire, etc.

3.3 Population

The total population for the research was 9,752. These include 28 Academic planners and administrators in Academic Departments at the headquarters of the Institute and 13 state coordinators in the North and South West Geo-political zones and their 13 education officers as respondents (A). Group (B) respondents comprise of 624 Centre Managers and Course Facilitators in the thirteen states in North and South West Zones. This group is very central in the implementation of all the learner support services in their respective study centres. Their positions and roles placed them as one of the most important and indispensable research constituents for this study.

The third and last group and who are considered as the most critical for the research are 9,074 students. The planning, organization and implementation of the Institute's Learner Support are all geared towards the successful training of this group of respondents. Below is a tabular explanation of the entire population for the study.

Table 3.1: Research Population

A					**B**	**C**	**D**
Headquarters and State Office Staff					**Course Facilitators**	**Students**	**G/T**
Positions	**No.**	**State Coordinators**		**State Educ. Officers**			
Deputy Directors	8	Jigawa	1	1	74	243	327
Asst. Directors	5	Kaduna	1	1	143	5,202	5352
Chief Education Officers	10	Kano	1	1	41	299	352
Asst. Chief Education Officers	5	Katsina	1	1	114	1,574	1695
		Kebbi	1	1	57	272	331
		Sokoto	1	1	24	19	45

		Zamfara	1	1	52	313	367
		Ekiti	1	1	8	113	123
		Lagos	1	1	23	344	369
		Ogun	1	1	17	218	237
		Ondo	1	1	34	153	189
		Osun	1	1	12	119	133
		Oyo	1	1	25	205	232
Total	**28**		***13***	***13***	***624***	***9,074***	**9,752**

The entire population of this study was therefore Nine Thousand, Seven Hundred and Fifty Two (9,752)

3.4 Sample size and Sampling Technique

The sample size for the study was two thousand, six hundred and ninety six (2, 696). This is inclusive of centre managers, course facilitators and students in the thirteen (13) states in the North and South West geo-political zones. The number was arrived at by the use of Morgan and Kreycie (1971) table for determining sample size from a given population.

Purposive Random Sampling was used to get the sample size in group A in which the entire population in this group was picked owing to their insignificant number.

In sampling groups B & C respondents, stratified random sampling (SRS) was used in getting the sample size by assigning numerical values to each of the entire population and the odd numbers were picked as samples.

The table below shows the sample size of each group for the study.

Table 3.2: Sample Size

A	B	C	G/Total

Headquarters and State Office Staff						**C/F**	**Students**	
Positions	**Dept.**	**Size**	**State Coordinators**		**State Educ. Officers**			
			Size		**Size**			
D/ Directors	Professional Depts.	8	Jigawa	1	1	63	152	
ADs	Do	5	Kaduna	1	1	108	382	
C.E.Os	Do	10	Kano	1	1	41	169	
Asst. Chief Education Officers	Do	5	Katsina	1	1	92	306	
			Kebbi	1	1	52	159	
			Sokoto	1	1	24	19	
			Zamfara	1	1	48	175	
			Ekiti	1	1	8	86	
			Lagos	1	1	19	181	
			Ogun	1	1	15	140	
			Ondo	1	1	32	108	
			Osun	1	1	12	92	
			Oyo	1	1	24	135	
Total		***28***		***13***	***13***	***538***	***2,104***	***2,696***

The research sample was Two Thousand, Six Hundred and Ninety Six representing 27.64% of the entire population.

3.5 Instrumentation

Questionnaire was used throughout for this research. The respondents indicated their opinions freely by ticking the appropriate options in the various sections of the questionnaire.

The Questionnaires were structured in sections. Section (A) sought for information on personal details of the respondents, while section (B) required the respondents to indicate their opinions on the adequacy of the support services being provided to the students.

Section (C) was specifically targeted to get the opinions of the respondents on the quality of the service and (D) on its utilisation in the delivery of the Nigeria Certificate in Education distance learning programme. Section (E) was specific for respondents in (A) and (B) only. The section was emphatic on the capacity of the respondents to deliver qualitative learner support services at their respective operational levels. Respondents in group (C) were not required to fill this section because of their irrelevance. Section (F) was for groups (B & C) only. Respondents in these two groups were required to indicate their opinions on the impact of the Institute's learner support services on the performance of the students. For clarity of number of items in each section of the instrument, the table below provided the much needed detail.

Table 3.3 Questionnaire Content

Respondents	***Sections***	***Number of Items***
A (Headquarter and State Office Staff)	A: (Personal Details)	05
	B: (Adequacy of Learner Support Services)	15
	C: (Quality of Learner Support Services)	15
	D: Utilisation of Learner Support Services)	14
	E: (Capacity of Learner Support Service Personnel)	07
B= (Centre Managers and Course Facilitators)	A: (Personal Details)	05
	B: (Adequacy of Learner Support Services)	15
	C: (Quality of Learner Support Services)	15
	D: Utilisation of Learner Support Services)	14
	E: (Capacity of Learner Support Service Personnel)	07
	F: (Impact of Learner Support Services on students' learning)	17
C (Students)	A: (Personal Details)	02

	B: (Adequacy of Learner Support Services)	15
	C: (Quality of Learner Support Services)	15
	D: Utilisation of Learner Support Services)	14
	E: (Impact of Learner Support Services on students' learning)	17
Total Items		***192***

3.5.1 Validity of the Research Instruments

Experts from NTI, University of Abuja and the National Open University of Nigeria were selected to face validate the instruments to ensure its validity and relevance to the study. Similarly, the Instrument was subjected to validation by the project supervisors and other specialists in Distance Learning Education and Curriculum experts before it was administered in the field. Their comments and suggestions guided the modification of the instruments before it was finally taken to the field for the actual research.

3.5.2 Pilot Study

The research instrument was pilot tested within the research zone on non-primary respondents in order to guide the main study and as well to determine their reliability and validity. The results appeared to be in agreement with the expected validity and reliability confidence levels.

3.5.3 Reliability of the Instruments

The research instrument was subjected to test-re-test reliability estimate that yielded a result of 0.87 co-efficient. This implies that the instrument was highly reliable.

3.6 Administration of the Research instrument

Non participant researchers were used mostly to carry out the research in the field during the weekend and intensive contact sessions when it was expected that the respondents would be in attendance. These non-participant researchers were adequately trained before undertaking the research in the field.

The researcher on the other hand, personally administered the instrument to the staff responsible for the instructional design at the Headquarters level in order to ensure high level of return of the Questionnaire.

3.7 Methods of Data Analysis

Analysis of Variance (ANOVA) statistics was used to test hypotheses 1, 2 and 3 because the variables involved are dependent and were answered by three different groups of respondents (students, staff and facilitators) (independent variable). In this case, the best statistics to use is Analysis of Variance (ANOVA).

In the case of hypotheses 4 and 5 where the variable of impact of learners support services on students achievement and capacity training of staff (dependent variables) were answered by two different groups of respondents, i.e. students and facilitators (Factor/independent variable), Independent t-test sample statistics was used.

Justification for the use of the selected statistical technique was given at each point of analysis.

CHAPTER FOUR

PRESENTATION AND DISCUSSION OF RESULTS

4.1 Introduction:

This chapter presents the data analysis, it interpretation and discussion of results. Three categories of respondents comprising of 382 facilitators, 54 staff and 1,596 students are involved in this study titled “Evaluation of learners support services by the Nigeria Teachers Institute: implications for National Certificate in Education by distance education delivery’ and is presented in sections; section one presents the frequencies and percentages of the biodata variables. Section two answers the Research questions while section three presents the tests and discussion of Research hypotheses at 0.05 level of significance.

4.2 Respondents Characteristics

Distribution of Staff

Table 4.1.1 Distribution of Staff by Age

Age	**Frequency**	**Percentage**
less than 25 yrs	5	9.25%
25-35 yrs	15	27.77%
36-45 yrs	16	29.62%
Above 45 yrs	18	33.33%
Total	54	100%

The above table revealed the age of the staff respondents. 5 of them representing 9.25% are l.ess than 25 years while 15 (27.77%) others are between 25 – 35 years as against 16 (29.62%) that are between 36-45 years and the rest 18 (33.33%) are above 45 years.

Table 4.1.2 Distribution of Staff by Sex

Sex	**Frequency**	**Percentage**
Male	32	59.25%
Female	22	40.74%
Total	54	100%

According to the above table on the sex of the staff respondents, 32 of them representing 59.25% are males while the remaining 22 representing 40.74% are females.

Table 4.1.3 Distribution of Staff by Qualification

Education	**Frequency**	**Percentage**
HND/bachelors	28	51.85%
MA	26	48.15%
Total	54	100%

The above table revealed the highest educational qualification of the staff respondents. Accordingly, 28 of them representing 51.85% are HND/Bachelors holders while 26 (48.15%) others have the MA certificates.

Table 4.1.4 Distribution of Staff by Rank

Rank	**Frequency**	**Percentage**
Deputy Directors	7	12.96%
Assistant Directors	5	9.26%
Chief Education Officers	4	7.41%
State Coordinators	12	22.22%
Education Officers	26	48.15%
Total	54	100%

The ranking or positions of the staff respondents showed that Seven (7) of them representing 12.96% are Deputy Directors, Five (5) representing 9.26% are Assistant Directors, Four (4) representing 7.41% are Chief Education Officers, Twelve (12) representing 22.22% are State Coordinators and Twenty Six (26) representing 48.15% are Education Officers.

Table 4.1.5 Distribution of Staff by Experience

Experience	**Frequency**	**Percentage**
Less than 10 yrs	26	48.15%
10 yrs and above	28	51.85%
Total	54	100%

The experience of the staff as given in the table above revealed that 26 of them representing 48.15% have less than 10- years working experience while the rest 28 representing 51.85% have over 10 years of working experience.

Table 4.1.6 Distribution of Course Facilitators by Age

Age	**Frequency**	**Percentage**
35 – 45 years	126	32.98%
46 years and above	256	67.02%
Total	382	100%

The ages of the course facilitators have been revealed by the table above. One Hundred and Twenty Six (126) representing 32.98% are between the ages 35 – 45 years, while Two Hundred and Fifty Six (256) representing 67.02% are between the ages 46 years and above.

Table 4.1.7 Distribution of Course Facilitators by Sex

Sex	**Frequency**	**Percentage**
Male	297	77.75%
Female	85	22.25%
Total	382	100%

The table above showed the distribution of facilitators by Sex. Two Hundred and Ninety Seven (297) of them representing 77.75% are male and the rest Eighty Five (85) representing 22.25% are Female.

Table 4.1.8 Distribution of Course Facilitators by Qualification

Qualification	Frequency	Percentage
1st Degree	156	40.83%
MA, M.Ed, M.Sc(Ed), M.A (Ed)	226	59.16%
Total	382	100%

The table above revealed the Qualification of the Course Facilitators. While One Hundred and Fifty Six (156) representing 40.83% are 1st Degree Holders, the res Two Hundred and Twenty Six (226) representing 59.16% are holders of 2nd Degree.

Table 4.1.9 Distribution of Course Facilitators by Position

Position	Frequency	Percentage
Course Facilitators	52	13.61%
Centre Managers	330	86.39
Total	382	100%

The table above explained the positions of course facilitators. Accordingly, Fifty Two (52) of them representing 13.61% are Course Facilitators, while the rest Three Hundred and Thirty (330) representing 86.39% are Centre Managers.

Table 4.10 Distribution of Course Facilitators by Experience

Experience	Frequency	Percentage
1 – 9 years	143	37.43%
10 years and above	239	62.57%
Total	382	100%

The data in the table above revealed the experience of the facilitators involved in this study. One Hundred and Fourty Three (143) of them representing 37.43% have experiences of between 1 – 9 years, while Two Hundred and Thirty Nine (239) representing 62.57% have 10 years and above experience.

Students' distribution

Table 4.11 Distribution of Students by Age

Age	Frequency	Percentage
less than 18 yrs	0	0%
18-25 yrs	672	42.11%

25 – 35 yrs	523	32.75%
Above 35 yrs	401	25.13%
Total	1,596	100%

The above table revealed the age of the students respondents. None of them representing 0% is less than 19 years while 672 (42.11%) are between 18-25 years as against 523 (32.75%) that are between 25-35 years and the rest 401 (25.13%) are above 35 years old.

Table 4.12 Distribution of Students by Sex

Sex	**Frequency**	**Percentage**
Male	924	57.89%
Female	672	42.11%
Total	1,596	100%

The above table revealed the sex of the students. Nine Hundred and Twenty Four (924) representing 57.89% are males while Six Hundred and Seventy Two (672) representing 42.11% are females.

4.3 Answering the Research Questions

Question 1: How adequate are the Learner Support Services of the National Teachers' Institute's NCE/DLS?

Table 4.3.1: Opinions of Students, Staff and Course Facilitators on the level of Adequacy of Learner Support Services on NCE/DLS

s/n	ITEMS	STATUS	RESPONSE CATEGORIES				MEAN	S.D	S.E
			VA	A	FA	IA			
1	Library Facilities	Students	100	129	532	835	1.6829	.9100	.0326
		Staff	24	9	9	12	2.8333	.9236	.1521
		Facilitators	38	64	93	187	1.7303	1.0007	.0047
2	Computer Facilities	Students	98	119	526	853	1.6629	.85009	.0249
		Staff	14	17	11	12	2.6111	.9721	.0121
		Facilitators	49	56	59	218	1.5706	1.1422	.0326
3	Internet Facilities	Students	72	118	525	881	1.6121	.7909	.1521
		Staff	8	20	8	18	2.3333	1.0915	.0047
		Facilitators	29	69	108	176	1.8193	.9800	.0249
4	Telecommunication facilities	Students	354	384	446	412	2.426	1.0300	.0121
		Staff	8	7	17	22	2.0185	.9409	.0434
		Facilitators	27	68	74	133	1.5209	.8800	.0222
5	Storage facilities	Students	378	420	596	202	2.6102	1.0092	.1311

		Staff	8	14	17	15	2.2777	1.1003	.1245
		Facilitators	56	147	73	106	2.0654	.9398	.0926
6	Course books	Students	862	491	124	119	3.3132	1.0183	.0007
		Staff	18	9	12	15	2.5555	1.1300	.1245
		Facilitators	209	105	49	19	2.3821	.9100	.0015
7	Students Handbook	Students	187	263	452	694	1.9642	1.0122	.0926
		Staff	17	7	10	25	2.4814	.7500	.1021
		Facilitators	74	58	168	82	1.801	.9512	.0047
8	Teaching practice Manual	Students	307	368	374	547	2.2725	1.0228	.0949
		Staff	12	11	26	5	2.556	1.0339	.0021
		Facilitators	60	86	137	99	1.9031	1.0128	.0926
9	Tutoring manual	Students	207	291	342	756	1.968	1.0989	.1821
		Staff	8	6	17	23	1.9814	1.0090	.0147
		Facilitators	89	64	163	66	1.7801	1.0988	.0949
10	Students Project Handbook	Students	156	190	482	768	1.8333	1.0117	.0121
		Staff	7	7	12	30	1.9074	.9311	.0434
		Facilitators	59	64	171	88	1.8795	.9811	.0222
11	Practical Handbook	Students	222	289	474	611	2.0764	1.0221	.1311
		Staff	5	5	32	24	2.2777	1.0722	.0326
		Facilitators	40	53	118	171	1.7329	1.0199	.0572
12	Examination manual	Students	253	248	512	583	2.1071	1.0900	.0326
		Staff	13	13	12	16	2.4259	.9898	.1521
		Facilitators	47	76	87	172	1.7539	.9711	.0047
13	Audio Cassettes in all subjects	Students	102	135	512	847	1.6817	.8011	.0249
		Staff	6	6	21	21	1.9444	.9811	.0121
		Facilitators	18	58	109	197	1.7931	.8609	.0434
14	Video Cassettes in all subjects	Students	83	115	602	796	1.6723	.8611	.0222
		Staff	4	3	22	25	1.7407	.8813	.1311
		Facilitators	10	44	103	225	1.7251	.8323	.0969
15	Continuous assessment Guidelines	Students	481	649	242	224	2.869	1.0091	.09250
		Staff	16	22	12	4	2.9259	.9576	.1400
		Facilitators	10	44	103	225	1.5785	.8801	.0501

Table 4.3.1 above revealed the opinions of three respondents (students, staff and course facilitators) on the level of Adequacy of Learner Support Services on NCE/DLS.

The highest mean responses of 3.3132, 2.5555 and 2.3821 by students, staff and course facilitators respectively are on the adequacy of course books for learners support services on NCE/DLS. Detailed responses of students on this item showed that 862 of them considered course books as very adequate, 491 of them agreed they were adequate, 124 others said fairly adequate and the rest 119 students considered course books as inadequate. The responses of staff on the course books on the other hand showed that 18 considered them as very adequate, 9 others considered them adequate while 12 others considered the course books as fairly adequate and the rest 15 of the staff considered the books inadequate. The facilitators' responses on course books showed that 209 of them considered the books as very adequate, while 105 others said they were adequate, while another 49 considered said fairly adequate and the rest 19 of the facilitators considered course books as inadequate.

Question 2: How qualitative are the Learner Support Services of the National Teachers' Institute on its NCE/DLS?

Table 4.3.2: Opinions of Students, staff and Course facilitators on the level of quality of Learner Support Facilities on the NCE/DLS)

S/N	**ITEMS**	**STATUS**	**RESPONSE CATEGORIES**				**MEAN**	**S.D**	**S.E**
			V.Good	**Good**	**Fair**	**Poor**			
1	Library Facilities	Students	93	114	566	823	1.6723	**.7300**	**.0512**
		Staff	5	23	19	7	2.4815	**.2160**	**.0300**
		Facilitators	46	65	109	162	1.9869	**1.0021**	**.1400**
2	Internet Facilities	Students	88	106	586	816	1.6654	**.8012**	**.0523**
		Staff	31	12	5	6	3.2593	**1.4201**	**.0221**
		Facilitators	30	65	130	157	1.9162	**.9001**	**.1634**
3	Computer Facilities	Students	133	103	653	707	1.7882	**.7112**	**.0532**
		Staff	28	18	4	4	3.2963	**.9108**	**.1468**
		Facilitators	41	62	132	147	1.9921	**.9001**	**.0541**
4	Telecommunication facilities	Students	328	393	568	307	2.4649	**.9083**	**.0291**
		Staff	17	23	8	6	2.9444	**1.0038**	**.0512**
		Facilitators	34	97	113	138	2.0707	**.9007**	**.0300**
5	Storage facilities	Students	335	308	471	482	2.3108	**1.0996**	**.1400**
		Staff	7	18	17	12	2.3704	**.9720**	**.0523**
		Facilitators	71	60	178	73	2.3377	**.9116**	**.0221**
6	Instructional materials	Students	457	798	245	96	3.0125	**.1003**	**.1634**
		Staff	16	27	8	3	3.0370	**.9006**	**.0532**
		Facilitators	174	133	52	23	3.1990	**.9897**	**.0525**
7	Students Handbook	Students	233	690	259	414	2.4649	**1.0912**	**.0512**
		Staff	27	17	8	2	3.2778	**.8900**	**.0300**

		Facilitators	93	105	98	86	2.5366	**1.9851**	**.1400**
8	Teaching practice Manual	Students	626	412	299	259	2.8803	**1.0049**	**.0512**
		Staff	23	19	9	3	3.1481	**.9113**	**.0300**
		Facilitators	105	149	69	59	2.7853	**1.1975**	**.1400**
9	Students project Handbook	Students	564	688	180	164	3.0351	**1.0008**	**.0523**
		Staff	6	14	12	13	2.2889	**1.1011**	**.0221**
		Facilitators	59	129	111	83	2.4293	**1.0149**	**.1634**
10	Tutoring manual	Students	176	393	576	451	2.1842	**.9111**	**.0532**
		Staff	7	22	11	14	2.4074	**.1612**	**.1400**
		Facilitators	58	121	116	97	2.3571	**.9090**	**.0523**
11	Practical Handbook	Students	205	292	626	473	2.1435	**1.0000**	**.0221**
		Staff	5	18	19	12	2.2963	**.9598**	**.0512**
		Facilitators	46	85	155	96	2.2120	**1.0300**	**.0300**
12	Examination manual	Students	338	527	534	197	2.6303	**1.0299**	**.1400**
		Staff	10	27	9	8	2.7222	**1.0599**	**.0523**
		Facilitators	107	144	71	60	2.7801	**1.0809**	**.0221**
13	Audio Cassettes in all subjects	Students	84	92	567	853	1.6284	**.7408**	**.0512**
		Staff	2	5	17	30	1.6111	**.8411**	**.0300**
		Facilitators	9	39	142	192	1.6466	**.7811**	**.1400**
14	Video Cassettes in all subjects	Students	63	128	607	798	1.6591	**.7809**	**.0523**
		Staff	3	6	16	29	1.6852	**.9308**	**.0221**
		Facilitators	15	30	123	214	1.5969	**.8311**	**.1634**
15	Continuous assessment Guidelines	Students	657	547	276	116	3.0934	**.9900**	**.0532**
		Staff	20	17	8	9	2.8889	**1.1139**	**.1006**
		Facilitators	145	112	65	60	2.8953	**1.0814**	**.0006**

Table 4.3.2 above revealed the opinion of the respondents (students, staff and course facilitators) on the quality level of Learner Support Services on NCE/DLS).

The highest mean responses of 3.0125, 3.0370 and 3.1990 respectively are on the quality of instructional materials. Detailed students' responses on this item revealed that 457 of them voted very good, 798 good; 245 fairly, and the rest 96 students poor. The staff responses on the instructional materials showed that 16 considered course books as very good, 27 others, good while 8 others said fair and the rest 3 considered Instructional Materials poor. The facilitators' responses on Instructional Materials showed that 174 of them considered them very good, 133 others considered them good, while another 52 considered them fair and the rest 23 of the facilitators considered the Instructional Materials as poor.

Question 3: How are the Learner Support Services being utilized by the National Teachers' Institute in its NCE/DLS?

Table 4.3.3: Opinions of Students, staff and facilitators on the level of utilization of Learner Support Services on NCE/DLS)

S/N	**ITEMS**	**STATUS**	**RESPONSE CATEGORIES**				**MEAN**	**S.D**	**S.E**
			VA	**A**	**FA**	**IA**			
1	Library Facilities	Students	45	227	579	745	1.7318	**.8700**	**.0512**
		Staff	13	12	18	11	2.5000	**1.1007**	**.0300**
		Facilitators	38	65	114	165	1.9372	**.9700**	**.1400**
2	Internet Facilities	Students	114	199	596	687	1.8371	**.9012**	**.0523**
		Staff	11	13	23	7	2.5185	**1.0213**	**.0221**
		Facilitators	46	69	108	159	2.0052	**.8909**	**.1634**
3	Computer Facilities	Students	87	245	468	796	1.7638	**.9300**	**.0532**
		Staff	4	12	22	16	2.0741	**1.0009**	**.1581**
		Facilitators	22	57	132	171	1.8168	**.9290**	**.0520**
4	Telecommunication facilities	Students	276	324	475	521	2.2224	**.9591**	**.0290**
		Staff	16	10	19	9	2.6111	**1.1113**	**.1735**
		Facilitators	76	97	93	116	2.3482	**1.0103**	**.0575**
5	Course Books	Students	789	585	143	79	3.3058	**.8519**	**.0372**
		Staff	26	21	5	2	3.3148	**.6609**	**.1025**
		Facilitators	164	133	67	18	3.1597	**.8900**	**.0592**
6	Students Handbook	Students	332	587	398	279	2.6090	**1.0120**	**.0690**
		Staff	12	20	18	4	2.7407	**1.0109**	**.1560**
		Facilitators	98	93	107	84	2.5366	**1.0094**	**.0612**
7	Tutoring Manual	Students	174	286	489	647	1.9919	**1.0141**	**.0311**
		Staff	6	8	15	25	1.9074	**1.0039**	**.1595**
		Facilitators	48	85	106	143	2.0995	**1.0300**	**.0512**
8	Teaching Practice Manual	Students	175	578	489	354	2.3596	**1.0311**	**.0300**
		Staff	10	32	7	5	2.8704	**.9311**	**.1400**
		Facilitators	60	147	91	84	2.4791	**1.0001**	**.0523**
9	Students project Handbook	Students	87	247	574	688	1.8327	**.9501**	**.0221**
		Staff	8	6	27	13	2.1667	**1.0115**	**.1634**
		Facilitators	49	67	149	117	2.1257	**1.0006**	**.0532**
10	Practical Handbook	Students	197	286	356	757	1.9518	**1.1117**	**.0512**
		Staff	9	10	13	22	2.1111	**1.0092**	**.0300**
		Facilitators	53	73	122	134	2.1178	**.9772**	**.1400**
11	Examination manual	Students	423	342	534	297	2.5583	**.92226**	**.0512**

		Staff	8	18	19	9	2.4630	**1.0373**	**.0300**
		Facilitators	72	143	55	112	2.4581	**.9617**	**.1400**
12	Audio Cassettes in all subject	Students	47	64	689	796	1.6003	**.7708**	**.0523**
		Staff	4	3	19	28	1.6852	**.9160**	**.0221**
		Facilitators	11	38	137	19	1.6443	**.7876**	**.1634**
13	Video Cassettes in all subjects	Students	98	637	789	488	1.6573	**.7873**	**.0532**
		Staff	3	19	28	16	1.6852	**.8909**	**.1413**
		Facilitators	53	137	185	133	1.6911	**.7900**	**.0451**
14	Continuous assessment Guidelines	Students	579	378	161	161	2.8609	**1.0122**	**.0319**
		Staff	21	13	9	9	2.6296	**1.000**	**.1563**
		Facilitators	97	124	69	57	2.5550	**1.0821**	**.0609**

Table 4.3.3 above revealed the opinion of the three categories of respondents (students, staff and facilitators) on level of utilization of Learner Support Services in NCE/DLS.

The highest mean responses of 3.3058, 3.3148 and 3.1597 by students, staff and facilitators respectively are on the utilization of course books. 789 students on this item said very effective, 585 others said effective, 143 fairly effective and the rest 79 students said ineffective.

The staff responses on utilization of course books showed that 26 considered it very effective, 21 others considered it effective while 5 of the staff considered it fairly effective and the rest 2 considered it ineffective. The facilitators' response on utilization of course books showed that 164 of them considered it very effective, 133 others considered it effective, another 67 considered it fairly effective and the rest 18 facilitators considered utilization of course books as ineffective.

Question 4: What impact does the Learner Support Services/Facilities NCE/DLS?

Table 4.3.4: Opinions of students and facilitators on the level of impact of Learner Support Services/Facilities on NCE/DLS

S/N	**ITEMS**	**Status**	**Response categories**					**MEAN**	**S.D**	**S.E**
			SA	A	UD	D	SD			

1	Library facilities have considerable impact on students learning	Students	87	162	354	567	426	2.3214	1.1900	.03001
		Facilitators	38	32	70	148	94	2.4031	1.3129	.0901
2	Students use internet most often to strengthen their studies	Students	96	163	275	483	579	2.1942	1.2709	1.006
		Facilitators	49	42	52	151	88	2.5104	1.4112	1.2163
3	Computer courses offer practical experiences to students	Students	121	165	289	425	596	2.2418	1.3612	.0411
		Facilitators	36	33	36	115	162	2.1256	1.3420	.0709
4	Course books have greater appeal on students' learning	Students	783	497	168	65	83	4.1478	1.1912	.0390
		Facilitators	184	98	81	14	5	4.1570	.9798	.0512
5	Students' handbooks provide relief and stimulation to students	Students	361	336	564	269	66	3.4116	1.2020	.0325
		Facilitators	90	145	63	48	36	3.5366	1.3310	.0700
6	Tutorial clear students' learning difficulties	Students	528	647	214	98	109	3.8690	1.2320	.0082
		Facilitators	102	128	72	46	34	3.5706	1.3112	.0143
7	Teaching practice provides professional skills to students	Students	435	587	343	109	122	3.6917	1.1255	.0300
		Facilitators	92	138	79	42	31	3.5706	1.2200	.0712
8	Students' project handbook guide students' research writing	Students	387	437	342	254	176	3.37907	1.9020	.0376
		Facilitators	56	68	117	86	55	2.9581	1.2012	.0870
9	Lab & field practicals provide enough practical skills	Students	87	79	351	437	642	2.0802	1.2109	.0311
		Facilitators	48	81	88	91	74	2.8376	1.1212	.0612
10	Counseling service resolves students' anxieties	Students	437	532	469	90	68	3.7393	1.1721	.0313
		Facilitators	127	81	75	72	27	3.5471	1.3310	.0721
11	Audio cassettes provide supplementary learning experiences	Students	57	72	186	584	697	1.8771	1.0620	.0323
		Facilitators	33	38	34	118	159	2.1308	1.3309	.0790
12	Video cassettes in all subjects boost students understanding	Students	89	76	234	532	665	1.9924	1.2102	.0389
		Facilitators	22	24	41	131	164	1.9764	1.1105	.0612
13	Continuous assessment builds on students' achievements	Students	425	548	435	127	61	3.7199	1.1002	.0325
		Facilitators	134	113	87	28	20	3.8193	1.1011	.0690

14	Regular orientation are provided to ease students' learning difficulties	Students	316	567	421	168	124	3.4906	1.2000	.0312
		Facilitators	98	93	129	38	24	3.5314	1.2101	.0675
15	Centre of Educational Technology in study centre provide variety of learning resources to aid students' learning	Students	98	106	339	491	562	2.1773	1.3605	.0390
		Facilitators	29	45	101	129	78	2.5235	1.2511	.0712
16	Examination manual guides the conduct of examination	Students	359	578	453	109	97	3.6221	1.1700	.0390.
		Facilitators	51	93	120	65	53	3.0628	1.3235	.0709
17	Timely release of results encourage students to remain in the programme	Students	314	448	576	87	171	3.4053	1.1020	.0420
		Facilitators	74	114	116	42	36	3.3874	1.2001	.0797

The above table (4.3.4) revealed the opinion of the two categories of respondents (students and course facilitators) on the impact level of Learner Support Services/Facilities on NCE/DLS.

The highest mean responses of 4.1478 and 4.1570 by students and facilitators respectively indicate that course books are the main access in students' studies. 783 students on this opinion strongly agreed, 497 agreed, and 168 were undecided, while 65 disagreed and the rest 83 strongly disagreed. The facilitators' opinions showed that 184 of them strongly agreed, 98 agreed, 81 undecided, while 14 disagreed and the rest 5 of the facilitators strongly disagreed.

Question 5: What is the capacity of NTI staff and Course Facilitators involved in implementing the Institute's Learner Support Services.

Table 4.3.5: Opinions of staff and facilitators on their level of capacity training on Learner Support services

S/N	**ITEMS**	**Status**	**Response categories**				**MEAN**	**S.D**	**S.E**
			Very Often	Often	Seldom	Not at all			

1	Study Centre Management	Staff	7	8	27	12	2.185185	1.0548	.1627
		Facilitators	53	76	89	164	2.04712	1.0566	.0596
2	Tutoring in Distance Learning	Staff	7	10	20	17	2.1296	1.0102	.1374
		Facilitators	54	61	105	162	2.018325	1.0836	.0611
3	Counselling in Distance learning	Staff	16	9	17	12	2.537037	1.0315	.1592
		Facilitators	37	79	119	147	2.015707	1.0016	.0565
4	Quality Assurance in Distance Learning	Staff	6	23	14	11	2.444444	1.0189	.1572
		Facilitators	46	71	123	142	2.054974	1.0179	.0574
5	Record keeping in Distance education	Staff	9	27	13	5	2.740741	.9324	.1439
		Facilitators	43	84	131	124	2.120419	1.0313	.0582
6	Information & Communication Tech (ICT) application in Distance Learning	Staff	4	29	14	7	2.555556	.8874	.1369
		Facilitators	31	71	137	143	1.973822	1.0091	.0569
7	Continuous Assessment in Distance Learning	Staff	12	19	16	7	2.6667	.97126	.1321
		Facilitators	56	126	107	93	2.379581	1.0733	.0606

The above table (4.3.5) is on the opinions of the two categories of respondents (staff and course facilitators) on their capacity Training level in Distance Education. The highest mean responses of 2.7380 and 2.3795 by staff and course facilitators respectively are on the regularity of capacity Training on Continuous Assessment in Distance Learning. The staff responses on this opinion showed that 12 said very often, 14 others said it’s often, 9 others said seldom and the rest 7 said not at all. The facilitators’ responses on this opinion showed that 56 said very often, 126 others said often, while 107 said seldom and the rest 93 of the facilitators said not at all to this opinion.

4.4 Testing the research hypotheses

Hypothesis One: There is no significant difference between the perception of staff and students on the adequacy of Learner Support Services/Facilities in the NCE/DLS.

The adequacy variable of learners support facilities (dependent variable) was answered by three different groups of respondents (students, staff and facilitators) (independent variable). Their mean responses in table 4.3.1 was analysed using Analysis of Variance Statistics in the table below.

Table 4.4.1: (a) Analysis of Variance (ANOVA) on the difference among the perceptions of Facilitators, staff and students on adequacy of Learner Support Services on the Nigeria Certificate in Education by Distance Learning System (NCE/DLS) in NTI

Adequacy of Facilities **ANOVA**

Variations	Sum of Squares	df	Mean Square	F ratio	F critical	Sig (p).
Between Groups	3215.397	2	1607.698	1.325	2.60	.137
Within Groups	391841.193	2029	193.120			
Total	395056.590	2031				

Not Significant, ***Calculated p >0.05, calculated F ratio <2.60 at df 2, 2029***

The outcome of the Analysis of Variance (ANOVA) statistics above revealed that there is no significant differences among the various groups of respondents (students, staff and facilitators) on the adequacy of in NCE/DLS. Reason being that the calculated significance (P) value of 0.13 is greater than the 0.05 alpha level of significance while the calculated F ratio value of 1.325 is less than the 2.60 F critical value at df 2, 2029. Therefore, the null hypothesis which stated that there is no significant difference among the perception of Facilitators, staff and students on the adequacy of Learner Support Services on NCE/DLS, is hereby accepted and retained.

Table 4.4.2 (b): Descriptive statistics on the mean difference among Facilitators, staff and students on adequacy of Learner Support in (NCE/DLS)

Adequacy of Facilities

Descriptive

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Students	1596	32.7801	14.28298	.35752	32.0788	33.4813	15.00	60.00
Staff	52	33.0577	12.34220	1.71156	35.6216	42.4938	16.00	60.00
Facilitators	384	34.9661	12.37855	.63169	33.7241	36.2082	15.00	60.00
Total	2032	33.3538	13.94680	.30939	32.7471	33.9606	15.00	60.00

Table 4.4.2 (b) above revealed the differences among the various groups of respondents (students, staff and facilitators) on the adequacy of Learner Support Services in the Nigeria Certificate in Education by Distance Learning System (NCE/DLS)

The table showed the mean responses as 32.7801, 33.0577 and 34.9861 for students, staff and facilitators respectively.

Table 4.4.3 (c): Post hoc (LSD multiple comparison statistics on the mean difference among the perceptions of Course Facilitators, staff and students on adequacy of Learner Support in (NCE/DLS) in NTI

(I) status of respondent	(J) status of respondent	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Students	Staff	-3.46324	2.13860	.116	-7.5584	.5319
	Facilitators	.89102	.87155	.316	-.8179	2.2218
Staff	Students	3.46324	2.13860	.106	-.5319	7.5584
	Facilitators	4.35517	2.23418	.071	-.0174	8.1278
Facilitators	Students	-.89102	.87155	.316	-2.2218	.8179

Staff	-4.35517	2.23418	.071	-8.1278	.0174

The Post Hoc Multiple comparison test pair wise using LSD technique showed that there is no significant difference in each pair wise comparisons of the mean perception of Facilitators, staff and students on adequacy of Learner Support Services in the Nigeria Certificate in Education by Distance Learning System (NCE/DLS). This is because on each comparison, the mean difference is not significant because the calculated Significance (p) value is greater than the 0.05 alpha level of significance.

Hypothesis Two: There is no significant difference between the perception of staff and students on the quality of Learner Support Services in the Nigeria Certificate in Education by Distance Learning System (NCE/DLS).

The same three group of respondents (students, staff and facilitators (independent variable) indicated their opinions on variable of quality of learners support facilities (dependent variable) of the National teachers' Institute's Nigeria Certificate by Distance Learning. Table 4.3.2 was equally analysed using Analysis of Variance (ANOVA) statistics and the result is adequate represented in the table below.

Table 4.4.4: (a) Analysis of Variance (ANOVA) on the difference among Facilitators, staff and students on Quality of Learner Support Services on NCE/DLS

Quality of facilities **ANOVA**

Variations	Sum of Squares	df	Mean Square	F	F critical	Sig.
Between Groups	5449.155	2	2724.578	1.622	2.60	.230
Within Groups	378059.089	2029	186.328			
Total	383508.244	2031				

Not Significant, Calculated p >0.05, calculated F ratio <2.60 at df 2, 2029

The outcome of the Analysis of Variance (ANOVA) statistics above revealed that there is no significant differences among the various groups of respondents (students, staff and course facilitators) on the quality of Learner Support Services in NCE/DLS. The reason being that the calculated significance (P) value of 0.230 was greater than the 0.05 alpha level of significance while the calculated F ratio value of 1.622 was less than the 2.60 F critical value at df 2,2029. Therefore, the null hypothesis which stated that there is no significant difference among the perception of Course Facilitators, staff and students on the quality of Learner Support Services on NCE/DLS, is hereby accepted and retained.

Table 4.4.5 (b): Descriptive statistics on the mean difference among Course Facilitators, staff and students on quality of Learner Support Services in NCE/DLS

Descriptive

Status of respondents	N	Mean	Std. Deviation	Std. Error
Students	1596	32.2619	13.90164	.34798
Staff	52	35.9231	12.44257	1.72547
Facilitators	382	31.3037	14.72734	.75352
Total	**2032**	**29.0984**	**14.2522**	**.31617**

Table 4.4.5 (b) above revealed the differences among the various groups of respondents (students, staff and facilitators) on the quality of Learner Support Services in NCE/DLS

The table showed that the mean responses as 32.2619, 35.9231 and 35.6849 for students, staff and facilitators respectively.

Table 4.4.6 (c): Post hoc (LSD multiple comparison on the mean difference among Course Facilitators, staff and students on the quality of Learner Support Services in NCE/DLS

(I) status of	(J) status of respondent	Mean Difference (I-J)	Std. Error	Sig.

respondent				
Students	Staff	-1.59137	0.07435	.094
	Facilitators	-.21047	.84548	.703
Staff	Students	1.59137	0.07435	.094
	Facilitators	1.37989	0.16707	.139
Facilitators	Students	.21047	.04548	.703
	Staff	-1.37989	0.16707	.139

The Post Hoc Multiple comparison test pair wise using LSD technique showed that there is no significant difference in each pair wise comparisons of the mean perception of students, staff and Facilitators quality of Learner Support Services in NCE/DLS. This is because on each comparison the mean difference is not significant because the calculated Significance (p) value of .094, .703 and .139 is greater than the 0.05 alpha level of significance.

Hypothesis Three: There is no significant difference between the perception of staff and students on the utilisation of Learners Support services in NCE/DLS.

Utilization of learners support facilities (dependent variable) was similarly answered by three different groups of respondents, i.e. students, staff and facilitators (independent variable). Their opinions were duly represented in table 4.3.3 and the table of Analysis of Variance (ANOVA) below was used to test the hypothesis.

Table 4.4.7: (a) Analysis of Variance (ANOVA) on the difference among Course Facilitators, staff and students on the Utilization of Learner Support Services in NCE/DLS

Utilization of facilities **ANOVA**

variations	Sum of Squares	df	Mean Square	F ratio	F critical	Sig. (P)
Between Groups	4760.111	2	2380.056	1.721	2.60	.230
Within Groups	328053.581	2029	161.682			

Utilization of facilities **ANOVA**

variations	Sum of Squares	df	Mean Square	F ratio	F critical	Sig. (P)
Between Groups	4760.111	2	2380.056	1.721	2.60	.230
Within Groups	328053.581	2029	161.682			
Total	332813.692	2031				

Not Significant, Calculated p >0.05, calculated F ratio <2.60 at df 2, 2029

The outcome of the Analysis of Variance (ANOVA) statistics above revealed that there is no significant differences among the various groups of respondents (students, staff and facilitators) the utilization of Learners Support services in NCE/DLS in NCE/DLS. Reason being that the calculated significance (p) value of 0.230 is greater than the 0.05 alpha level of significance while the calculated F ratio value of 1.7213 is less than the 2.60 F critical value at df 2,2029. Hence, the null hypothesis which stated that there is no significant difference among the perception of Facilitators, staff and students on the utilization of Learner Support Services of the NCE/DLS, is hereby accepted and retained.

Table 4.4.8 (b): Descriptive statistics on the mean difference among Facilitators, staff and students on utilization of Learner Support Services in NCE/DLS

Status of respondents	**N**	**Mean**	**Std. Deviation**	**Std. Error**
Students	1596	30.8716	13.01368	.32575
Staff	52	32.0385	11.90479	1.65090
Facilitators	384	33.0885	11.50582	.58715
Total	**2032**	**30.6373**	**12.80105**	**.28398**

Table 4.4.8 (b)_above revealed the differences among the various groups of respondents (students, staff and course facilitators) on the utilization of Learner Support Services in NCE/DLS. The table showed the mean responses as 30.8716, 32.0385 and 33.0885 for students, staff and facilitators respectively.

Table 4.4.9 (c): Post hoc (LSD multiple comparison on the mean difference among students, staff and facilitators utilization of Learner Support Services in NCE/DLS

(I) status of respondent	(J) status of respondent	Mean Difference (I-J)	Std. Error	Sig.
Students	Staff	-2.16691*	1.79181	.091
	Facilitators	-2.21699*	.72274	.231
Staff	Students	2.16691*	1.79181	.091
	Facilitators	2.94992	1.87892	.117
Facilitators	Students	2.21699*	.72274	.091
	Staff	-2.94992	1.87892	.117

The Post Hoc Multiple comparison test pair wise using LSD technique showed that no significant difference exist in each pair wise comparisons of the mean perception of students, staff and Facilitators on utilization of Learner Support services in NCE/DLS. This is because on each comparison the mean difference is not significant because the calculated Significance (p) value is greater than 0.05 alpha level of significance.

Hypothesis Four: The null hypothesis stated that there is no significant difference between the opinions of course facilitators and students on the impact of Learner Support Services in NCE/DLS.

Against this hypothesis, two different groups of respondents i.e. students and facilitators popularly referred to as factor/independent variable indicated their opinions in table 4.3.4 which was analysed in the Independent t-test sample statistics table below.

Table 4.4.10: Independent t-test on the perception of students and Facilitators on the Impact of Learner Support Services in NCE/DLS

Variable	Sex	N	Mean	std.dev	std.err	Df	t	t	Sig	Remark

							calculated	critical	(p)	
Impact of Learners support services on students Achievement	Student	1596	48.2689	15.7000	.5202	**1976**	1.542	1.96	.123	Not Significant
	Facilitator	382	51.5000	16.5000	1.0210					

Not Significant, Calculated p > 0.05, calculated t <1.96 at df 1976

The outcome of the Independent sample t-statistics above revealed that there is no significant difference between students and facilitators respondents in their perception on the Impact of Learner Support Services in NCE/DLS. This is because the calculated significance (P) value of 0.123 is greater than the 0.05 alpha level of significance while the calculated t value of 1.542 is less than the 1.96 critical t value at df 1976. Consequently, the null hypothesis which stated that there is no significant difference in the perception of students and Facilitators on the Impact of Learner Support Services in NCE/DLS is hereby accepted and retained.

Hypothesis Five: The null hypothesis states that there is no significant difference of opinions of staff and Course Facilitators on their capacity Training.

This hypothesis too was answered by two different groups of respondents of staffs and facilitators (Factor/independent) variable) in table 4.3.5 and the result was analysed by the Independent t-test sample statistics below.

Table 4.4.11: Independent t-test on the perception of staff and Facilitators on Capacity Training

Variable	**Sex**	**N**	**Mean**	**std.dev**	**std.err**	**Df**	**t calculated**	**t critical**	**Sig (p)**	**Remark**
Capacity Training in Distance Education	Staff	54	16.6905	6.77329	1.04514	**434**	1.060	1.96	.254	Not Significant
	Facilitator	382	15.4777	7.11663	.40161					

Not significant, Calculated p > 0.05, calculated t =1.96 at df 434

The outcome of the Independent sample t-statistics above revealed that there is no significant difference between staff and facilitators in their perception on their Capacity Training in Distance Education Management. The reason being that the calculated significance (p) value of 0.254 is greater than the 0.05 alpha level of significance while the calculated t value of 1.060 is less than the 1.96 critical t value at df 434. Consequently, the null hypothesis which stated that there is no significant difference in the perception of staff and Facilitators on the Capacity Training of staff and course facilitators in Distance Education Management is hereby retained.

4.5 Major findings of the study

The findings revealed that the opinions of the respondents on all the dependent variables do not significantly differ and have given a lot of insight into the overall practice of distance education by the National Teachers' Institute, vis-à-vis its learner support practices. The conclusions drawn from the analysis are based on the respondents' opinions in relation to their operational bases, which have entirely agreed with the research hypotheses. Accordingly, below are the summary of the major findings of the study:

1. The Learner Support Services/Facilities being used in the Institute in its Nigeria Certificate in Education by Distance Learning are not adequate.
2. The Learner Support Services/Facilities being used in the Institute's Nigeria Certificate in Education by Distance Learning are not qualitative.

3. 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.
4. The learner support services by the Institute's distance learning programme do not significantly impact on students' performances.
5. The staff and Course Facilitators are not constantly trained by the Institute in most aspects of its distance education.

4.6 Discussions of Findings

Three groups of respondents including 54 staff, 382 facilitators and 1, 596 students were represented in the analysis.

a. The opinion expressed by the three groups of respondents (students, staff and facilitators) on the level of Adequacy of Learner Support Services on NCE/DLS is represented by the means (3.3132, 2.5555 and 2.3821), significance (P) value of 0.135 which was found to be greater than the 0.05 alpha level of significance and the calculated F ratio value of 2.004 that was less than the 2.60 F critical value at df 2 and 1435. While the means measured heavily on the strength of course materials as the most appealing to the students, the statistical analysis revealed the opinion of the respondents on the quantum of the learner support services/facilities as practically inadequate. The essence of learner support in distance learning is to provide unlimited support services/facilities to students at a distance from which they can benefit to facilitate their successful learning. Depending on the Management Structure and the interfaces put in place to ease educational transactions of the learner at a distance, the National Teachers' Institute needs to provide ample of the facilities and services within the specified structure it has undertaken to operate. The opinions of the three categories of respondents should encourage positive action towards addressing this important issue in students' learning.

b. The opinion of the three categories of respondents (students, staff and facilitators) on the quality level of Learner Support Services on NCE/DLS support the assumption of the researcher that successful distance education practice depend to a large extent on the quality of the support services for the students. The mean response of 3.0125, 3.0370 and 3.1990 by students, staff and facilitators respectively on the quality of instructional materials for learners support services and the analysis of variance (ANOVA) statistics that showed the calculated significance (P) value of 0.230 as greater than the 0.05 alpha level of significance and the calculated F ratio value of 1.622 less than the 2.60 F critical value at df 2,2029 have clearly pointed their discontent on the quality of the learner support services/facilities being used in their training. This too need to be addressed in order to entrench the much needed quality and as motivation to students by the Institute. Poor quality of learners support services are bound to adversely affect the performance of students.

c. The opinions of the three categories of respondents (students, staff and facilitators) on utilization level of Learner Support Services on NCE/DLS are no less than different from their earlier expressions on the adequacy and quality of the learner support services/facilities in use by the Institute. The highest mean responses of 3.3058, 3.3148 and 3.1597 by students, staff and facilitators respectively only points to a high level of utilization of course materials. The Analysis of Variance (ANOVA) statistics with the calculated significance (p) value of 0.230 that was greater than the 0.05 alpha level of significance and the calculated F ratio value of 1.7213 less than the 2.60 F critical value at df 2, 2029 spoke of the utilization of the quantum of learner support services and facilities which was found to be heavily underutilized. Effective utilization of the learner support services/facilities are as necessary as the distance education practice itself if any desired impact is to be felt on students' learning. If the required services and facilities are qualitative and put into effective use, the probability of the distant learners to excel in their academic pursuit will be high. The course facilitators and students should have unhindered access to these facilities to optimally utilize them during and out of contact sessions. Every point in distance learning operation must have adequate and qualitative learner support facilities to utilize.

d. Two categories of respondents (students and facilitators) expressed their opinion on the impact level of Learner Support Services. Their means on course books have wider acclaim than the remaining interfaces. This was expressed by the mean responses of 4.1478 and 4.1570 by students and facilitators respectively. However, the independent t-test statistics with the calculated significance (P) value of 0.123 greater than the 0.05 alpha level of significance and the calculated t value of 1.542 less than the 1.96 critical t value at df 1976 indicated low level impact of the generality of learner support services/facilities under study. The challenges for the Institute therefore continues in the area of ensuring continuous training of its personnel towards effective utilization of learner support services/ facilities with a view to impacting positively of learners' performance.

e. Looking at the opinion of the two categories of respondents (staff and facilitators) on their capacity training level, it can be concluded that much is expected from NTI with respect to continuous training of the personnel involved in the implementation of Learner Support Services on NCE/DLS. This was expressed by the independent t-test analysis with a calculated significance (p) value of 0.254 that is greater than the 0.05 alpha level of significance and the calculated t value of 1.060 less than the 1.96 critical t values at df 434.

Personnel in the Headquarters, States and study centres must be properly equipped with the required knowledge and skills to perform better in their unique capacities as distance education operators. It is only by doing so that they would be able to discharge qualitative distance education delivery to the NCE/DLS students.

Based on the strength of the research findings, it can rightly be accepted that the hypotheses below are as valid as they have been stated.

a. There is no significant difference among the various groups of respondents (students, staff and facilitators) the adequacy of Learner Support Services of the NCE/DLS.

b. There is no significant differences among the various groups of respondents (students, staff and facilitators) the quality of Learner Support Services of the NCE/DLS

c. There is no significant difference among the various groups of respondents (students, staff and facilitators) the utilization of Learner Support Services of the NCE/DLS.

d. There is no significant difference between students and facilitators respondents in their perception on the Impact of Learner Support Services on students achievement of the NCE/DLS

e. There is no significant difference between staff and facilitators respondents in their perception on the Capacity Training of staff and course facilitators in the effective implementation of Learner Support Services.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary

This research titled “Evaluation of the Learner Support Services in the Nigeria Certificate in Education by Distance Learning under the National Teachers’ Institute, Kaduna” came about as a result of the growing concern and general outcry over the quality of teachers being trained by the Institute; poor perception by learners and course facilitators about the facilitation of learning through effective utilization of Learner Support Services and inadequate training of the personnel involved in the implementation of learner support materials, etc.

In pursuance of the research, five research objectives were drawn to include:

1. Investigate the adequacy of learner support services provided in the Nigeria Certificate in Education by Distance Learning System (NCE/DLS) in the NTI.
2. Determine the quality of learner support services utilized in the Nigeria Certificate in Education by Distance Learning System (NCE/DLS) in the NTI.
3. Find out the extent to which learner support services are being utilized by the Institute in its Nigeria Certificate in Education by Distance Learning System (NCE/DLS).
4. Identify the capacity of the NTI personnel and Course Facilitators to in NCE by Distance Learning under the NTI.

5. Find out the views of students and Course Facilitators on the impact of learner support services in the NCE by Distance Learning of NTI.

Similarly, five research questions were raised and five hypotheses were postulated. An ex-post factor research design was adopted in which questionnaires with the reliability index of 0.87 co-efficient were administered to a sample size of 2,696 based on the Morgan & Kreycie (1971) table of sampling was drawn from a population of 9,752 respondents from North West and South West Geo-political zones of the country. Of the 2,696 questionnaire, 2,036 (75.52%) were returned.

Data obtained were analysed, description and hypotheses tested using ANOVA (analysis of Variance) and Independent t-test. The study established that:

1. There is no significant difference between the perception of staff and students on the adequacy of Learner Support Services in the NCE/DLS;
2. There is no significant difference between the perception of staff and students on the quality of Learner Support Services in the NCE/DLS;
3. There is no significant difference between the perception of staff and students on the utilisation of Learner Support Services in the NCE/DLS;
4. There is no significant difference between the opinions of course facilitators and students on the impact of Learner Support Services in the NCE/DLS;

5. There is no significant difference of opinions of staff and Course Facilitators on the capacity training of NTI Personnel and Course Facilitators in Learner Support Services.

5.2 Conclusion

Based on the outcome of the research, it is right to conclude that, although the National Teachers' Institute has been training and upgrading teachers to the required minimum teaching qualification (NCE) in the country through its Distance Learning System, its strength has been more tended to print materials as is evidently confirmed by the research findings. Relative considerations have been given to the adequate provision of qualitative learners support facilities/services as would be required in addition to their effective implementation by well trained personnel in the system. Doing so will guarantee the much needed impact which learner supports are expected to have on students' performances. This relative consideration, without doubt, led to so many misgivings by the course facilitators and students respectively and the general public outcry. The capacity of the personnel involved in all facets of the institute's distance education programmes have seriously challenged by the outcome of the research, meaning that together hardly would the required impact be on students' academic performances be made. A lot more effort is needed to address this serious short coming.

This did not however preclude the positive contributions the Institute has been making over the years in raising the quality and standards of teachers across the country through its Distance Learning System. Nevertheless, there is the urgent need for the Institute to develop a commitment to and redirect its attention to providing an enabling ground for the entrenchment of qualitative learner support services in its distance education delivery.

5.3 Recommendations

The recommendations hereby given in order to entrench qualitative learner support service delivery by the National Teachers' Institute are in two (2) levels in consideration of the research findings.

1. **Need for Quality Assurance Agency**

The National Teachers' Institute was the first single mode Distance Education Institution in the country to be established by the Federal Government dedicated to teacher education and saddled with the responsibility of training, retraining and upgrading teachers to NCE level following the surge in primary school enrolment and the dearth of teachers. The focus at the initial stage was on teachers grade two certificate and after some few years the scope widened to include training to NCE and Advanced/Postgraduate Diploma in Education. The Institute has since its inception being operating independent of any accrediting institution until much later when the National Colleges of Education was established to oversee the Nigeria Certificate in Education programmes of Colleges of education throughout the country whence the NCE programme of the Institute began to be accredited. One obvious difference however between the NCE distance Learning Programme of the Institute and the National Commission for Colleges of Education was that each of the Institutions operates within a peculiar delivery mode.

Because of this operational difference, and consequent upon the springing of distance education institution in the country, it is hereby suggested that an exclusive agency to accredit and monitor the programmes of the National teachers' Institute and indeed of other distance education institutions in the country be established by the Federal Government. This Agency should have adequate/qualified personnel with diverse specializations in open and distance learning. They should be experts in various complementary services required by the learners at all times and should be able to work in teams within acceptable operational standards, and suggesting sufficient learner support options for distance learning institutions across the country. They should be able to exercise full control and regulate the practice of distance education in the country with a view to maintaining the standard practice of distance education. In addition, the agency should be supported with adequate resources to ensure compliance with the expected standards at all times.

Experiences of the well established collaborating national and international Distance Education Organizations and Institutions should be tapped by the Institute by way of calling for visitations to further strengthen the practice of distance education with a view to maintaining the national and international standards at all times.

The National Commission for Colleges of Education (NCCE) which does these on behalf of the Federal Government appears to be informed with the schooling pattern of regimented campus sit-tight institutions as opposed to what is regarded in the modern time as synchronous learning institutions with their peculiar operational patterns. The challenges bedeviling effective implementation of standard learner support services would be surmounted if this particular need is addressed.

2. Institutional Strengthening

It is clear based on the findings of the research that almost all the learner support facilities in the Headquarters, State Offices and Study Centres are grossly inadequate. The implications of this is that, although no distance education institutions in any given country can boast of providing all the required learner support facilities to their staff and students, selected ones based on personal choices of students should be made available. Thus, it is essential to provide all the facilities and services that address the peculiar characteristics of distance education. Such resources as Library facilities; Internet facilities; Computer facilities; Telecommunication Facilities; Students' Handbook; Tutoring manual; Teaching Practice Manual; Students' Project Handbook; Practical Handbook; Examinations Manual; Audio Cassettes in all subjects; Video Cassettes in all subjects; and Continuous Assessment Guidelines are extremely relevant and should be provided in adequate quantities to complement the written, which is the most heavily relied upon by the students.

Most of the facilities above with their corresponding support complement aid students to facilitate academic achievement among students and remediate the physical separations between them and their teachers. Facilitators and students should be encouraged to personally own such facilities as computers, Radio Cassette Recorders, VCD machines and modems to enable them access online materials and share ideas with the relevant desks elsewhere in remote locations.

The challenges of inadequate learner support services must be addressed through an unbending strong will and determination by the Institute's Management bearing in mind that there is no better way of managing distance education than this among others. This way, public interest in open and distance learning would be created and that of students would be sustained.

3. Focusing on Quality of Learner Support Services/Facilities

There is no any better way to describe quality in any programme than to equate it with a sale merchant competing to draw its products to its would be buyers. In this context, the quality of the NTI NCE/DLS Learner Support Services/Facilities is so crucial that complete attention need to be accorded to it so that they do not only appeal to the NTI clientele, but also make the required impact on students' learning. Thus, all aspects of the Institute's programmes need to be periodically checked, updated, edited and critiqued by different instructional design experts in distance education against the Institute's approved operational norms in order to conform to the internationally accepted distance education principles. The findings of this study should make the Institute very anxious of ways to address the respondents and the general public perceptions on this variable.

The Institute as mandated in the decree establishing it, should continue to cooperate with relevant/related national and international organizations in such important areas as qualitative instructional designs, course materials preparation, writing/editing and production, designs of instructional medias and distance education learning packages, instructional delivery strategies, assessment/evaluation techniques, application of bst distance education principles/practices and continuous review of the Institute's distance education practices.

Quality assurance and monitoring of the implementation of the Institute's programmes need to be accorded priority at all times and the outcomes of such impotent activities must not be swept under the carpets but used to enrich the programme. Every minute data got from this kind of investigation matter a lot on the effects it might have on the Institute's general performance, whether positive or negative.

The Institute needs to fund internal and external researches on continuous bases including tracer studies to get sufficient empirical data that would be used to review and enrich its distance education practices from empirical consideration.

4. Utilisation of learner support facilities

Realizing the importance of the provision of adequate and qualitative learner support services/facilities is not sufficient to assure the desirable impact they should have on students' learning at a distance. This is because the leaner support services/facilities need to be effectively and efficiently utilized by the support service providers and students individually and in groups during private and intensive or weekend contact hours. This means that whatever facility or support service is put in place for the successful implementation of the Nigeria certificate in education by Distance learning, those to use it and benefit from it need to be adequately trained to do so. So it is training all round to ensure maximum effect.

In addition to utilizing learner support services/facilities effectively, one other important aspect that would guarantee success in this regard is continuous monitoring which cannot be divorced from every important activity. To be able to do this, the unit responsible for quality assurance of the Institute's programmes needs to be strengthened with capable personnel that are adequately motivated and be given the resources carry out routine checks and investigations on how these facilities are being utilized at the various NCE/DLS locations. Similarly, the accrediting institution or agency suggested above, should institute a profound monitoring practice that would ensure proper and efficient utilization of the learner support facilities assembled to facilitate students' academic progress.

Small and/or large scale study should be organized by the Institute periodically to understand the position of resource utilization by the operators of the Institute's programmes in the various NCE/DLS delivery locations. The course facilitators and students should be properly encouraged to personally own and utilize the User-friendly ICT facilities as this will ensure the maximization of chances of successful learning.

5. Need for regular capacity training for staff and course facilitators

It will be unimaginable to think that adequate/qualitative learner support facilities would by themselves be utilized by the students to remarkably impact on their academic progression. The personnel to handle such facilities and offer efficient and robust learner support services must constantly be trained and updated in all aspects of distance education practice. Staff and course facilitators need continuous training in Instructional Design in Distance Learning; Course materials development in Distance Education; Distance Education Management; Tutoring in Distance Learning; Counselling in Distance Learning; Quality Assurance in Distance Learning; Record Keeping in Distance Education; Information and Communication Technology (ICT) application in Distance Learning; and Continuous Assessment in Distance Learning. More to this list can be added so long they relate to what staff and course facilitators should know and apply in their interactions with the students in the study centres.

The Institute has the sole responsibility of getting its staff adequately trained in order to perform their assigned tasks. The institute can better do this through long term training especially outside the country in renowned distance education institutions. It could similarly count on international scholarships by Commonwealth countries whose efforts and commitment established the

Commonwealth of Learning with Headquarters at Vancouver, Canada. This body has since its establishment, facilitated the institutionalization and consolidation of distance education among the Commonwealth countries.

The capacity training of course facilitators can be regularly organized during long term holidays throughout the country on short term bases to equip them with the theoretical knowledge and skills to function more effectively in their respective study centres.

Implications of the research findings to other institutions

Teaching and learning whether at a distance or in regimented institutions are nowadays not done in isolation. There are more interrelationships covertly or overtly between institutions where ideas, technologies and treaties are shared to enhance the quality of education around the world. The outcomes of this research present lot of challenges to similar institutions operating distance learning and indeed others, including the sit-tight types. All educational programmes must be must be regularly critiqued and updated to meet the changing circumstances and incorporate new ideas and skills. They must be put to proper utilisation by well-informed and coordinated instructors to raise the quality of their programmes. Institutions, distance or conventional, should draw lots of inspiration from this research findings to direct and redirect their attentions towards organizing their programmes to facilitate the academic achievement of their students.

Contributions of the research to knowledge

- The researcher was able to establish that distance education can be used to deliver the content of education through the use of learners support services/facilities.

- The researcher also established that Distance education can be used to increase enrolment, access and completion of higher education.
- The study has also increased both the theoretical and empirical studies to the existing body of knowledge in distance learning.
- The findings of the research can be used to increase the quality of the Institute's programmes.

Suggestions for further research

This research attempted to look into one of the most important component of distance education practice of the Institute from a general perspective. The findings of the research have not only gone beyond confirming earlier researches that have already been undertaken in specific areas, but also provided insight into wide areas not delved in the previous researches.

Lots of researches can be undertaken in areas such as:

- Quality assurance of the NTI Distance Education practice with clear specifications in areas such as Continuous Assessment practices, Examinations , practical, project writing and monitoring, etc. so as to place the Institute in a better position to enhance the implementation of ODE and ensure academic achievements of its students;
- Effects of the Institute's distance learning system on the nations educational development in order to correlate the practice with the general and/or specific goals of the national policy on education with clear limitations;
- Analysis of the counseling impacts on of the Institute's study materials on students' academic performances with the aim of addressing specific counseling activities of the Institute's distance learning operations;

- Analysis of the Institute's ODL Management Structure and its implications for the qualitative delivery of Distance Education Programmes, etc.

It is the researchers' belief that these kinds of researchers' would instigate interests among not only distance education operators like NTI, but also provide a sound bases for commitment and development of distance education in Nigeria and beyond.

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Appendices

a. Respondent A: Questionnaire for Headquarters based programme planners and administrators that are responsible for the entire distance learning system. The state coordinators and their education officers, who coordinate and monitor the implementation of learner support services in the field centres are equally included in this group**.** They have useful information and insight to give in connection with this study. The summary of this group is given in page eighty three (83);

b. Respondent B: Questionnaire for Centre managers and course facilitators. This group constitutes one of the most respondents in the operation of the Institute's distance learning programme. The adage that teachers are the pivot of any educational endeavour applies to this group.

c. Respondent C: It is expected that One Thousand, Four Hundred and Fourty Seven from a population of Eight Thousand, Four Hundred and Twenty Eight students from all the seven states in North West Zone will respond to the questionnaire. Their responses will be critical in entrenching qualitative learner support service in the Institute's NCE DLS.

A cumulative sample size of One Thousand, Eight Hundred and Thirty Two (1, 832) from a population of Eight Thousand, Four Hundred and Sixty Nine have been sampled using the Morgan and Kreycic (1977) table for determining sample size from a given population.

Appendix A

28th August, 2012.

Dear Respondent,

My name is Zubairu Shehu, a Ph.d Student of Ahmadu Bello University, Zaria.

I'm conducting a research on Students' Learner Support Services on Nigeria Certificate in Education by Distance Learning of the National Teachers' Institute with the sole aim of addressing issues regarding adequacy, quality, utilisation and capacity of the operators of the system in the Headquarters and state offices.

Lists of possible support services have been given to aid the streamlining and analysis of responses from you, which will invariably facilitate a well informed decision based on the hypotheses for the research.

I am appealing to you to assist by responding to what corresponds to your correct opinion in the various sections of the questionnaire. I assure you that whatever response you give, will be accorded high confidentiality and is mainly for research purposes.

Thank you,

Zubairu Shehu

LSSQ 1 : QUESTIONNAIRE FOR STAFF IN THE HEADQUARTERS AND STATE OFFICES

Please take time to study and fill this Questionnaire carefully according to your conviction. All information given by you will be treated most confidentially. Thank you.

SECTION A PERSONAL DETAILS

Kindly indicate your response by a tick ( ) and write where necessary:

1. ***Age***: ……….. 2. ***Sex***: Male ( ) Female: ( )

3. Highest qualification: ………… 4**.** ***Rank/Position***: ………….

5. Experience: (a) Less than 10 Yrs ( ), (b) 10 years and above ( )

SECTION B: ADEQUACY OF FACILITIES

Scale: 4 = Very Adequate; 3 = Adequate; 2 = Fairly Adequate; 1 = Inadequate

6. *How adequate have the following facilities been provided to facilitate students learning?*	***4***	***3***	***2***	***1***
Library facilities				
Internet facilities				
Computer facilities				
Telecommunication Facilities.				
Storage Facilities				
Instructional Materials				
Students’ Handbook				
Tutoring manual				
Teaching Practice Manual				
Students’ Project Handbook				
Practical Handbook				
Examinations Manual				
Audio Cassettes in all subjects				
Video Cassettes in all subjects				
Continuous Assessment Guidelines				

SECTION C: QUALITY OF FACILITIES

Scale: 4 = Very Good; 3 = Good; 2 = Fair; 1 = Poor

7. *How would you rate the quality of the facilities below that have been put in place by the Institute to support students' learning?*

	4	3	2	1
Library facilities				
Internet facilities				
Computer facilities				
Telecommunication Facilities				
Storage Facilities				
Instructional Materials				
Students' Handbooks				
Teaching Practice Manual				
Students' Project Handbook				
Tutoring manual				
Practical Handbook				
Examinations Manual				
Audio Cassettes in all subjects				
Video Cassettes in all subjects				
Continuous Assessment Guidelines				

SECTION D: UTILISATION OF FACILITIES

Scale: 4 = Very Effective; 3 = Effective; 2 = Fairly Effective; 1 = Ineffective

8. *How would you rate the utilisation of the following facilities that have been provided by the Institute to facilitate students learning?*

	4	3	2	1
Library facilities				
Internet facilities				
Computer facilities				
Telecommunication Facilities				
Storage Facilities				
Instructional Materials				
Students' Handbook				
Tutoring manual				
Teaching Practice Manual				
Students' Project Handbook				

Practical Handbook				
Examinations Manual				
Audio Cassettes in all subjects				
Video Cassettes in all subjects				
Continuous Assessment Guidelines				

SECTION E: CAPACITY TRAINING IN DISTANCE EDUCATION

Scale: 4 = Very Often; 3 = Often; 2 = Seldom; 1 = Not at all

9. *How often have you been trained in the following distance education practices*	***4***	***3***	***2***	***1***
Instructional Design in Distance Learning				
Course materials development in Distance Learning				
Distance Education Management				
Tutoring in Distance Learning				
Counselling in Distance Learning				
Quality Assurance in Distance Learning				
Record Keeping in Distance Education				
Information and Communication Technology (ICT) application in Distance Learning				
Continuous Assessment in Distance Learning				

Appendix B

LSSQ 2: Questionnaire for Centre Managers and Course facilitators

Please take time to study and fill this Questionnaire according to your conviction. All information given by you will be treated most confidentially. Thank you.

SECTION A PERSONAL DETAILS

Kindly indicate your response by ticking the box that corresponds to your answer and writes where necessary:

1. ***Age***: ………… 2. ***Sex***: Male ( ) Female: ( )

3. ***Qualification: (***Highest Qualification) ……………………..

4. ***Position***: (Please tick) (a) C/M ( ) (b) C/F ( )

5. ***Experience***: (a) 1- 9 Yrs ( ), (b) 10 and above

SECTION B: ADEQUACY OF FACILITIES

Scale: 4 = Very Adequate; 3 = Adequate; 2 = Fairly Adequate; 1 = Inadequate

6. *How adequate have the following facilities been provided in your study centre?*	***4***	***3***	***2***	***1***
Library facilities in Study Centres				
Computer facilities				
Internet facilities				
Telecommunication Facilities				
Storage Facilities				
Instructional Materials				
Students' Handbooks				
Teaching Practice Manual				
Tutoring manual				
Students' Project Handbook				
Practical Handbook				
Examinations Manual				
Audio Cassettes in all subjects				
Video Cassettes in all subjects				
Continuous Assessment Guidelines				

SECTION C: QUALITY OF FACILITIES

Scale: 4 = Very Good; 3 = Good; 2 = Fair; 1 = Poor

7. *How would you rate the quality of the facilities below that have been put in place by the Institute to support students' learning?*	***4***	***3***	***2***	***1***
Library facilities in the Study Centre				
Internet facilities				
Computer facilities				
Telecommunication Facilities				
Storage Facilities				
Instructional Materials				
Students' Handbooks				
Teaching Practice Manual				
Students' Project Handbook				
Tutoring manual				
Practical Handbook				
Examinations Manual				
Audio Cassettes in all subjects m.				
n. Video Cassettes in all subjects				
o. Continuous Assessment Guidelines				

SECTION D: UTILISATION OF FACILITIES

Scale: 4 = Very Effective; 3 = Effective; 2 = Fairly Effective; 1 = Ineffective

8. *How would you rate the utilisation of the following facilities that have been provided by the Institute to facilitate students learning?*	***4***	***3***	***2***	***1***
Library facilities in the Study Centre				
Internet facilities				
Computer facilities				
Telecommunication Facilities				
Instructional Materials				
Students' Handbook				
Tutoring manual				

Teaching Practice Manual				
Students’ Project Handbook				
Practical Handbook				
Examinations Manual				
Audio Cassettes in all subjects				
Video Cassettes in all subjects				
Continuous Assessment Guidelines				

SECTION E: CAPACITY TRAINING IN DISTANCE EDUCATION

Scale: 4 = Very Often; 3 = Often; 2 = Seldom; 1 = Not at all

9. *How often have you been trained in the following learner support practices*	***4***	***3***	***2***	***1***
Study Centre Management				
Tutoring in Distance Learning				
Counselling in Distance Learning				
Quality Assurance in Distance Learning				
Record Keeping in Distance Education				
Information and Communication Technology (ICT) application in Distance Learning				
Continuous Assessment in Distance Learning				

SECTION F: IMPACT OF LEARNERS SUPPORT SERVICES ON STUDENTS’ ACHIEVEMENT

Scale: 5 = Strongly Agree; 4 = Agree; 3 = Undecided; 2 =Disagree; 1= Strongly Disagree

10. *In your opinion, how would you rate the impact of the facilities and services below that have been provided by the Institute to facilitate on your students’ academic performances?*	***5***	***4***	***3***	***2***	***1***
Library facilities have considerable impact on students learning.					
Students use internet most often to strengthen their studies.					
Computer courses offer practical experiences to students.					
Course books have greater appeal on students’ learning.					

Students’ handbooks provide relief and stimulation to students					
Tutorial clear students’ learning difficulties.					
Teaching practice provides professional skills to students.					
Students’ project handbook guide students’ research writing					
Lab & field practicals provide enough practical skills					
Counseling service resolves students’ anxieties.					
Audio cassettes provide supplementary learning experiences.					
Video cassettes in all subjects boost students understanding.					
Continuous assessment builds on students’ achievements.					
Regular orientations are provided to ease students’ learning difficulties.					
Centre of Educational Technology in study centre provide variety of learning resources to aid students’ learning					
Examination manual guides the conduct of examination					
Timely release of results encourage students to remain in the programme					

Appendix c

LSSQ 3 : *Questionnaire for Students*

Please study and fill this Questionnaire honestly according to your opinion. All the information that you will give will be treated confidentially. Thank you.

SECTION A PERSONAL DETAILS

Kindly respond to the following questions:

1. Age: 2. Sex: Male ( ) Female: ( )

SECTION B: ADEQUACY OF FACILITIES

Scale: 4 = Very Adequate; 3 = Adequate; 2 = Fairly Adequate; 1 = Inadequate

3. *How adequate have you been provided with the following facilities in your study centre?*	***4***	***3***	***2***	***1***
Library facilities in your Study Centres				
Computer facilities				
Internet facilities				
Telecommunication Facilities				
Storage Facilities				
Course Books				
Students' Handbooks				
Teaching Practice Manual				
Tutoring manual				
Students' Project Handbook				
Practical Handbook				
Examinations Manual				
Audio Cassettes in all subjects				
Video Cassettes in all subjects				
Continuous Assessment Guidelines				

SECTION C: QUALITY OF FACILITIES

Scale: 4 = Very Good; 3 = Good; 2 = Fair; 1 = Poor

4. *How would you rate the quality of the facilities below that have*	***4***	***3***	***2***	***1***

been put in place by the Institute to support your studies?

Library facilities in the Study Centre				
Internet facilities				
Computer facilities				
Telecommunication Facilities				
Storage Facilities				
Instructional Materials				
Students' Handbooks				
Teaching Practice Manual				
Students' Project Handbook				
Tutoring manual				
Practical Handbook				
Examinations Manual				
m Audio Cassettes in all subjects				
n. Video Cassettes in all subjects				
o. Continuous Assessment Guidelines				

SECTION D: UTILISATION OF FACILITIES

Scale: 4 = Very Effective; 3 = Effective; 2 = Fairly Effective; 1 = Ineffective

5. *How would you rate the utilisation of the following facilities that have been provided by the Institute to facilitate your studies?*	***4***	***3***	***2***	***1***
Library facilities				
Internet facilities				
Computer facilities				
Telecommunication Facilities				
Course Books				
Students' Handbook				
Tutoring manual				
Teaching Practice Manual				
Students' Project Handbook				
Practical Handbook				
Examinations Manual				

Audio Cassettes in all subjects				
Video Cassettes in all subjects				
Continuous Assessment Guidelines				

SECTION E: IMPACT OF LEARNERS SUPPORT SERVICES ON STUDENTS' ACHIEVEMENT

Scale: 5 = Strongly Agree; 4 = Agree; 3 = Undecided; 2 =Disagree; 1= Strongly Disagree

6. *Rate the impact of the facilities and services below on your studies*	***5***	***4***	***3***	***2***	***1***
Library facilities have considerable impact on my studies.					
I use the Internet to strengthen my studies.					
Computer courses offer practical experiences to students					
Course books have greater appeal on my studies.					
Students' handbooks provide relief and stimulation to students					
Tutorial clear students' learning difficulties					
Teaching practice provides professional skills to students					
Students' project handbook guide students' research writing					
Lab & field practicals provide enough practical skills					
Counseling service resolves students' anxieties					
Audio cassettes provide supplementary learning experiences to students					
Video cassettes in all subjects boost students' understanding					
Continuous assessment builds on students' achievements					
Regular orientation are provided to ease students' learning difficulties					
Centre of Educational Technology in study centre provide variety of learning resources to aid students' learning					
Examination manual guides students in the conduct of examination					
Timely release of results encourage students to remain in the programme					

Appendices

a. ***Respondent A:*** Questionnaire for Headquarters based programme planners and administrators that are responsible for the entire distance learning system. The state coordinators and their education officers, who coordinate and monitor the implementation of learner support services in the field centres are equally included in this group**.** They have useful information and insight to give in connection with this study. The summary of this group is given in page eighty three (83);

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A cumulative sample size of One Thousand, Eight Hundred and Thirty Two (1, 832) from a population of Eight Thousand, Four Hundred and Sixty Nine have been sampled using the Morgan and Kreycic (1977) table for determining sample size from a given population.

Appendix A

28th August, 2012.

Dear Respondent,

My name is Zubairu Shehu, a Ph.d Student of Ahmadu Bello University, Zaria.

I'm conducting a research on Students' Learner Support Services on Nigeria Certificate in Education by Distance Learning of the National Teachers' Institute with the sole aim of addressing issues regarding adequacy, quality, utilisation and capacity of the operators of the system in the Headquarters and state offices.

Lists of possible support services have been given to aid the streamlining and analysis of responses from you, which will invariably facilitate a well informed decision based on the hypotheses for the research.

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LSSQ 1 : QUESTIONNAIRE FOR STAFF IN THE HEADQUARTERS AND STATE OFFICES

Please take time to study and fill this Questionnaire carefully according to your conviction. All information given by you will be treated most confidentially. Thank you.

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Kindly indicate your response by a tick ( ) and write where necessary:

2. ***Age***: ……….. 2. ***Sex***: Male ( ) Female: ( )

3. ***Highest qualification:*** ………… 4**.** ***Rank/Position***: ………….

5. ***Experience***: (a) Less than 10 Yrs ( ), (b) 10 years and above ( )

SECTION B: ADEQUACY OF FACILITIES

Scale: 4 = Very Adequate; 3 = Adequate; 2 = Fairly Adequate; 1 = Inadequate

6. *How adequate have the following facilities been provided to facilitate students learning?*	***4***	***3***	***2***	***1***
Library facilities				
Internet facilities				
Computer facilities				
Telecommunication Facilities.				
Storage Facilities				
Instructional Materials				
Students' Handbook				
Tutoring manual				
Teaching Practice Manual				
Students' Project Handbook				
Practical Handbook				
Examinations Manual				
Audio Cassettes in all subjects				
Video Cassettes in all subjects				
Continuous Assessment Guidelines				

SECTION C: QUALITY OF FACILITIES

Scale: 4 = Very Good; 3 = Good; 2 = Fair; 1 = Poor

7. *How would you rate the quality of the facilities below that have been put in place by the Institute to support students' learning?*

	4	**3**	**2**	**1**
Library facilities				
Internet facilities				
Computer facilities				
Telecommunication Facilities				
Storage Facilities				
Instructional Materials				
Students' Handbooks				
Teaching Practice Manual				
Students' Project Handbook				
Tutoring manual				
Practical Handbook				
Examinations Manual				
Audio Cassettes in all subjects				
Video Cassettes in all subjects				
Continuous Assessment Guidelines				

SECTION D: UTILISATION OF FACILITIES

Scale: 4 = Very Effective; 3 = Effective; 2 = Fairly Effective; 1 = Ineffective

8. *How would you rate the utilisation of the following facilities that have been provided by the Institute to facilitate students learning?*

	4	**3**	**2**	**1**
Library facilities				
Internet facilities				
Computer facilities				
Telecommunication Facilities				
Storage Facilities				
Instructional Materials				
Students' Handbook				
Tutoring manual				
Teaching Practice Manual				
Students' Project Handbook				

Practical Handbook				
Examinations Manual				
Audio Cassettes in all subjects				
Video Cassettes in all subjects				
Continuous Assessment Guidelines				

SECTION E: CAPACITY TRAINING IN DISTANCE EDUCATION

Scale: 4 = Very Often; 3 = Often; 2 = Seldom; 1 = Not at all

9. *How often have you been trained in the following distance education practices*	**4**	**3**	**2**	**1**
Instructional Design in Distance Learning				
Course materials development in Distance Learning				
Distance Education Management				
Tutoring in Distance Learning				
Counselling in Distance Learning				
Quality Assurance in Distance Learning				
Record Keeping in Distance Education				
Information and Communication Technology (ICT) application in Distance Learning				
Continuous Assessment in Distance Learning				

Appendix B

LSSQ 2: Questionnaire for Centre Managers and Course facilitators

Please take time to study and fill this Questionnaire according to your conviction. All information given by you will be treated most confidentially. Thank you.

SECTION A   PERSONAL DETAILS

Kindly indicate your response by ticking the box that corresponds to your answer and writes where necessary:

2. ***Age***: ………… 2. ***Sex***: Male ( ) Female: ( )
3. ***Qualification: (***Highest Qualification) ……………………..
4. ***Position***: (Please tick) (a) C/M ( ) (b) C/F ( )
5. ***Experience***: (a) 1- 9 Yrs ( ), (b) 10 and above

SECTION B: ADEQUACY OF FACILITIES

Scale: 4 = Very Adequate;   3 = Adequate; 2 = Fairly Adequate; 1 = Inadequate

6. *How adequate have the following facilities been provided in your study centre?*	***4***	***3***	***2***	***1***
Library facilities in Study Centres				
Computer facilities				
Internet facilities				
Telecommunication Facilities				
Storage Facilities				
Instructional Materials				
Students’ Handbooks				
Teaching Practice Manual				
Tutoring manual				
Students’ Project Handbook				
Practical Handbook				
Examinations Manual				
Audio Cassettes in all subjects				
Video Cassettes in all subjects				
Continuous Assessment Guidelines				

SECTION C: QUALITY OF FACILITIES

Scale: 4 = Very Good; 3 = Good; 2 = Fair; 1 = Poor

7. *How would you rate the quality of the facilities below that have been put in place by the Institute to support students' learning?*	***4***	***3***	***2***	***1***
Library facilities in the Study Centre				
Internet facilities				
Computer facilities				
Telecommunication Facilities				
Storage Facilities				
Instructional Materials				
Students' Handbooks				
Teaching Practice Manual				
Students' Project Handbook				
Tutoring manual				
Practical Handbook				
Examinations Manual				
Audio Cassettes in all subjects m.				
n. Video Cassettes in all subjects				
o. Continuous Assessment Guidelines				

SECTION D: UTILISATION OF FACILITIES

Scale: 4 = Very Effective; 3 = Effective; 2 = Fairly Effective; 1 = Ineffective

8. *How would you rate the utilisation of the following facilities that have been provided by the Institute to facilitate students learning?*	***4***	***3***	***2***	***1***
Library facilities in the Study Centre				
Internet facilities				
Computer facilities				
Telecommunication Facilities				
Instructional Materials				
Students' Handbook				
Tutoring manual				

Teaching Practice Manual				
Students’ Project Handbook				
Practical Handbook				
Examinations Manual				
Audio Cassettes in all subjects				
Video Cassettes in all subjects				
Continuous Assessment Guidelines				

SECTION E: CAPACITY TRAINING IN DISTANCE EDUCATION

Scale: 4 = Very Often; 3 = Often; 2 = Seldom; 1 = Not at all

9. *How often have you been trained in the following learner support practices*	***4***	***3***	***2***	***1***
Study Centre Management				
Tutoring in Distance Learning				
Counselling in Distance Learning				
Quality Assurance in Distance Learning				
Record Keeping in Distance Education				
Information and Communication Technology (ICT) application in Distance Learning				
Continuous Assessment in Distance Learning				

SECTION F: IMPACT OF LEARNERS SUPPORT SERVICES ON STUDENTS’ ACHIEVEMENT

Scale: 5 = Strongly Agree; 4 = Agree; 3 = Undecided; 2 =Disagree; 1= Strongly Disagree

10. *In your opinion, how would you rate the impact of the facilities and services below that have been provided by the Institute to facilitate on your students’ academic performances?*	***5***	***4***	***3***	***2***	***1***
Library facilities have considerable impact on students learning.					
Students use internet most often to strengthen their studies.					
Computer courses offer practical experiences to students.					
Course books have greater appeal on students’ learning.					

	Students’ handbooks provide relief and stimulation to students					
	Tutorial clear students’ learning difficulties.					
	Teaching practice provides professional skills to students.					
	Students’ project handbook guide students’ research writing					
	Lab & field practicals provide enough practical skills					
	Counseling service resolves students’ anxieties.					
.	Audio cassettes provide supplementary learning experiences.					
	Video cassettes in all subjects boost students understanding.					
.	Continuous assessment builds on students’ achievements.					
	Regular orientations are provided to ease students’ learning difficulties.					
	Centre of Educational Technology in study centre provide variety of learning resources to aid students’ learning					
.	Examination manual guides the conduct of examination					
.	Timely release of results encourage students to remain in the programme					

Appendix c

LSSQ 3 : *Questionnaire for Students*

Please study and fill this Questionnaire honestly according to your opinion. All the information that you will give will be treated confidentially. Thank you.

SECTION A PERSONAL DETAILS

Kindly respond to the following questions:

2. Age: 2. Sex: Male ( ) Female: ( )

SECTION B: ADEQUACY OF FACILITIES

Scale: 4 = Very Adequate; 3 = Adequate; 2 = Fairly Adequate; 1 = Inadequate

3. *How adequate have you been provided with the following facilities in your study centre?*	***4***	***3***	***2***	***1***
Library facilities in your Study Centres				
Computer facilities				
Internet facilities				
Telecommunication Facilities				
Storage Facilities				
Course Books				
Students' Handbooks				
Teaching Practice Manual				
Tutoring manual				
Students' Project Handbook				
Practical Handbook				
Examinations Manual				
Audio Cassettes in all subjects				
Video Cassettes in all subjects				
Continuous Assessment Guidelines				

SECTION C: QUALITY OF FACILITIES

Scale: 4 = Very Good; 3 = Good; 2 = Fair; 1 = Poor

4. *How would you rate the quality of the facilities below that have*	***4***	***3***	***2***	***1***

been put in place by the Institute to support your studies?

Library facilities in the Study Centre				
Internet facilities				
Computer facilities				
Telecommunication Facilities				
Storage Facilities				
Instructional Materials				
Students’ Handbooks				
Teaching Practice Manual				
Students’ Project Handbook				
Tutoring manual				
Practical Handbook				
Examinations Manual				
m Audio Cassettes in all subjects				
n. Video Cassettes in all subjects				
o. Continuous Assessment Guidelines				

SECTION D: UTILISATION OF FACILITIES

Scale: 4 = Very Effective; 3 = Effective; 2 = Fairly Effective; 1 = Ineffective

5. *How would you rate the utilisation of the following facilities that have been provided by the Institute to facilitate your studies?*

	4	***3***	***2***	***1***
Library facilities				
Internet facilities				
Computer facilities				
Telecommunication Facilities				
Course Books				
Students’ Handbook				
Tutoring manual				
Teaching Practice Manual				
Students’ Project Handbook				
Practical Handbook				
Examinations Manual				

Audio Cassettes in all subjects				
Video Cassettes in all subjects				
Continuous Assessment Guidelines				

SECTION E: IMPACT OF LEARNERS SUPPORT SERVICES ON STUDENTS' ACHIEVEMENT

Scale: 5 = Strongly Agree; 4 = Agree; 3 = Undecided; 2 =Disagree; 1= Strongly Disagree

6. *Rate the impact of the facilities and services below on your studies*	***5***	***4***	***3***	***2***	***1***
Library facilities have considerable impact on my studies.					
I use the Internet to strengthen my studies.					
Computer courses offer practical experiences to students					
Course books have greater appeal on my studies.					
Students' handbooks provide relief and stimulation to students					
Tutorial clear students' learning difficulties					
Teaching practice provides professional skills to students					
Students' project handbook guide students' research writing					
Lab & field practicals provide enough practical skills					
Counseling service resolves students' anxieties					
Audio cassettes provide supplementary learning experiences to students					
Video cassettes in all subjects boost students' understanding					
Continuous assessment builds on students' achievements					
Regular orientation are provided to ease students' learning difficulties					
Centre of Educational Technology in study centre provide variety of learning resources to aid students' learning					
Examination manual guides students in the conduct of examination					
Timely release of results encourage students to remain in the programme					

Statistics

		library facilities	computer facilities	internet facilities	telecommunication facilities	storage facilities	course books	students' handbook	teaching practice manual	tutoring manual	students' project handbook	practical handbook	examinations manual	audio cassettes in all subjects	video cassettes in all subjects	continuous assessment guidelines
N	Valid	1596	1596	1596	1596	1596	1596	1596	1596	1596	1596	1596	1596	1596	1596	1596
	Missing	0	0	0 ………… ………… ………… …… .	0	0	0	0	0	0	0	0	0	0	0	0
Mean		1.4937	1.5013	1.4211	2.2487	2.1729	2.4900	2.2826	2.1855	1.7625	1.7487	1.81203	2.2168	1.4536	1.5132	2.2650
Std. Error of Mean		.02014	.01959	.01794	.03029	.02910	.03310	.03097	.02942	.02603	.02476	.026216	.03089	.01857	.01985	.03102
Std. Deviation		.80474	.78265	.71660	1.21026	1.16271	1.32230	1.23724	1.17527	1.03995	.98905	1.047346	1.23405	.74175	.79289	1.23909

Research Question 1

STUDENTS 1

Library facilities

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Inadequate	1049	65.7	65.7	65.7
	Fairly adequate	382	23.9	23.9	89.7
	Adequate	89	5.6	5.6	95.2
	Very Adequate	76	4.8	4.8	100.0
	Total	1596	100.0	100.0	

Frequency Table

Computer facilities

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Inadequate	1017	63.7	63.7	63.7
	Fairly adequate	426	26.7	26.7	90.4
	Adequate	85	5.3	5.3	95.7
	Very Adequate	68	4.3	4.3	100.0
	Total	1596	100.0	100.0	

Internet facilities

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Inadequate	1090	68.3	68.3	68.3
	Fairly adequate	389	24.4	24.4	92.7

	Adequate	68	4.3	4.3	96.9
	Very Adequate	49	3.1	3.1	100.0
	Total	1596	100.0	100.0	

Telecommunication facilities

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Inadequate	673	42.2	42.2	42.2
	Fairly adequate	199	12.5	12.5	54.6
	Adequate	378	23.7	23.7	78.3
	Very Adequate	346	21.7	21.7	100.0
	Total	1596	100.0	100.0	

Storage facilities

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Inadequate	666	41.7	41.7	41.7
	Fairly adequate	286	17.9	17.9	59.6
	Adequate	346	21.7	21.7	81.3
	Very Adequate	298	18.7	18.7	100.0
	Total	1596	100.0	100.0	

Course books

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Inadequate	633	39.7	39.7	39.7
	Fairly adequate	110	6.9	6.9	46.6

	Adequate	291	18.2	18.2	64.8
	Very Adequate	562	35.2	35.2	100.0
	Total	1596	100.0	100.0	

Students' handbook

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Inadequate	677	42.4	42.4	42.4
	Fairly adequate	173	10.8	10.8	53.3
	Adequate	364	22.8	22.8	76.1
	Very Adequate	382	23.9	23.9	100.0
	Total	1596	100.0	100.0	

Teaching practice manual

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Inadequate	678	42.5	42.5	42.5
	Fairly adequate	247	15.5	15.5	58.0
	Adequate	368	23.1	23.1	81.0
	Very Adequate	303	19.0	19.0	100.0
	Total	1596	100.0	100.0	

Tutoring manual

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Inadequate	950	59.5	59.5	59.5

	Fairly adequate	222	13.9	13.9	73.4
	Adequate	277	17.4	17.4	90.8
	Very Adequate	147	9.2	9.2	100.0
	Total	1596	100.0	100.0	

Students' project handbook

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Inadequate	882	55.3	55.3	55.3
	Fairly adequate	382	23.9	23.9	79.2
	Adequate	183	11.5	11.5	90.7
	Very Adequate	149	9.3	9.3	100.0
	Total	1596	100.0	100.0	

Practical handbook

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Inadequate	875	54.8	54.8	54.8
	Fairly adequate	324	20.3	20.3	75.1
	Adequate	219	13.7	13.7	88.8
	Very Adequate	178	11.2	11.2	100.0
	Total	1596	100.0	100.0	

Examinations manual

		Frequency	Percent	Valid Percent	Cumulative Percent

Valid	Inadequate	727	45.6	45.6	45.6
	Fairly adequate	148	9.3	9.3	54.8
	Adequate	369	23.1	23.1	77.9
	Very Adequate	352	22.1	22.1	100.0
	Total	1596	100.0	100.0	

Audio cassettes in all subjects

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Inadequate	1061	66.5	66.5	66.5
	Fairly adequate	398	24.9	24.9	91.4
	Adequate	85	5.3	5.3	96.7
	Very Adequate	52	3.3	3.3	100.0
	Total	1596	100.0	100.0	

Video cassettes in all subjects

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Inadequate	1010	63.3	63.3	63.3
	Fairly adequate	422	26.4	26.4	89.7
	Adequate	95	6.0	6.0	95.7
	Very Adequate	69	4.3	4.3	100.0
	Total	1596	100.0	100.0	

Continuous assessment guidelines

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Inadequate	688	43.1	43.1	43.1
	Fairly adequate	178	11.2	11.2	54.3
	Adequate	349	21.9	21.9	76.1
	Very Adequate	381	23.9	23.9	100.0
	Total	1596	100.0	100.0	

Research question 2

Statistics

		library facilities	internet facilities	computer facilities	telecommunication facilities	storage facilities	instructional materials	students' handbook	teaching practice manual	Students 'project handbook	Tutoring manual	practical handbook	examinations manual	audio cassettes in all subjects	video cassettes in all subjects	continuous assessment guidelines
N	Valid	1596	1596	1596	1596	1596	1596	1596	1596	1596	1596	1596	1596	1596	1596	1596
	Missing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mean		1.3997	1.4699	1.4605	2.2569	2.1153	2.5464	2.2669	2.0758	1.7519	1.5576	1.7895	2.2876	1.4518	1.4781	2.3954
Std. Error of Mean		.01674	.01852	.01742	.02936	.02911	.03244	.03092	.02986	.02555	.02112	.02587	.03069	.01718	.01808	.03168
Std. Deviation		.66858	.74006	.69594	1.17302	1.16285	1.29614	1.23540	1.19293	1.02071	.84382	1.03338	1.22589	.68631	.72234	1.26578

Students 2

Library facilities

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor	1087	68.1	68.1	68.1
	Fair	416	26.1	26.1	94.2
	Good	57	3.6	3.6	97.7
	very good	36	2.3	2.3	100.0
	Total	1596	100.0	100.0	

Internet facilities

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor	1030	64.5	64.5	64.5
	Fair	436	27.3	27.3	91.9
	Good	76	4.8	4.8	96.6
	very good	54	3.4	3.4	100.0
	Total	1596	100.0	100.0	

Frequency Table

Computer facilities

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor	1016	63.7	63.7	63.7
	Fair	458	28.7	28.7	92.4
	Good	89	5.6	5.6	97.9
	very good	33	2.1	2.1	100.0
	Total	1596	100.0	100.0	

Telecommunication facilities

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor	621	38.9	38.9	38.9
	Fair	268	16.8	16.8	55.7
	Good	383	24.0	24.0	79.7
	very good	324	20.3	20.3	100.0
	Total	1596	100.0	100.0	

Storage facilities

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor	696	43.6	43.6	43.6
	Fair	321	20.1	20.1	63.7
	Good	278	17.4	17.4	81.1
	very good	301	18.9	18.9	100.0

	Total	1596	100.0	100.0	

Instructional materials

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor	570	35.7	35.7	35.7
	Fair	156	9.8	9.8	45.5
	Good	298	18.7	18.7	64.2
	very good	572	35.8	35.8	100.0
	Total	1596	100.0	100.0	

Students' handbook

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor	647	40.5	40.5	40.5
	Fair	290	18.2	18.2	58.7
	Good	245	15.4	15.4	74.1
	very good	414	25.9	25.9	100.0
	Total	1596	100.0	100.0	

Teaching practice manual

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor	773	48.4	48.4	48.4
	Fair	235	14.7	14.7	63.2
	Good	282	17.7	17.7	80.8

	very good	306	19.2	19.2	100.0
	Total	1596	100.0	100.0	

Students' project handbook

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor	902	56.5	56.5	56.5
	Fair	364	22.8	22.8	79.3
	Good	154	9.6	9.6	89.0
	very good	176	11.0	11.0	100.0
	Total	1596	100.0	100.0	

Tutoring manual

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor	1001	62.7	62.7	62.7
	Fair	376	23.6	23.6	86.3
	Good	143	9.0	9.0	95.2
	very good	76	4.8	4.8	100.0
	Total	1596	100.0	100.0	

Practical handbook

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor	887	55.6	55.6	55.6

	Fair	326	20.4	20.4	76.0
	Good	215	13.5	13.5	89.5
	very good	168	10.5	10.5	100.0
	Total	1596	100.0	100.0	

Examinations manual

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor	646	40.5	40.5	40.5
	Fair	234	14.7	14.7	55.1
	Good	327	20.5	20.5	75.6
	very good	389	24.4	24.4	100.0
	Total	1596	100.0	100.0	

Audio cassettes in all subjects

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor	1019	63.8	63.8	63.8
	Fair	467	29.3	29.3	93.1
	Good	76	4.8	4.8	97.9
	very good	34	2.1	2.1	100.0
	Total	1596	100.0	100.0	

Video cassettes in all subjects

		Frequency	Percent	Valid Percent	Cumulative Percent

Continuous assessment guidelines

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor	630	39.5	39.5	39.5
	Fair	162	10.2	10.2	49.6
	Good	347	21.7	21.7	71.4
	very good	457	28.6	28.6	100.0
	Total	1596	100.0	100.0	

Valid	Poor	1007	63.1	63.1	63.1
	Fair	458	28.7	28.7	91.8
	Good	88	5.5	5.5	97.3
	very good	43	2.7	2.7	100.0
	Total	1596	100.0	100.0	

Research question 3

Students 3

Frequencies

Statistics

		library facilities	internet facilities	computer facilities	telecommunication facilities	course books	students handbook	Tutoring manual	teaching practice manual	students' project handbook	practical handbook	examination manual	audio cassettes in all subjects	video cassettes in all subjects
N	Valid	1596	1596	1596	1596	1596	1596	1596	1596	1596	1596	1596	1596	1596
	Missing	0	0	0	0	0	0	0	0	0	0	0	0	0
Mean		1.6065	1.5439	1.5645	2.1974	2.5558	2.1880	1.7249	1.8496	1.5827	1.8145	2.3634	1.4662	1.4793
Std. Error of Mean		.02083	.02094	.02151	.02855	.03258	.02979	.02453	.02592	.02211	.02721	.03090	.01781	.01821
Std. Deviation		.83230	.83645	.85952	1.14054	1.30156	1.19024	.98013	1.03540	.88317	1.08714	1.23462	.71138	.72757

Frequency Table

Library facilities

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Ineffective	945	59.2	59.2	59.2
	fairly effective	379	23.7	23.7	83.0
	Effective	227	14.2	14.2	97.2
	very effective	45	2.8	2.8	100.0
	Total	1596	100.0	100.0	

Internet facilities

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Ineffective	1001	62.7	62.7	62.7
	fairly effective	409	25.6	25.6	88.3
	Effective	99	6.2	6.2	94.5
	very effective	87	5.5	5.5	100.0

Internet facilities

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Ineffective	1001	62.7	62.7	62.7
	fairly effective	409	25.6	25.6	88.3
	Effective	99	6.2	6.2	94.5
	very effective	87	5.5	5.5	100.0
	Total	1596	100.0	100.0	

Computer facilities

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Ineffective	1001	62.7	62.7	62.7
	fairly effective	376	23.6	23.6	86.3
	Effective	132	8.3	8.3	94.5
	very effective	87	5.5	5.5	100.0
	Total	1596	100.0	100.0	

Telecommunication facilities

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Ineffective	635	39.8	39.8	39.8
	fairly effective	287	18.0	18.0	57.8
	Effective	398	24.9	24.9	82.7
	very effective	276	17.3	17.3	100.0
	Total	1596	100.0	100.0	

Course books

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Ineffective	590	37.0	37.0	37.0
	fairly effective	93	5.8	5.8	42.8
	Effective	349	21.9	21.9	64.7
	very effective	564	35.3	35.3	100.0
	Total	1596	100.0	100.0	

Students handbook

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Ineffective	676	42.4	42.4	42.4
	fairly effective	276	17.3	17.3	59.6
	Effective	312	19.5	19.5	79.2
	very effective	332	20.8	20.8	100.0
	Total	1596	100.0	100.0	

Tutoring manual

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Ineffective	903	56.6	56.6	56.6
	fairly effective	372	23.3	23.3	79.9
	Effective	178	11.2	11.2	91.0
	very effective	143	9.0	9.0	100.0
	Total	1596	100.0	100.0	

Teaching practice manual

		Frequency	Percent	Valid Percent	Cumulative Percent
	Ineffective	868	54.4	54.4	54.4
	fairly effective	225	14.1	14.1	68.5
	Effective	378	23.7	23.7	92.2
	very effective	125	7.8	7.8	100.0
	Total	1596	100.0	100.0	

Students' project handbook

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Ineffective	1007	63.1	63.1	63.1
	fairly effective	335	21.0	21.0	84.1
	Effective	167	10.5	10.5	94.5
	very effective	87	5.5	5.5	100.0
	Total	1596	100.0	100.0	

Practical handbook

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Ineffective	921	57.7	57.7	57.7
	fairly effective	247	15.5	15.5	73.2
	Effective	231	14.5	14.5	87.7
	very effective	197	12.3	12.3	100.0

Practical handbook

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Ineffective	921	57.7	57.7	57.7
	fairly effective	247	15.5	15.5	73.2
	Effective	231	14.5	14.5	87.7
	very effective	197	12.3	12.3	100.0
	Total	1596	100.0	100.0	

Examination manual

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Ineffective	608	38.1	38.1	38.1
	fairly effective	223	14.0	14.0	52.1
	Effective	342	21.4	21.4	73.5
	very effective	423	26.5	26.5	100.0
	Total	1596	100.0	100.0	

Audio cassettes in all subjects

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Ineffective	1010	63.3	63.3	63.3
	fairly effective	475	29.8	29.8	93.0
	Effective	64	4.0	4.0	97.1
	very effective	47	2.9	2.9	100.0

Audio cassettes in all subjects

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Ineffective	1010	63.3	63.3	63.3
	fairly effective	475	29.8	29.8	93.0
	Effective	64	4.0	4.0	97.1
	very effective	47	2.9	2.9	100.0
	Total	1596	100.0	100.0	

Video cassettes in all subjects

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Ineffective	1002	62.8	62.8	62.8
	fairly effective	475	29.8	29.8	92.5
	Effective	67	4.2	4.2	96.7
	very effective	52	3.3	3.3	100.0
	Total	1596	100.0	100.0	

Continuous Assessment guidelines

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Ineffective	675	42.3	42.3	42.3
	fairly effective	189	11.8	11.8	54.1
	Effective	354	22.2	22.2	76.3
	very effective	378	23.7	23.7	100.0
	Total	1596	100.0	100.0	

Research question 5

Students 3

Statistics

		library facilities have considerable impact on my studies	I use the internet to strengthen my studies	Computer courses offer practical experiences to students	Course books have greater appeal on students' learning	Students' handbooks provide relief and stimulation to students	Tutorial clear students' learning difficulties	Teaching practice provides professional skills to students	Students' project handbook guide students' research writing	Lab & field practicals provide enough practical skills	Counseling service resolves students' anxieties	Audio cassettes provide supplementary learning experiences	Video cassettes in all subjects boost students understanding	Continuous assessment builds on students' achievements	Regular orientation are provided to ease students' learning difficulties	CET in the study centre provide variety of learning resources to aid students' learning	Examination manual guides the conduct of examination	Timely release of results encourage students to remain in the programme
N	Valid	1596	1596	1596	1596	1596	1596	1596	1596	1596	1596	1596	1596	1596	1596	1596	1596	1596
	Missing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mean		1.9793	1.9135	1.9749	3.0213	2.8383	2.7638	2.7995	2.3415	1.8904	2.8653	1.7105	1.7813	2.8672	2.7556	1.9718	2.7594	2.6767
Std. Error of Mean		.02980	.03056	.03285	.04275	.04034	.03998	.04122	.03538	.02937	.04030	.02521	.02819	.04059	.03993	.03092	.03878	.04043
Std. Deviation		1.19043	1.22105	1.31235	1.70768	1.61154	1.59701	1.64685	1.41352	1.17332	1.60993	1.00727	1.12612	1.62153	1.59519	1.23525	1.54911	1.61520

Frequency Table

Library facilities have considerable impact on my studies

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	774	48.5	48.5	48.5
	Disagree	367	23.0	23.0	71.5
	Undecided	256	16.0	16.0	87.5
	Agree	112	7.0	7.0	94.5
	Strongly Agree	87	5.5	5.5	100.0
	Total	1596	100.0	100.0	

I use the internet to strengthen my studies

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	857	53.7	53.7	53.7
	Disagree	331	20.7	20.7	74.4
	Undecided	193	12.1	12.1	86.5
	Agree	119	7.5	7.5	94.0
	Strongly Agree	96	6.0	6.0	100.0
	Total	1596	100.0	100.0	

Computer courses offer practical experiences to students

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	900	56.4	56.4	56.4
	Disagree	209	13.1	13.1	69.5
	Undecided	235	14.7	14.7	84.2
	Agree	131	8.2	8.2	92.4
	Strongly Agree	121	7.6	7.6	100.0
	Total	1596	100.0	100.0	

Course books have greater appeal on students' learning

	Frequency	Percent	Valid Percent	Cumulative Percent

Valid	Strongly disagree	597	37.4	37.4	37.4
	Disagree	65	4.1	4.1	41.5
	Undecided	94	5.9	5.9	47.4
	Agree	387	24.2	24.2	71.6
	Strongly Agree	453	28.4	28.4	100.0
	Total	1596	100.0	100.0	

Students' handbooks provide relief and stimulation to students

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	578	36.2	36.2	36.2
	Disagree	124	7.8	7.8	44.0
	Undecided	235	14.7	14.7	58.7
	Agree	296	18.5	18.5	77.3
	Strongly Agree	363	22.7	22.7	100.0
	Total	1596	100.0	100.0	

Tutorial clear students' learning difficulties

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	622	39.0	39.0	39.0

	Disagree	98	6.1	6.1	45.1
	Undecided	214	13.4	13.4	58.5
	Agree	359	22.5	22.5	81.0
	Strongly Agree	303	19.0	19.0	100.0
	Total	1596	100.0	100.0	

Teaching practice provides professional skills to students

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	636	39.8	39.8	39.8
	Disagree	109	6.8	6.8	46.7
	Undecided	128	8.0	8.0	54.7
	Agree	385	24.1	24.1	78.8
	Strongly Agree	338	21.2	21.2	100.0
	Total	1596	100.0	100.0	

Students' project handbook guide students' research writing

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	688	43.1	43.1	43.1
	Disagree	214	13.4	13.4	56.5
	Undecided	342	21.4	21.4	77.9
	Agree	165	10.3	10.3	88.3
	Strongly Agree	187	11.7	11.7	100.0

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	688	43.1	43.1	43.1
	Disagree	214	13.4	13.4	56.5
	Undecided	342	21.4	21.4	77.9
	Agree	165	10.3	10.3	88.3
	Strongly Agree	187	11.7	11.7	100.0
	Total	1596	100.0	100.0	

Lab & field practicals provide enough practical skills

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	855	53.6	53.6	53.6
	Disagree	314	19.7	19.7	73.2
	Undecided	261	16.4	16.4	89.6
	Agree	79	4.9	4.9	94.5
	Strongly Agree	87	5.5	5.5	100.0
	Total	1596	100.0	100.0	

Counseling service resolves students’ anxieties

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	582	36.5	36.5	36.5
	Disagree	74	4.6	4.6	41.1
	Undecided	286	17.9	17.9	59.0
	Agree	285	17.9	17.9	76.9
	Strongly Agree	369	23.1	23.1	100.0
	Total	1596	100.0	100.0	

Audio cassettes provide supplementary learning experiences

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	896	56.1	56.1	56.1
	Disagree	428	26.8	26.8	83.0
	Undecided	159	10.0	10.0	92.9
	Agree	64	4.0	4.0	96.9
	Strongly Agree	49	3.1	3.1	100.0
	Total	1596	100.0	100.0	

Video cassettes in all subjects boost students understanding

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	881	55.2	55.2	55.2
	Disagree	437	27.4	27.4	82.6
	Undecided	113	7.1	7.1	89.7

	Agree	76	4.8	4.8	94.4
	Strongly Agree	89	5.6	5.6	100.0
	Total	1596	100.0	100.0	

Continuous assessment builds on students' achievements

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	575	36.0	36.0	36.0
	Disagree	127	8.0	8.0	44.0
	Undecided	194	12.2	12.2	56.1
	Agree	335	21.0	21.0	77.1
	Strongly Agree	365	22.9	22.9	100.0
	Total	1596	100.0	100.0	

Regular orientation are provided to ease students' learning difficulties

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	638	40.0	40.0	40.0
	Disagree	57	3.6	3.6	43.5
	Undecided	259	16.2	16.2	59.8
	Agree	341	21.4	21.4	81.1
	Strongly Agree	301	18.9	18.9	100.0

Audio cassettes provide supplementary learning experiences

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	896	56.1	56.1	56.1
	Disagree	428	26.8	26.8	83.0
	Undecided	159	10.0	10.0	92.9
	Agree	64	4.0	4.0	96.9
	Strongly Agree	49	3.1	3.1	100.0
	Total	1596	100.0	100.0	

Centre of Educational Technology in study centre provide variety of learning resources to aid students' learning

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	840	52.6	52.6	52.6
	Disagree	263	16.5	16.5	69.1
	Undecided	289	18.1	18.1	87.2
	Agree	106	6.6	6.6	93.9
	Strongly Agree	98	6.1	6.1	100.0
	Total	1596	100.0	100.0	

Examination manual guides the conduct of examination

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	601	37.7	37.7	37.7

	Disagree	76	4.8	4.8	42.4
	Undecided	298	18.7	18.7	61.1
	Agree	348	21.8	21.8	82.9
	Strongly Agree	273	17.1	17.1	100.0
	Total	1596	100.0	100.0	

Timely release of results encourage students to remain in the programme

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	685	42.9	42.9	42.9
	Disagree	53	3.3	3.3	46.2
	Undecided	265	16.6	16.6	62.8
	Agree	279	17.5	17.5	80.3
	Strongly Agree	314	19.7	19.7	100.0
	Total	1596	100.0	100.0	

Research Question 1

staff 1

Statistics

		library facilities	computer facilities	internet facilities	telecommunication facilities	storage facilities	course books	students' handbook	teaching practice manual	tutoring manual	students' project handbook	practical handbook	examinations manual	audio cassettes in all subjects	video cassettes in all subjects	continuous assessment guidelines
N	Valid	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54
	Missing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mean		3.2963	2.8148	2.8519	2.6852	2.0370	2.0370	3.0556	2.5926	2.0926	2.2778	2.14815	2.7407	2.0926	1.8889	2.7037
Std. Error of Mean		.11410	.12135	.12513	.11770	.14470	.14470	.09315	.12820	.13804	.11345	.103764	.12451	.12191	.11111	.12007
Std. Deviation		.83845	.89177	.91954	.86492	1.06333	1.06333	.68451	.94207	1.01440	.83365	.762504	.91497	.89587	.81650	.88231

Frequency Table

Library facilities

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Inadequate	2	3.7	3.7	3.7
	Fairly adequate	7	13.0	13.0	16.7
	Adequate	18	33.3	33.3	50.0
	Very Adequate	27	50.0	50.0	100.0
	Total	54	100.0	100.0	

Computer facilities

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Inadequate	5	9.3	9.3	9.3
	Fairly adequate	12	22.2	22.2	31.5
	Adequate	25	46.3	46.3	77.8
	Very Adequate	12	22.2	22.2	100.0
	Total	54	100.0	100.0	

Internet facilities

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Inadequate	5	9.3	9.3	9.3
	Fairly adequate	12	22.2	22.2	31.5
	Adequate	23	42.6	42.6	74.1
	Very Adequate	14	25.9	25.9	100.0
	Total	54	100.0	100.0	

Telecommunication facilities

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Inadequate	6	11.1	11.1	11.1
	Fairly adequate	13	24.1	24.1	35.2
	Adequate	27	50.0	50.0	85.2
	Very Adequate	8	14.8	14.8	100.0
	Total	54	100.0	100.0	

Storage facilities

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Inadequate	21	38.9	38.9	38.9
	Fairly adequate	18	33.3	33.3	72.2
	Adequate	7	13.0	13.0	85.2
	Very Adequate	8	14.8	14.8	100.0
	Total	54	100.0	100.0	

Course books

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Inadequate	21	38.9	38.9	38.9
	Fairly adequate	18	33.3	33.3	72.2
	Adequate	7	13.0	13.0	85.2
	Very Adequate	8	14.8	14.8	100.0
	Total	54	100.0	100.0	

Students' handbook

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Fairly adequate	11	20.4	20.4	20.4
	Adequate	29	53.7	53.7	74.1
	Very Adequate	14	25.9	25.9	100.0
	Total	54	100.0	100.0	

Teaching practice manual

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Inadequate	5	9.3	9.3	9.3
	Fairly adequate	24	44.4	44.4	53.7
	Adequate	13	24.1	24.1	77.8
	Very Adequate	12	22.2	22.2	100.0
	Total	54	100.0	100.0	

Tutoring manual

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Inadequate	17	31.5	31.5	31.5
	Fairly adequate	23	42.6	42.6	74.1
	Adequate	6	11.1	11.1	85.2
	Very Adequate	8	14.8	14.8	100.0
	Total	54	100.0	100.0	

Students' project handbook

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Inadequate	6	11.1	11.1	11.1
	Fairly adequate	34	63.0	63.0	74.1
	Adequate	7	13.0	13.0	87.0
	Very Adequate	7	13.0	13.0	100.0
	Total	54	100.0	100.0	

Practical handbook

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Inadequate	7	13.0	13.0	13.0
	Fairly adequate	37	68.5	68.5	81.5
	Adequate	5	9.3	9.3	90.7
	Very Adequate	5	9.3	9.3	100.0
	Total	54	100.0	100.0	

Examinations manual

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Inadequate	4	7.4	7.4	7.4
	Fairly adequate	19	35.2	35.2	42.6
	Adequate	18	33.3	33.3	75.9
	Very Adequate	13	24.1	24.1	100.0
	Total	54	100.0	100.0	

Audio cassettes in all subjects

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Inadequate	13	24.1	24.1	24.1
	Fairly adequate	29	53.7	53.7	77.8
	Adequate	6	11.1	11.1	88.9
	Very Adequate	6	11.1	11.1	100.0
	Total	54	100.0	100.0	

Video cassettes in all subjects

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Inadequate	17	31.5	31.5	31.5
	Fairly adequate	30	55.6	55.6	87.0
	Adequate	3	5.6	5.6	92.6
	Very Adequate	4	7.4	7.4	100.0
	Total	54	100.0	100.0	

Continuous assessment guidelines

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Inadequate	4	7.4	7.4	7.4
	Fairly adequate	19	35.2	35.2	42.6
	Adequate	20	37.0	37.0	79.6
	Very Adequate	11	20.4	20.4	100.0
	Total	54	100.0	100.0	

Research Question 2
staff 2

Statistics

		library facilities	internet facilities	computer facilities	telecommunication facilities	storage facilities	instructional materials	students' handbook	teaching practice manual	students' project handbook	Tutoring manual	practical handbook	examinations manual	audio cassettes in all subjects	video cassettes in all subjects	continuous assessment guidelines
N	Valid	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54
	Missing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mean		2.3519	3.0370	3.1111	2.8148	2.0556	2.9630	3.0741	2.9074	2.0556	2.0926	2.0185	2.5741	1.6667	1.6852	2.5926
Std. Error of Mean		.11264	.13470	.11421	.13237	.12234	.11204	.10852	.11299	.12792	.14055	.11966	.13112	.10899	.12063	.13867
Std. Deviation		.82776	.98982	.83929	.97272	.89899	.82332	.79745	.83029	.94003	1.03283	.87934	.96352	.80094	.88646	1.01904

Frequency Table

Library facilities

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor	7	13.0	13.0	13.0
	fair	26	48.1	48.1	61.1
	Good	16	29.6	29.6	90.7
	very good	5	9.3	9.3	100.0
	Total	54	100.0	100.0	

Internet facilities

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor	6	11.1	11.1	11.1
	fair	7	13.0	13.0	24.1
	Good	20	37.0	37.0	61.1
	very good	21	38.9	38.9	100.0
	Total	54	100.0	100.0	

Computer facilities

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor	4	7.4	7.4	7.4
	fair	4	7.4	7.4	14.8
	Good	28	51.9	51.9	66.7
	very good	18	33.3	33.3	100.0
	Total	54	100.0	100.0	

Telecommunication facilities

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor	6	11.1	11.1	11.1
	fair	13	24.1	24.1	35.2
	Good	20	37.0	37.0	72.2
	very good	15	27.8	27.8	100.0
	Total	54	100.0	100.0	

Storage facilities

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor	15	27.8	27.8	27.8
	fair	26	48.1	48.1	75.9
	Good	8	14.8	14.8	90.7

	very good	5	9.3	9.3	100.0
	Total	54	100.0	100.0	

Instructional materials

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor	3	5.6	5.6	5.6
	fair	10	18.5	18.5	24.1
	Good	27	50.0	50.0	74.1
	very good	14	25.9	25.9	100.0
	Total	54	100.0	100.0	

Students' handbook

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor	2	3.7	3.7	3.7
	fair	9	16.7	16.7	20.4
	Good	26	48.1	48.1	68.5
	very good	17	31.5	31.5	100.0
	Total	54	100.0	100.0	

Teaching practice manual

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor	3	5.6	5.6	5.6
	fair	12	22.2	22.2	27.8
	Good	26	48.1	48.1	75.9

	very good	13	24.1	24.1	100.0
	Total	54	100.0	100.0	

Students' project handbook

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor	17	31.5	31.5	31.5
	fair	22	40.7	40.7	72.2
	Good	10	18.5	18.5	90.7
	very good	5	9.3	9.3	100.0
	Total	54	100.0	100.0	

Tutoring manual

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor	19	35.2	35.2	35.2
	fair	18	33.3	33.3	68.5
	Good	10	18.5	18.5	87.0
	very good	7	13.0	13.0	100.0
	Total	54	100.0	100.0	

Practical handbook

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor	15	27.8	27.8	27.8
	fair	28	51.9	51.9	79.6

	Good	6	11.1	11.1	90.7
	very good	5	9.3	9.3	100.0
	Total	54	100.0	100.0	

Examinations manual

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor	8	14.8	14.8	14.8
	fair	17	31.5	31.5	46.3
	Good	19	35.2	35.2	81.5
	very good	10	18.5	18.5	100.0
	Total	54	100.0	100.0	

Audio cassettes in all subjects

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor	27	50.0	50.0	50.0
	fair	20	37.0	37.0	87.0
	Good	5	9.3	9.3	96.3
	very good	2	3.7	3.7	100.0
	Total	54	100.0	100.0	

Video cassettes in all subjects

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor	29	53.7	53.7	53.7
	fair	16	29.6	29.6	83.3

	Good	6	11.1	11.1	94.4
	very good	3	5.6	5.6	100.0
	Total	54	100.0	100.0	

Continuous assessment guidelines

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor	9	16.7	16.7	16.7
	fair	16	29.6	29.6	46.3
	Good	17	31.5	31.5	77.8
	very good	12	22.2	22.2	100.0
	Total	54	100.0	100.0	

Research Question 3

Staff 3

Statistics

		library facilities	internet facilities	computer facilities	telecommunication facilities	course books	students handbook	Tutoring manual	teaching practice manual	students' project handbook	practical handbook	examination manual	audio cassettes in all subjects	video cassettes in all subjects	continuous Assessment guidelines
N	Valid	54	54	54	54	54	54	54	54	54	54	54	54	54	54
	Missing	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mean		2.5370	2.6111	2.7222	2.7407	3.2037	2.9815	2.0556	2.8148	2.1667	2.3148	2.5556	1.7778	1.7778	2.3148
Std. Error of Mean		.15120	.13062	.12792	.14034	.08096	.12537	.13062	.11545	.13151	.13434	.12860	.11723	.11723	.12349
Std. Deviation		1.11106	.95989	.94003	1.03131	.59494	.92125	.95989	.84840	.96642	.98716	.94503	.86147	.86147	.90750

Frequency Table

Library facilities

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Ineffective	13	24.1	24.1	24.1
	fairly effective	12	22.2	22.2	46.3
	Effective	16	29.6	29.6	75.9
	very effective	13	24.1	24.1	100.0
	Total	54	100.0	100.0	

Internet facilities

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Ineffective	7	13.0	13.0	13.0
	fairly effective	18	33.3	33.3	46.3
	Effective	18	33.3	33.3	79.6

	very effective	11	20.4	20.4	100.0
	Total	54	100.0	100.0	

Computer facilities

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Ineffective	6	11.1	11.1	11.1
	fairly effective	15	27.8	27.8	38.9
	Effective	21	38.9	38.9	77.8
	very effective	12	22.2	22.2	100.0
	Total	54	100.0	100.0	

Telecommunication facilities

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Ineffective	7	13.0	13.0	13.0
	fairly effective	16	29.6	29.6	42.6
	Effective	15	27.8	27.8	70.4
	very effective	16	29.6	29.6	100.0
	Total	54	100.0	100.0	

Course books

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	fairly effective	5	9.3	9.3	9.3
	Effective	33	61.1	61.1	70.4
	very effective	16	29.6	29.6	100.0
	Total	54	100.0	100.0	

Students' handbook

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Ineffective	4	7.4	7.4	7.4
	fairly effective	11	20.4	20.4	27.8
	Effective	21	38.9	38.9	66.7
	very effective	18	33.3	33.3	100.0
	Total	54	100.0	100.0	

Tutoring manual

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Ineffective	17	31.5	31.5	31.5
	fairly effective	23	42.6	42.6	74.1
	Effective	8	14.8	14.8	88.9
	very effective	6	11.1	11.1	100.0
	Total	54	100.0	100.0	

Teaching practice manual

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Ineffective	5	9.3	9.3	9.3
	fairly effective	10	18.5	18.5	27.8
	Effective	29	53.7	53.7	81.5

	very effective	10	18.5	18.5	100.0
	Total	54	100.0	100.0	

Students' project handbook

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Ineffective	13	24.1	24.1	24.1
	fairly effective	27	50.0	50.0	74.1
	Effective	6	11.1	11.1	85.2
	very effective	8	14.8	14.8	100.0
	Total	54	100.0	100.0	

Practical handbook

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Ineffective	11	20.4	20.4	20.4
	fairly effective	24	44.4	44.4	64.8
	Effective	10	18.5	18.5	83.3
	very effective	9	16.7	16.7	100.0
	Total	54	100.0	100.0	

Examination manual

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Ineffective	9	16.7	16.7	16.7
	fairly effective	14	25.9	25.9	42.6
	Effective	23	42.6	42.6	85.2

	very effective	8	14.8	14.8	100.0
	Total	54	100.0	100.0	

Audio cassettes in all subjects

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Ineffective	23	42.6	42.6	42.6
	fairly effective	24	44.4	44.4	87.0
	Effective	3	5.6	5.6	92.6
	very effective	4	7.4	7.4	100.0
	Total	54	100.0	100.0	

Video cassettes in all subjects

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Ineffective	23	42.6	42.6	42.6
	fairly effective	24	44.4	44.4	87.0
	Effective	3	5.6	5.6	92.6
	very effective	4	7.4	7.4	100.0
	Total	54	100.0	100.0	

Continuous Assessment guidelines

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Ineffective	9	16.7	16.7	16.7
	fairly effective	26	48.1	48.1	64.8
	Effective	12	22.2	22.2	87.0

	very effective	7	13.0	13.0	100.0
	Total	54	100.0	100.0	

Research Question 4
STAFF 4

Statistics

		Study centre management	Tutoring in Distance learning	Counselling in distance learning	Quality Assurance in Distance learning	Record keeping in distance learning	Inform & comm. Tech (ICT) application in Distance learning	Continuous assessment in distance learning
N	Valid	382	382	382	382	382	382	382
	Missing	0	0	0	0	0	0	0
Mean		2.0654	1.9921	1.9686	1.9869	2.0079	1.8455	2.1021
Std. Error of Mean		.05519	.05554	.05187	.05275	.05353	.05096	.05628
Std. Deviation		1.07874	1.08555	1.01385	1.03093	1.04615	.99591	1.10001

Frequency Table

Study centre management

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	157	41.1	41.1	41.1
	2.00	96	25.1	25.1	66.2
	3.00	76	19.9	19.9	86.1
	4.00	53	13.9	13.9	100.0
	Total	382	100.0	100.0	

Tutoring in Distance learning

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	172	45.0	45.0	45.0
	2.00	95	24.9	24.9	69.9
	3.00	61	16.0	16.0	85.9
	4.00	54	14.1	14.1	100.0
	Total	382	100.0	100.0	

Counselling in distance learning

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	165	43.2	43.2	43.2
	2.00	101	26.4	26.4	69.6
	3.00	79	20.7	20.7	90.3
	4.00	37	9.7	9.7	100.0
	Total	382	100.0	100.0	

Quality Assurance in Distance learning

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	159	41.6	41.6	41.6
	2.00	115	30.1	30.1	71.7
	3.00	62	16.2	16.2	88.0
	4.00	46	12.0	12.0	100.0
	Total	382	100.0	100.0	

Record keeping in distance learning

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	164	42.9	42.9	42.9
	2.00	94	24.6	24.6	67.5
	3.00	81	21.2	21.2	88.7
	4.00	43	11.3	11.3	100.0
	Total	382	100.0	100.0	

Inform & comm. Tech (ICT) application in Distance learning

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	192	50.3	50.3	50.3
	2.00	88	23.0	23.0	73.3
	3.00	71	18.6	18.6	91.9
	4.00	31	8.1	8.1	100.0
	Total	382	100.0	100.0	

Continuous assessment in distance learning

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	157	41.1	41.1	41.1
	2.00	85	22.3	22.3	63.4
	3.00	84	22.0	22.0	85.3
	4.00	56	14.7	14.7	100.0

Record keeping in distance learning

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	164	42.9	42.9	42.9
	2.00	94	24.6	24.6	67.5
	3.00	81	21.2	21.2	88.7
	4.00	43	11.3	11.3	100.0
	Total	382	100.0	100.0	

Research Question 1
FACILITATORS 1

Statistics

	library facilities	computer facilities	internet facilities	telecommunication facilities	storage facilities	course books	students' handbook	teaching practice manual	tutoring manual	Students 'project handbook	practical handbook	examinations manual	audio cassettes in all subjects	video cassettes in all subjects	continuous assessment guidelines
N Valid	382	382	382	382	382	382	382	382	382	382	382	382	382	382	382
Missing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mean	1.8089	1.7696	1.8141	1.8560	2.3796	2.8743	2.2225	2.1518	2.4895	2.0524	1.83770	2.1728	1.4843	1.5576	2.2775
Std. Error of Mean	.05236	.05632	.04958	.04593	.05435	.05919	.05295	.05481	.05870	.05196	.051093	.05299	.04156	.04080	.05414
Std. Deviation	1.02341	1.10086	.96908	.89777	1.06231	1.15694	1.03494	1.07121	1.14724	1.01557	.998604	1.03558	.81232	.79736	1.05813

Frequency Table

Library facilities

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Inadequate	205	53.7	53.7	53.7
	Fairly adequate	83	21.7	21.7	75.4
	Adequate	56	14.7	14.7	90.1
	Very Adequate	38	9.9	9.9	100.0
	Total	382	100.0	100.0	

Computer facilities

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Inadequate	236	61.8	61.8	61.8
	Fairly adequate	47	12.3	12.3	74.1
	Adequate	50	13.1	13.1	87.2
	Very Adequate	49	12.8	12.8	100.0
	Total	382	100.0	100.0	

Internet facilities

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Inadequate	192	50.3	50.3	50.3
	Fairly adequate	98	25.7	25.7	75.9
	Adequate	63	16.5	16.5	92.4
	Very Adequate	29	7.6	7.6	100.0
	Total	382	100.0	100.0	

Telecommunication facilities

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Inadequate	161	42.1	42.1	42.1
	Fairly adequate	139	36.4	36.4	78.5
	Adequate	58	15.2	15.2	93.7
	Very Adequate	24	6.3	6.3	100.0
	Total	382	100.0	100.0	

Storage facilities

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Inadequate	114	29.8	29.8	29.8
	Fairly adequate	65	17.0	17.0	46.9
	Adequate	147	38.5	38.5	85.3
	Very Adequate	56	14.7	14.7	100.0
	Total	382	100.0	100.0	

Course books

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Inadequate	75	19.6	19.6	19.6
	Fairly adequate	57	14.9	14.9	34.6
	Adequate	91	23.8	23.8	58.4
	Very Adequate	159	41.6	41.6	100.0
	Total	382	100.0	100.0	

Students' handbook

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Inadequate	100	26.2	26.2	26.2
	Fairly adequate	168	44.0	44.0	70.2
	Adequate	43	11.3	11.3	81.4
	Very Adequate	71	18.6	18.6	100.0
	Total	382	100.0	100.0	

Teaching practice manual

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Inadequate	137	35.9	35.9	35.9
	Fairly adequate	107	28.0	28.0	63.9
	Adequate	81	21.2	21.2	85.1
	Very Adequate	57	14.9	14.9	100.0
	Total	382	100.0	100.0	

Tutoring manual

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Inadequate	114	29.8	29.8	29.8
	Fairly adequate	56	14.7	14.7	44.5
	Adequate	123	32.2	32.2	76.7
	Very Adequate	89	23.3	23.3	100.0
	Total	382	100.0	100.0	

Students 'project handbook

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Inadequate	136	35.6	35.6	35.6
	Fairly adequate	141	36.9	36.9	72.5
	Adequate	54	14.1	14.1	86.6
	Very Adequate	51	13.4	13.4	100.0
	Total	382	100.0	100.0	

Practical handbook

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Inadequate	189	49.5	49.5	49.5
	Fairly adequate	103	27.0	27.0	76.4
	Adequate	53	13.9	13.9	90.3
	Very Adequate	37	9.7	9.7	100.0
	Total	382	100.0	100.0	

Examinations manual

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Inadequate	140	36.6	36.6	36.6
	Fairly adequate	73	19.1	19.1	55.8
	Adequate	132	34.6	34.6	90.3
	Very Adequate	37	9.7	9.7	100.0
	Total	382	100.0	100.0	

Audio cassettes in all subjects

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Inadequate	265	69.4	69.4	69.4
	Fairly adequate	59	15.4	15.4	84.8
	Adequate	48	12.6	12.6	97.4
	Very Adequate	10	2.6	2.6	100.0
	Total	382	100.0	100.0	

Video cassettes in all subjects

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Inadequate	233	61.0	61.0	61.0
	Fairly adequate	95	24.9	24.9	85.9
	Adequate	44	11.5	11.5	97.4
	Very Adequate	10	2.6	2.6	100.0
	Total	382	100.0	100.0	

Continuous assessment guidelines

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Inadequate	114	29.8	29.8	29.8
	Fairly adequate	109	28.5	28.5	58.4
	Adequate	98	25.7	25.7	84.0
	Very Adequate	61	16.0	16.0	100.0
	Total	382	100.0	100.0	

Research Question 2

FACILITATORS 2

Statistics

		library facilities	internet facilities	computer facilities	telecommunication facilities	storage facilities	instructional materials	students' handbook	teaching practice manual	students' project handbook	Tutoring manual	practical handbook	examinations manual	audio cassettes in all subjects	video cassettes in all subjects	continuous assessment guidelines
N	Valid	382	382	382	382	382	382	382	382	382	382	382	382	382	382	382
	Missing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mean		1.8979	1.8691	1.9031	1.9555	2.4162	2.8901	2.1021	2.3874	2.0681	1.8848	1.9869	2.3770	1.5995	1.5497	2.4162
Std. Error of Mean		.05197	.04928	.04942	.05016	.05724	.06244	.05677	.05993	.05348	.04696	.05339	.05999	.03921	.04099	.06085
Std. Deviation		1.01565	.96317	.96584	.98044	1.11870	1.22032	1.10951	1.17124	1.04521	.91779	1.04358	1.17243	.76628	.80117	1.18921

Frequency Table

Library facilities

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor	180	47.1	47.1	47.1
	fair	99	25.9	25.9	73.0
	Good	65	17.0	17.0	90.1
	very good	38	9.9	9.9	100.0
	Total	382	100.0	100.0	

Internet facilities

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor	175	45.8	45.8	45.8
	fair	112	29.3	29.3	75.1
	Good	65	17.0	17.0	92.1
	very good	30	7.9	7.9	100.0
	Total	382	100.0	100.0	

Computer facilities

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor	165	43.2	43.2	43.2
	fair	122	31.9	31.9	75.1
	Good	62	16.2	16.2	91.4
	very good	33	8.6	8.6	100.0
	Total	382	100.0	100.0	

Telecommunication facilities

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor	166	43.5	43.5	43.5
	fair	93	24.3	24.3	67.8
	Good	97	25.4	25.4	93.2
	very good	26	6.8	6.8	100.0
	Total	382	100.0	100.0	

Storage facilities

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor	121	31.7	31.7	31.7
	fair	52	13.6	13.6	45.3
	Good	138	36.1	36.1	81.4
	very good	71	18.6	18.6	100.0
	Total	382	100.0	100.0	

Instructional materials

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor	91	23.8	23.8	23.8
	fair	34	8.9	8.9	32.7
	Good	83	21.7	21.7	54.5
	very good	174	45.5	45.5	100.0
	Total	382	100.0	100.0	

Students' handbook

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor	154	40.3	40.3	40.3
	fair	98	25.7	25.7	66.0
	Good	67	17.5	17.5	83.5
	very good	63	16.5	16.5	100.0
	Total	382	100.0	100.0	

Teaching practice manual

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor	127	33.2	33.2	33.2
	fair	69	18.1	18.1	51.3
	Good	97	25.4	25.4	76.7
	very good	89	23.3	23.3	100.0

Teaching practice manual

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor	127	33.2	33.2	33.2
	fair	69	18.1	18.1	51.3
	Good	97	25.4	25.4	76.7
	very good	89	23.3	23.3	100.0
	Total	382	100.0	100.0	

Students 'project handbook

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor	147	38.5	38.5	38.5
	fair	111	29.1	29.1	67.5
	Good	75	19.6	19.6	87.2
	very good	49	12.8	12.8	100.0
	Total	382	100.0	100.0	

Tutoring manual

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor	165	43.2	43.2	43.2
	fair	116	30.4	30.4	73.6
	Good	81	21.2	21.2	94.8
	very good	20	5.2	5.2	100.0
	Total	382	100.0	100.0	

Practical handbook

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor	164	42.9	42.9	42.9
	fair	105	27.5	27.5	70.4
	Good	67	17.5	17.5	88.0
	very good	46	12.0	12.0	100.0
	Total	382	100.0	100.0	

Examinations manual

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor	128	33.5	33.5	33.5
	fair	71	18.6	18.6	52.1
	Good	94	24.6	24.6	76.7
	very good	89	23.3	23.3	100.0
	Total	382	100.0	100.0	

Audio cassettes in all subjects

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor	210	55.0	55.0	55.0
	fair	124	32.5	32.5	87.4
	Good	39	10.2	10.2	97.6
	very good	9	2.4	2.4	100.0
	Total	382	100.0	100.0	

Video cassettes in all subjects

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor	232	60.7	60.7	60.7
	fair	105	27.5	27.5	88.2
	Good	30	7.9	7.9	96.1
	very good	15	3.9	3.9	100.0
	Total	382	100.0	100.0	

Continuous assessment guidelines

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor	128	33.5	33.5	33.5
	fair	62	16.2	16.2	49.7
	Good	97	25.4	25.4	75.1
	very good	95	24.9	24.9	100.0
	Total	382	100.0	100.0	

Research Question 3
FACILITATOR 3

Statistics

		library facilities	internet facilities	computer facilities	telecommunication facilities	course books	students handbook	Tutoring manual	teaching practice manual	Students 'project handbook	practical handbook	examination manual	audio cassettes in all subjects	video cassettes in all subjects	continuous Assessment guidelines
N	Valid	382	382	382	382	382	382	382	382	382	382	382	382	382	382
	Missing	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mean		1.9372	1.7277	1.7644	2.2853	2.7932	2.4319	1.9948	2.1545	1.9948	2.0079	2.4555	1.5864	1.6492	2.3874
Std. Error of Mean		.05113	.04492	.04651	.05634	.05589	.06078	.05372	.05485	.05435	.05130	.05651	.03911	.04018	.06004
Std. Deviation		.99933	.87797	.90898	1.10106	1.09240	1.18801	1.04992	1.07206	1.06235	1.00259	1.10445	.76445	.78536	1.17348

Frequency Table

Library

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Ineffective	165	43.2	43.2	43.2
	fairly effective	114	29.8	29.8	73.0
	Effective	65	17.0	17.0	90.1
	very effective	38	9.9	9.9	100.0
	Total	**382**	**100.0**	**100.0**	

Internet facilities

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Ineffective	197	51.6	51.6	51.6
	fairly effective	108	28.3	28.3	79.8
	Effective	61	16.0	16.0	95.8
	very effective	16	4.2	4.2	100.0
	Total	382	100.0	100.0	

Computer facilities

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Ineffective	191	50.0	50.0	50.0
	fairly effective	112	29.3	29.3	79.3
	Effective	57	14.9	14.9	94.2
	very effective	22	5.8	5.8	100.0
	Total	382	100.0	100.0	

Telecommunication facilities

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Ineffective	124	32.5	32.5	32.5
	fairly effective	93	24.3	24.3	56.8
	Effective	97	25.4	25.4	82.2
	very effective	68	17.8	17.8	100.0
	Total	382	100.0	100.0	

Course books

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Ineffective	67	17.5	17.5	17.5
	fairly effective	74	19.4	19.4	36.9
	Effective	112	29.3	29.3	66.2
	very effective	129	33.8	33.8	100.0
	Total	382	100.0	100.0	

Students handbook

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Ineffective	124	32.5	32.5	32.5
	fairly effective	67	17.5	17.5	50.0
	Effective	93	24.3	24.3	74.3
	very effective	98	25.7	25.7	100.0
	Total	382	100.0	100.0	

Tutoring manual

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Ineffective	163	42.7	42.7	42.7
	fairly effective	106	27.7	27.7	70.4
	Effective	65	17.0	17.0	87.4
	very effective	48	12.6	12.6	100.0
	Total	382	100.0	100.0	

Teaching practice manual

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Ineffective	142	37.2	37.2	37.2
	fairly effective	91	23.8	23.8	61.0
	Effective	97	25.4	25.4	86.4
	very effective	52	13.6	13.6	100.0

Tutoring manual

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Ineffective	163	42.7	42.7	42.7
	fairly effective	106	27.7	27.7	70.4
	Effective	65	17.0	17.0	87.4
	very effective	48	12.6	12.6	100.0
	Total	382	100.0	100.0	

Students' project handbook

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Ineffective	167	43.7	43.7	43.7
	fairly effective	99	25.9	25.9	69.6
	Effective	67	17.5	17.5	87.2
	very effective	49	12.8	12.8	100.0
	Total	**382**	**100.0**	**100.0**	

Practical handbook

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Ineffective	149	39.0	39.0	39.0
	fairly effective	122	31.9	31.9	70.9
	Effective	70	18.3	18.3	89.3
	very effective	41	10.7	10.7	100.0
	Total	382	100.0	100.0	

Examination manual

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Ineffective	113	29.6	29.6	29.6
	fairly effective	54	14.1	14.1	43.7
	Effective	143	37.4	37.4	81.2
	very effective	72	18.8	18.8	100.0
	Total	382	100.0	100.0	

Audio cassettes in all subjects

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Ineffective	214	56.0	56.0	56.0
	fairly effective	121	31.7	31.7	87.7
	Effective	38	9.9	9.9	97.6
	very effective	9	2.4	2.4	100.0
	Total	382	100.0	100.0	

Video cassettes in all subjects

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Ineffective	201	52.6	52.6	52.6
	fairly effective	121	31.7	31.7	84.3
	Effective	53	13.9	13.9	98.2
	very effective	7	1.8	1.8	100.0
	Total	382	100.0	100.0	

Continuous Assessment guidelines

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Ineffective	125	32.7	32.7	32.7
	fairly effective	76	19.9	19.9	52.6
	Effective	89	23.3	23.3	75.9
	very effective	92	24.1	24.1	100.0
	Total	382	100.0	100.0	

Research Question 5
FACILITATORS 4

Statistics

		library facilities have considerable impact on students learning	Students use internet most often to strengthen their studies	Computer courses offer practical experiences to students	course books have greater appeal on students' learning	students handbooks provide relief and stimulation to students	tutorial clear students' learning difficulties	Teaching practice provides professional skills to students	students project handbook guide students' research writing	Lab & field practicals provide enough practical skills	Counseling service resolves students' anxieties	Audio cassettes provide supplementary learning experiences	Video cassettes in all subjects boost students understanding	Continuous assessment builds on students' achievements	Regular orientation are provided to ease students' learning difficulties	Centre of Educ Tech in study centre provide variety of learning resources to aid students' learning	Examination manual guides the conduct of examination	Timely release of results encourage students to remain in the programme
N	Valid	382	382	382	382	382	382	382	382	382	382	382	382	382	382	382	382	382
	Missing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mean		2.2487	2.3325	2.0942	3.6597	3.0602	2.9921	2.9869	2.4607	2.8874	2.9869	2.0864	1.9293	3.1937	3.2304	2.2723	2.6440	2.9346
Std. Error of Mean		.06782	.07296	.06747	.06202	.07906	.07736	.07556	.06800	.06411	.07798	.06714	.05949	.07329	.07596	.06588	.07291	.07549
Std. Deviation		1.32548	1.42602	1.31876	1.21210	1.54513	1.51196	1.47680	1.32897	1.25299	1.52403	1.31232	1.16273	1.43235	1.48459	1.28762	1.42492	1.47540

Frequency Table

Library facilities have considerable impact on students learning

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	153	40.1	40.1	40.1
	Disagree	89	23.3	23.3	63.4
	Undecided	70	18.3	18.3	81.7
	Agree	32	8.4	8.4	90.1
	Strongly Agree	38	9.9	9.9	100.0
	Total	382	100.0	100.0	

Students use internet most often to strengthen their studies

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	156	40.8	40.8	40.8
	Disagree	83	21.7	21.7	62.6
	Undecided	52	13.6	13.6	76.2
	Agree	42	11.0	11.0	87.2
	Strongly Agree	49	12.8	12.8	100.0
	Total	382	100.0	100.0	

Computer courses offer practical experiences to students

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	174	45.5	45.5	45.5
	Disagree	103	27.0	27.0	72.5
	Undecided	36	9.4	9.4	81.9
	Agree	33	8.6	8.6	90.6
	Strongly Agree	36	9.4	9.4	100.0
	Total	382	100.0	100.0	

Course books have greater appeal on students' learning

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	19	5.0	5.0	5.0
	Disagree	56	14.7	14.7	19.6
	Undecided	85	22.3	22.3	41.9
	Agree	98	25.7	25.7	67.5
	Strongly Agree	124	32.5	32.5	100.0
	Total	382	100.0	100.0	

Students' handbooks provide relief and stimulation to students

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	104	27.2	27.2	27.2
	Disagree	42	11.0	11.0	38.2
	Undecided	53	13.9	13.9	52.1
	Agree	93	24.3	24.3	76.4
	Strongly Agree	90	23.6	23.6	100.0
	Total	382	100.0	100.0	

Tutorial clear students' learning difficulties

		Frequency	Percent	Valid Percent	Cumulative Per
Valid	Strongly disagree	102	26.7	26.7	
	Disagree	46	12.0	12.0	
	Undecided	72	18.8	18.8	

	Agree	77	20.2	20.2	
	Strongly Agree	85	22.3	22.3	
	Total	382	100.0	100.0	

Teaching practice provides professional skills to students

		Frequency	Percent	Valid Percent	Cumulative Per
Valid	Strongly disagree	99	25.9	25.9	
	Disagree	44	11.5	11.5	
	Undecided	79	20.7	20.7	
	Agree	83	21.7	21.7	
	Strongly Agree	77	20.2	20.2	
	Total	382	100.0	100.0	

Students’ project handbook guide students’ research writing

		Frequency	Percent	Valid Percent	Cumulative Per
Valid	Strongly disagree	123	32.2	32.2	
	Disagree	86	22.5	22.5	
	Undecided	87	22.8	22.8	
	Agree	46	12.0	12.0	
	Strongly Agree	40	10.5	10.5	
	Total	382	100.0	100.0	

Lab & field practicals provide enough practical skills

		Frequency	Percent	Valid Percent	Cumulative Per
Valid	Strongly disagree	55	14.4	14.4	
	Disagree	110	28.8	28.8	

	Undecided	88	23.0	23.0	
	Agree	81	21.2	21.2	
	Strongly Agree	48	12.6	12.6	
	Total	382	100.0	100.0	

Counseling service resolves students’ anxieties

		Frequency	Percent	Valid Percent	Cumulative Per
Valid	Strongly disagree	95	24.9	24.9	
	Disagree	72	18.8	18.8	
	Undecided	46	12.0	12.0	
	Agree	81	21.2	21.2	
	Strongly Agree	88	23.0	23.0	
	Total	382	100.0	100.0	

Audio cassettes provide supplementary learning experiences

		Frequency	Percent	Valid Percent	Cumulative Per
Valid	Strongly disagree	176	46.1	46.1	
	Disagree	101	26.4	26.4	
	Undecided	34	8.9	8.9	
	Agree	38	9.9	9.9	
	Strongly Agree	33	8.6	8.6	
	Total	382	100.0	100.0	

Video cassettes in all subjects boost students understanding

		Frequency	Percent	Valid Percent	Cumulative Percen
Valid	Strongly disagree	182	47.6	47.6	

	Disagree	113	29.6	29.6	
	Undecided	41	10.7	10.7	
	Agree	24	6.3	6.3	
	Strongly Agree	22	5.8	5.8	
	Total	382	100.0	100.0	

Continuous assessment builds on students' achievements

		Frequency	Percent	Valid Percent	Cumulative Percen
Valid	Strongly disagree	79	20.7	20.7	
	Disagree	37	9.7	9.7	
	Undecided	84	22.0	22.0	
	Agree	95	24.9	24.9	
	Strongly Agree	87	22.8	22.8	
	Total	382	100.0	100.0	

Regular orientation are provided to ease students' learning difficulties

		Frequency	Percent	Valid Percent	Cumulative Percen
Valid	Strongly disagree	87	22.8	22.8	
	Disagree	27	7.1	7.1	
	Undecided	77	20.2	20.2	
	Agree	93	24.3	24.3	
	Strongly Agree	98	25.7	25.7	
	Total	382	100.0	100.0	

Centre of Educational Technology in study centre provide variety of learning resources to aid students' learning

		Frequency	Percent	Valid Percent	Cumulative Percen
Valid	Strongly disagree	146	38.2	38.2	
	Disagree	89	23.3	23.3	
	Undecided	73	19.1	19.1	
	Agree	45	11.8	11.8	
	Strongly Agree	29	7.6	7.6	
	Total	382	100.0	100.0	

Examination manual guides the conduct of examination

		Frequency	Percent	Valid Percent	Cumulative Percen
Valid	Strongly disagree	121	31.7	31.7	
	Disagree	65	17.0	17.0	
	Undecided	76	19.9	19.9	
	Agree	69	18.1	18.1	
	Strongly Agree	51	13.4	13.4	
	Total	382	100.0	100.0	

Timely release of results encourage students to remain in the programme

		Frequency	Percent	Valid Percent	Cumulative Percen
Valid	Strongly disagree	104	27.2	27.2	
	Disagree	42	11.0	11.0	
	Undecided	85	22.3	22.3	
	Agree	77	20.2	20.2	
	Strongly Agree	74	19.4	19.4	

Timely release of results encourage students to remain in the programme

		Frequency	Percent	Valid Percent	Cumulative Percen
Valid	Strongly disagree	104	27.2	27.2	
	Disagree	42	11.0	11.0	
	Undecided	85	22.3	22.3	
	Agree	77	20.2	20.2	
	Strongly Agree	74	19.4	19.4	
	Total	382	100.0	100.0	

Research Question 4

FACILITAOR 4

Statistics

		Study centre management	Tutoring in Distance learning	Counselling in distance learning	Quality Assurance in Distance learning	Record keeping in distance learning	Inform & comm. Tech (ICT) application in Distance learning	Continuous assessment in distance learning
N	Valid	382	382	382	382	382	382	382
	Missing	0	0	0	0	0	0	0
Mean		2.0654	1.9921	1.9686	1.9869	2.0079	1.8455	2.1021
Std. Error of Mean		.05519	.05554	.05187	.05275	.05353	.05096	.05628
Std. Deviation		1.07874	1.08555	1.01385	1.03093	1.04615	.99591	1.10001

Frequency Table

Study centre management

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	157	41.1	41.1	41.1
	Disagree	96	25.1	25.1	66.2
	Undecided	76	19.9	19.9	86.1
	Agree	53	13.9	13.9	100.0
	Total	382	100.0	100.0	

Tutoring in Distance learning

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	172	45.0	45.0	45.0
	Disagree	95	24.9	24.9	69.9
	Undecided	61	16.0	16.0	85.9

	Agree	54	14.1	14.1	100.0
	Total	382	100.0	100.0	

Counselling in distance learning

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	165	43.2	43.2	43.2
	Disagree	101	26.4	26.4	69.6
	Undecided	79	20.7	20.7	90.3
	Agree	37	9.7	9.7	100.0
	Total	382	100.0	100.0	

Quality Assurance in Distance learning

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	159	41.6	41.6	41.6
	Disagree	115	30.1	30.1	71.7
	Undecided	62	16.2	16.2	88.0
	Agree	46	12.0	12.0	100.0
	Total	382	100.0	100.0	

Record keeping in distance learning

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	164	42.9	42.9	42.
	Disagree	94	24.6	24.6	67.
	Undecided	81	21.2	21.2	88.

	Agree	43	11.3	11.3	100.
	Total	382	100.0	100.0	

Inform & comm. Tech (ICT) application in Distance learning

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	192	50.3	50.3	50.
	Disagree	88	23.0	23.0	73.
	Undecided	71	18.6	18.6	91.
	Agree	31	8.1	8.1	100.
	Total	382	100.0	100.0	

Continuous assessment in distance learning

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	157	41.1	41.1	41.
	Disagree	85	22.3	22.3	63.
	Undecided	84	22.0	22.0	85.
	Agree	56	14.7	14.7	100.
	Total	382	100.0	100.0	

HYPOTHESES

One way

Descriptive

Adequacy of learners support

					95% Confidence Interval for Mean			
	N	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound	Minimum	Maximum
Students	1596	30.3302	15.59417	.39034	29.5646	31.0958	16.00	64.00
Staff	54	39.4074	13.42698	1.82718	35.7425	43.0723	17.00	64.00
Facilitators	382	33.2382	15.34223	.78498	31.6948	34.7816	16.00	64.00
Total	2032	31.1181	15.58831	.34581	30.4399	31.7963	16.00	64.00

ANOVA

Adequacy of learner support

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	6418.310	2	3209.155	13.367	.000
Within Groups	487105.343	2029	240.072		
Total	493523.654	2031			

Post Hoc Tests

Multiple Comparisons

Adequacy of learner support
LSD

					95% Confidence Interval	
(I) status of respondent	(J) status of respondent	Mean Difference (I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
Students	Staff	-9.07721*	2.14387	.000	-13.2816	-4.8728
	Facilitators	-2.90802*	.88254	.001	-4.6388	-1.1772
Staff	Students	9.07721*	2.14387	.000	4.8728	13.2816
	Facilitators	6.16919*	2.25261	.006	1.7515	10.5868

Facilitators	Students	2.90802*	.88254	.001	1.1772	4.6388
	Staff	-6.16919*	2.25261	.006	-10.5868	-1.7515

*. The mean difference is significant at 0.05 level.

One way

Descriptive

Quality of learner support services

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Students	1596	28.3033	14.06196	.35199	27.6128	28.9937	15.00	60.00
Staff	54	37.0000	12.50208	1.70132	33.5876	40.4124	15.00	60.00
Facilitators	382	31.3037	14.72734	.75352	29.8221	32.7852	15.00	60.00
Total	2032	29.0984	14.25229	.31617	28.4784	29.7185	15.00	60.00

ANOVA

Quality of learner support services

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	6238.317	2	3119.159	15.576	.000
Within Groups	406313.998	2029	200.253		
Total	412552.315	2031			

Post Hoc Tests

Multiple Comparisons

Quality of learner support services
LSD

(I) status of respondent	(J) status of respondent	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Students	Staff	-8.69674*	1.95803	.000	-12.5367	-4.8568
	Facilitators	-3.00041*	.80604	.000	-4.5812	-1.4197
Staff	Students	8.69674*	1.95803	.000	4.8568	12.5367
	Facilitators	5.69634*	2.05733	.006	1.6616	9.7310
Facilitators	Students	3.00041*	.80604	.000	1.4197	4.5812

	Staff	-5.69634*	2.05733	.006	-9.7310	-1.6616

*. The mean difference is significant at 0.05 level.

One way

Descriptive

Utilization of learner support

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Students	1596	26.2093	13.23087	.33119	25.5597	26.8589	14.00	56.00
Staff	54	34.5741	12.06211	1.64144	31.2818	37.8664	15.00	56.00
Facilitators	382	29.1702	13.38036	.68460	27.8241	30.5162	14.00	56.00
Total	2032	26.9882	13.33269	.29577	26.4081	27.5682	14.00	56.00

ANOVA

Utilization of learner support

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	5894.470	2	2947.235	16.838	.000
Within Groups	355137.246	2029	175.031		
Total	361031.717	2031			

Hoc Tests

Multiple Comparisons

Utilization of learner support
LSD

(I) status of respondent	(J) status of respondent	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Students	Staff	-8.36480*	1.83057	.000	-11.9548	-4.7748
	Facilitators	-2.96088*	.75357	.000	-4.4387	-1.4830

Staff	Students	8.36480[*]	1.83057	.000	4.7748	11.9548
	Facilitators	5.40392[*]	1.92341	.005	1.6319	9.1760
Facilitators	Students	2.96088[*]	.75357	.000	1.4830	4.4387
	Staff	-5.40392[*]	1.92341	.005	-9.1760	-1.6319

*. The mean difference is significant at 0.05 level.

T-Test

Group Statistics

	status of respondent	N	Mean	Std. Deviation	Std. Error Mean
Training capacity on learner support	Staff	54	15.9630	6.20092	.84384
	Facilitators	382	13.9686	7.22158	.36949

Independent Samples Test

		Levine's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Training capacity on learner support	Equal variances assumed	3.900	.049	1.931	434	.054	1.99438	1.03292	-.03577	4.02452
	Equal variances not assumed			2.165	74.888	.034	1.99438	.92119	.15923	3.82952

T-Test

Group Statistics

	status of respondent	N	Mean	Std. Deviation	Std. Error Mean
Impact on students’ achievement	Students	1596	40.9104	23.18537	.58036
	Facilitators	382	46.0000	22.56667	1.15461

Independent Samples Test

		Levine’s Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Impact on students’ achievement	Equal variances assumed	3.568	.059	-3.874	1976	.000	-5.08960	1.31390	-7.66638	-2.51282
	Equal variances not assumed			-3.939	588.863	.000	-5.08960	1.29226	-7.62761	-2.55159