"DISTANCE EDUCATION CAN SOLVE THE NUMEROUS EDUCATIONAL PROBLEMS IN THIRD WORLD AFRICA"

A CASE STUDY OF SIERRA LEONE

BY

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THROUGH DISTANCE LEARNING

I. CERTIFICATION

This is to certify that Mrs. Abie Paula Kamara carried out a Research in the topic: "**Distance Education can solve the numerous Educational Problems in Third World Africa".** A case study of Sierra Leone in partial fulfilment for the award of a Doctor of Philosophy from the St. Clements University.

Signed ……

Abie Paula Kamara – Researcher

Signed ……..

Dr. IRVING BUCHEN

SUPERVISOR

II DEDICATION

This work is dedicated to my husband, Prof. Dr. Paul Kamara and my children; Aziz, Mimi, Paulina, Mike, who have been a source of happiness to me and Umaru Kamara. May God grant us long Life and may his Grace continue to uphold us in love and understanding. Also to my mum Ya Alimamy Bai Sama Kamara, who worked very hard for my education.

To the Dead:

Blessed memory of

My Late Father Bai Sama Kamara

My Late Aunty Mrs. Cecilia Smith

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IV LIST OF ABBREVIATIONS

DEFINITION OF TECHNICAL TERMS

DE	Distance Education
UNDP	United Nations Development Programme
ICT	Information Communication Technology
UNESCO	United Nations Educational, Scientific And Cultural Organisation.
U. K	United Kingdom
ADEA	Africa Distance Education Association
NCTVA	National Council for Technical Vocational And Other Academic Awards
Bondo & Poro	Societies for women and men, respectively
6-3-3-4	6 Years Primary, 3 Years Junior Secondary, 3 Years Senior Secondary & 4 Years Tertiary Education
NUC	Njala University College
FBC	Fourah Bay College
UNICEF	United Nations International Children's Emergency Fund
WAEC	West African Examinations Council
IAMTECH	Institute of Advanced Management & Technology
SSL	Statistics Sierra Leone
T/V Cert	Technical/Vocational Certificate
SLADEA	Sierra Leone Adult Education Association
HTC	Higher Teachers Certificate
MEST	Ministry of Education, Science and Technology
USA	United State of America
CV	Curriculum Vitae
NGO	Non Governmental Organization
CMS	Christian Missionary Society

V LIST OF TABLES AND FIGURES

ABSTRACT

This work is divided into five chapters.

Chapter one - The Introduction gives a back ground of the study of Distance Education in relation to third world Africa.

The study will discover numerous problems challenging distance Education in the African continent with special reference to Sierra Leone. At the end of the study recommendations on the problems threatening the life of distance learning in Africa and Sierra Leone in particular will be made.

Chapter Two - The literature review of available materials is to buttress the background information introduced in the first chapter

Chapter Three - Describes the Methodology of the study with reference to the linking of research questions to research design, identification of variables, tools used and sample questions to be asked.

Chapter Four – The fourth chapter of the study describes the collection process of the data, and analysis of the data collected.

Chapter Five – Chapter five is the final chapter of the study. The results of the findings will provide indicators for further research on the topic: “Distance Education can solve the Numerous Educational Problems in Third World Africa”.

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CHAPTER ONE

INTRODUCTION AND BACKGROUND OF THE STUDY

1.1 BACKGROUND OF THE STUDY.

HISTORY OF DISTANCE EDUCATION

This study is in a wider plan to achieve World literacy increase, social justice and thus a closer linkage between higher education and national development goals; there is a growing concern all over the world for the provision of access to higher educational Institutions. The study of Distance Education is meant to increase access to learning opportunities and remove barriers.

The introduction of Information Communication Technologies (ICT's) makes the possibilities of Communicating across distances of space and time. There is a social effect, in which the learner stays in his/ her job whilst learning. No need for leaving one's family. Distance Education is unique as it encourages a more flexible learner-centric approach and provides opportunities for learning anywhere and anytime.

Distance Education is a, worldwide educational delivery system for increasing learning opportunities to more people, especially in the developing world, to whom Distance Education is an alternate innovation of social and economic relief to the lives of such students who hitherto studied in traditional, educational system.

Educators who go on the lookout for alternative models which could reduce the physical, social and psychological distance that separates knowledge and the learner in particular, turned their attention to the possibility of using the communication method to external education in both space and time and to diversify its objectives, content and form.

It is no secret that the success of the Open University concept has convinced many countries throughout the World that the **distance-teaching system**, that began on the use of new technology, can make an effective contribution to the quantitative and

qualitative improvement of higher education in the broader context of what is referred to as “Life-long education”.

It is also pertinent to add that since 1972, UNESCO has been making efforts to draw the attention of the international community to ventures that were included in the United Kingdom’s Open University System. This university has today helped in redeeming the African and other third-world nationals on their various borders as they get into in-campus learning.

The use of distance-learning methods at university-level calculation is a practice that goes back over one hundred years ago. Historical records show that the phenomenon was actually conceived in Africa when, in 1873, the university of the Cape of Good Hope was founded to undertake independent learning by degree candidates. The University of South Africa was thereby born as the first autonomous university in the world, in 1946, to offer Distance Education courses only. In Britain, its origins can partly be traced to the historical distortion, between learning and accreditation, which was one of the key features of the Oxford and the Cambridge University systems. In this system, the colleges do the teaching of various students while the universities examine and provide accreditation. This can be asserted because, when the University of London was established in 1836, it had no teaching functions, but merely registered and examined students in the UK, as well as in overseas for external degrees.

Distance Learning can help reduce the high illiteracy rate in third world Africa. As the world is becoming technologically inclined, global trends in education are fastly becoming more demanding. The world is going more technological in its bid to enhance economic development.

By most indices, Sierra Leone is one of the poorest countries in the world, and this is reflected in the current condition of the national education system. Even the higher education sectors in Sierra Leone, once Leaders in West Africa, it’s educational development is very much in decline. As a contribution to reversing this trend, the government of Sierra Leone, through the Ministry of Education, has put a National

Policy on recognizing Distance Education in Sierra Leone and has begun to implement it**.**

1.1.1 MODES OF DISTANCE EDUCATION

In Distance learning, a second model in vogue, is that of a conventional university which provides correspondence study facilities to external students, as well as examining and accrediting these students. Thus one writer El-Bushra (1973) classed the three main components of this model as:

- Universities offering correspondence teaching in one department only (a main example is the school of education at the university of the South Pacific);

- Others include universities in which teaching departments are required to accept both internal and correspondence students, with a separate department responsible for administrative aspects of correspondence study (e.g. the University of New England in Australia, the University of Zambia in Africa etc).

- Third, universities which have separate correspondence teaching units with both teaching and administrative funds (such examples include the University of Queensland in Australia, the Punjab university in India and many American universities, of which Wisconsin is a well known example).

1.1.2 SITUATION OF SIERRA LEONE

In Sierra Leone, "Education was functional and relevant to the needs of society. The ultimate goal was to produce an individual who was honest, respectful, skilled, cooperative, and who could conform to the social order of the day. Most of the learning was done informally through participation in ceremonies and rituals, initiation and demonstration. For instance, boys and girls were involved in practical Agriculture, fishing, mining, cooking, caring and so on. Secret Societies served as institutions for higher learning and the main societies were the Poro or Wonde for boys, and the Bondo or Sande for girls".[1]

[1] A New History of Sierra Leone – 2002 Edition by Dr. Joe A.D. Allie

Furthermore, Dr. Joe A.D. Allie (Ibid) commented that formal education was brought to Sierra Leone by the Christian Missionary Society (CMS) and as a result, this organization during colonialism founded the Sierra Leone Grammar School in 1845; the main reason was to provide a sound religious and general education for boys. In those days, provision was also made for industrial education, and in addition, a separate recessional level of primary school teachers. In that light, both the Sierra Leone Grammar School and Fourah Bay College were the first institutions of their kind in the Sub-Saharan Africa that attracted students from all over West Africa.

In 1849 the female counterpart Institution to the Sierra Leone Grammar School was opened and named Annie Walsh Memorial. Later the WMS opened the Methodist Boy's High school and the Methodist Girl's High school in 1874 and 1880 respectively.

From further literature research, it is evident that the education and other services provided during the colonial era were grossly inadequate and were heavily concentrated in the capital city Freetown, and in the provincial headquarters towns. MANY PAN AFRICANISTS OR BETTER CALLED NATIONALISTS commented that:

"Colonialism left behind a large illiteracy problem and an education system that was not suited to the needs of the people. For the education system was designed to teach the Sierra Leonean to be BRITISH instead of remaining Sierra Leonean."

When we reflect to Sierra Leone after Independence, it becomes clear that educational facilities were greatly expanded, as primary and secondary education became more readily available to all sections of the country. The primary school curriculum was also reformed to make it more relevant to the needs of the Sierra Leone society.

One big achievement was the setting up of the Institute of Education in 1968, to coordinate the activities of the Teacher Training Colleges and organize in-service

training courses for teachers. This was Sierra Leone's first step to Distance Learning Education and I would like to refer to the following questions.

1.1.3 ASCENDANCY OF DISTANCE EDUCATION

Distance Education has occupied the front burner in discussions of trends in education. Perhaps this is so for a good cause. According to a report published in 2002 by the Working Group on Distance Education and Open Learning in Sub-Saharan Africa, there is a great potential for Distance Education to contribute towards education for all. The report states in part:

"In most of the world, education is recognized as an impetus for change and transformation. Yet while richer countries have watched distance education develop from a poor course of traditional education into a full-fledged player in its own right, Sub-Saharan Africa has continued to rely on traditional approaches: face to face interaction with teachers and students, and learning at fixed times in fixed locations according to a system of certification.

"Great strides have been made in providing material and human resources for education in Sub-Saharan Africa. But no country has yet fulfilled the promise of providing access to education for all its citizens. It is within this context, therefore, that distance education offers the hope of reaching the unreached and allowing a second chance to those left behind because they could not afford the time or money to attend school or because there was no school for them to attend".[2]

1.1.4 DESCRIPTION OF DISTANCE EDUCATION

It is very much a matter of conjecture - many have used distance education or distance learning to mean one or several of the following:

(1) Open Learning
(2) Open University
(3) Virtual Education
(4) Flexible Learning
(5) Correspondence Learning
(6) University without Walls

(7) Non-Traditional Learning
(8) Distance Learning
(9) Off-Campus
(10)Non-Campus
(11)Private Independence Study
(12)Satellite Campus Learning
(13)Non-Formal Education
(14)On-Line Learning (E-Learning)
(15)Distributed Learning
(16)Home Study
(17)External Degrees
(18)Sandwich Courses
(19)Extension Studies
(20)Continuing Education
(21)Life-Long Learning

As Phil Race (1998) has observed, it is important not to be unduly limited by any of the above terms and terminologies, or by the definitions that we shall be considering in this discourse. It is worth remembering that they all address, in slightly different contexts, a common set of principles, which emphasize:

- Putting the learner in the driving seat
- Giving students ownership of their learning
- Tailoring study programmes to meet learners' individual requirements
- Philosophy of teaching and learning
- Change roles of learners and tutors towards active participation of both in the process of learning.

Kirkup and Jones (1996) have highlighted some of the confusion and problems of overlapping terminology, relating to open distance education. "Open Learning" is a term recently popular in the UK and becoming more widespread, although an American Educator would be more familiar with the term "Independent Study"

[2] Distance Teaching for Higher and Adult Education by Anthony Kaye and Greville Rumble.

…Internationally, the term "distance education' …is favoured over "independent study" (Moore, 1991), especially since the use of new information and communication technologies, stresses the possibilities of communicating across distances of space and time.[3]

1.1.5 FORMAL DEFINITIONS OF DISTANCE EDUCATION

Formal definitions of distance education include:

- Any formal approach to instruction in which the majority of the instruction occurs while educator and learner are not in each other's physical presence. (Mehrotra, Chandra Mohan; Hollister, C. David and McGahey, Lawrence, 2001)
- Distance learning systems are basically designed for "…students who are remote from the providing institution. The courses provided are very much like conventional correspondence courses, though they may be supported by periods of residential study, or include elements of study counseling and access to facilities for practical work at a local college or university." (CET, Open Learning Systems in Higher Education – Mimeo, London: Council for Educational Technology, 1980)
- Open Learning is a philosophy of learning that is based on the principle of flexibility to increase access to and equity in education. (ADEA, 2002)
- Open learning is learning in your own time, pace and place. (Calder and McCollum
- Distance education is learning which takes place while the educator and the learner are separated by time, distance or both. (Leslie, 1995 etc.
- Distance learning is a system and process that connects learners with distributed learning resources. While distance learning takes a wide range of forms, all distance learning is characterized by:
    1. Separation of place and/or time between instructor and learner, among learners, and/or between learners and learning resources

[3] Materials from Professor David Iornem compilation of Distance Education 2004

2. Interaction between the learner and the instructor, among learners and/or between learners and learning resources conducted through one or more media. (American Council of Education, 1996)

SOME KEY TECHNICAL TERMS IN DISATANCE EDUCATION

What are the three key terms in open distance learning?

Phil Race (Ibid) has isolated the three key terms in Open Distance Learning. These are Open Learning, Distance Learning and Flexible Learning.

- **Open Learning:** Provision of education, training or learning programmes where learners have some control regarding how they learn, where they learn, when they learn, what they learn, the pace at which they learn, how they learn and whether their learning will be assessed.
- **Distance Learning:** Open learning which takes place at a distance from the education provider such as open universities, correspondence colleges and virtual trainers.
- **Flexible Learning:** The Learning principally involving open and distance learning provision, but additionally relating to learning pathways in traditional schools, colleges and universities where learners have a control of time, pace, place and process of their study of particular parts of their programme.
- (Adapted from Phil. Rice (1998) 50 Tips for Open and Flexible learning, Kogan Page, London).

1.1.6 DISTANCE EDUCATION DRIVERS

According to a study by Kinyanjui (2000), African countries are increasingly under pressure to open up access to learning opportunities. The main drivers in this direction are:

- The drive towards Universal access to Primary Education
- The drive towards Universal access to Secondary Education
- The drive towards Universal access to Tertiary Education
- The drive towards Universal access to Lifelong Education

MODES OF OPEN DISTANCE LEARNING

1. Correspondence Courses
2. Challenge Examinations
3. Sandwich Course (Week day work/Weekend Study)
4. Summer contact Sessions/Residential periods.
5. Radio Broadcasts
6. Television Broadcasts
7. Training Films/audio Cassettes
8. Telephone/Electric Counselling
9. On-line Courses
10. Action Learning
11. Learning Journals
12. Accreditation of Learning by other means (Experiential Learning, tutorial by another agency or institute, certification through challenge examinations, etc)

DRIVERS OF DISTANCE EDUCATION

- Cost
- Demand
- Globalization
- Changing Values
- Quality
- Recognition
- Acceptability by reputable corporate organizations
- Changing favourable government policies
- Need to overcome skills shortages by keeping employees on the job while they receive training.
- Individual needs/demand to update their skills.
- Legitimization of open flexible learning.

LIMITS OF TRADITIONAL TRAINING

- Trainers may be out of touch
- Trainers may lack credibility with learners

- Course Timing may be inconvenient
- It can be difficult and costly to leave work to attend.

1.1.7 OVERALL BENEFITS OF DISTANCE EDUCATION

- Candidates learn in their own time
- No disruption to productivity
- Candidates work at their own pace
- Candidates can learn in private without the ignominy of classroom embarrassment
- Less personal cost
- Less social cost
- Candidates set goals and know where they are heading to.

1.1.8 COST EFFECTIVENESS OF DISTANCE EDUCATION

Most persons that initiate Distance Learning as a strategy for educational delivery cite cost-effectiveness as one of the appeals.

The Nigerian Minister of State for Education, Haja Bintu Ibrahim Musa, captured this when she referred to Distance and Open Learning as being "very efficient, cost effective and formidable. Its enormous potential in fostering education development through universalizing access and enhancing quality makes it attractive and compelling".

a) Cost-effectiveness as observed by Neil Butcher of the South African Institute of Distance Education is about "cheapness" of education delivery, usually expressed in terms of per-student cost.

b) Cost-effectiveness, he says, represents striking the optimal balance between cost, student numbers, and educational quality, a balance, which can change with situation and contexts.

c) There is ample evidence that Distance Learning reduces the cost of educational provision. A number of case studies reported at the Africa Distance Education Association (ADEA) Conference in July 2004 at Abuja, Nigeria, point towards substantiating this position. It was observed that programme delivery could be drastically reduced.

1.1.9 CRITICAL SUCCESS FACTORS IN DISTANCE EDUCATION

- Vision
- Success will depend on the vision of those charged with planning and implementing at national and institutional level
- Without a clear vision of how Distance Education can be harnessed and its weaknesses overcome, any Distance Education initiative is doomed to failure
- Vision needs to be located in a concrete understanding of what the values, benefits and goals of Distance Education actually are.

- National Policy redesigning to support a more flexible approach to planning and implementation of education
- ICT Infrastructure
- Strategic planning and change management
- Curriculum and materials development
- Connectivity
- Stakeholder sensitization/development – learners, educators, administrators, leaders, users.
- Quality Assurance
- Learner Support
- Marketing
- Private sector involvement
- Learning from past successes

Prof. Chike Obi, Chief Obafemi Awolowo, Prof Ephraim Okon, Alvan Ikoku, Durojaiye, M T Mbu, Chartered Accountants, Chartered Secretaries, Rapid Results College, Exam Success College, Wolsey Hall College, Metropolitan Correspondence College, Transworld Tutorial College, etc.

- Focusing on problems to be addressed through Distance Education
- Benchmarking and adoption of best practices, standards and protocols

1.2 PERSISTENT PROBLEMS OF TRADITIONAL EDUCATION

Traditional Education first entered in Africa. This type of education has created a lot of problems. Some of the problems included: -

- Disintegration of the African culture.
- Separation of marriage couples.
- Separation of children / learners from their families.
- Loss of employment by the on the job learners.
- Teachers biases and prejudices have forced many learners out of the learning Institutions.
- Teachers' defects, like blindness, dumbness, stammer etc
- Teachers' negative characteristics like quick tempered, irregular in school, subject to many mistakes etc.

This study seeks to find out the extent to which Distance Education can solve the numerous educational problems, most especially in Sierra Leone.

The traditional education requires learners to go to churches and perform other education conventions, like having boys and girls to study together before and during examinations. When this happens the Africans are forced to gradually leave their culture, for a new culture. Catholic schools are notorious for forcing the learners to attend no other churches or have no other religions except theirs.

Another problem created by the Traditional Education is the separation of the marriage couples. Students who are married do leave their husbands (in the case of female students) and or wives (in the case of male students) to stay with other students who are either males or females. This has continuously led to the separation of many couples on account of the engagement in Traditional Educational systems. This is also similar to the case of children with respect to their families.

Furthermore, Traditional Education has contributed to the loss of employment of many Africans who were employed before engagement in educational pursuits. In the African setting many people are not promoted because of their low educational levels. So they apply to the universities and colleges in order to further their studies.

When they leave, new people are employed to fill the employment vacancies. When this is done the new employees or the old ones occupy the positions that are vacant. When the learners return, they find it difficult to be reemployed or even receive their previous positions.

Teachers in the traditional educational institutions are visible and so have frequent contacts (facially) with their students. Some have biases because of race, religion, tribe and the like. Such biases have contributed to force many learners to leave the educational pursuits of the Traditional Education.

Teachers' defects (i.e. characteristics that cannot be controlled by the learners) have also made the traditional learning problems and to the learners. Some who are blind use the oral methods of teaching and learners who are normal find it difficult to understand and co-operate with those tutors.

Teachers' negative attitudes (which can be controlled) have also contributed to make the Traditional learning unfavourable. When teachers are irregular, the learners do not take their work very serious because they depend on the teachers heavily for the learning of ideas and skills. This is not entirely so in the new system of learning called Distance Learning.

1.3 PURPOSE OF THE STUDY

The study hopes to find out that Distance Learning in Third World Africa will help to solve many educational problems of the people. And such problems can be either internally or externally caused. The study will similarly address the problems of reducing illiteracy and increasing access and maintaining quality.

The study will also basically be assessing the role of Distance Learning Education in the drive towards addressing the numerous educational problems in Africa - Discovering the attitudes of the people towards the Distance Learning Education as compared to the traditional education. The study targets Teachers and Professionals in particular.

GENERAL AIMS:

1. To provide an answer to the question - Whether distance learning can help solve the numerous educational problems in third world Africa?.
2. To make available another source of information for future researchers in Distance Learning in the world today and African in particular.

SPECIFIC OBJECTIVES:-

1. To identify the various people who go in for distance learning in Africa and their main reasons for doing so.
2. To discuss the various distance learning institutions and courses available to Africans.
3. To identify and discuss the various educational problems in Africa.
4. To determine how distance learning has contributed to solving the numerous educational African problems.
5. To discover methods by which the distance learning will improve in Africa
6. To suggest ways by which the distance learning institutions and the in-campus learning institutions can work together.

1.4 NATURE OF THE RESEARCH DESIGN QUALITATIVE, QUANTITATIVE, MIXED etc)

RESEARCH DESIGN – This study is scientific and so will employ both the qualitative and quantitative presentation of the study. Hence it is partially qualitative and partially quantitative in nature.

RESEARCH METHODS

This research will use three broad research methods; namely:

- Primary – collecting data from the direct elements of the research population.
- Secondary – collecting data from semi-published data sources like newspapers, case studies and other written documents.

- Tertiary sources – collecting data from people who are not the direct elements of the research population.

RESEARCH POPULATION – The direct elements of the study will be drawn from African countries with a further limit to West African and finally Sierra Leonean.

This population shall directly include –

- Students of distance learning
- Teachers / Lecturers of distance learning
- Past students / graduates of distance learning
- Authorities / Administration of distance learning etc.

The indirect members include –

- Students of in-campus learning institutions
- Tutors of in-campus learning institutions
- Administration of in-campus learning institutions
- Other members of the public.

1.5 RESEARCH QUESTIONS/ HYPOTHESIS

During the study the following hypothesis and objectives will be investigated.

Hypothesis I:

Null Hypothesis – There is a Negative feeling about Distance Learning in terms of quality.

Alternative: - There is high value for Distance Learning

Hypothesis II:

Null – There is set time and place.

Alternative – There is a high level of flexibility and time available.

Hypothesis III:

Null – Low level of income and little family ties.

Alternative- cost effectiveness and less social cost.

Hence the rationale for the study topic: “Distance Learning will in many ways help to solve the numerous educational problems in third world Africa”.

1.6 ASSUMPTIONS AND LIMITATIONS OF THE STUDY

This research will serve as a case study of how distance learning is invaluable to third-world Africa, taking cognizance of the fact that many people who wanted to learn are faced with a few educational opportunities.

The study will also be of benefit to students who are distance learners so as to take their pursuits very seriously as compared to the past days when distance learning had little or no impact to the educational sector in Africa.

Thirdly, the study is important because it will discover numerous problems challenging the distance learning in the African continent with special reference to Sierra Leone and its neighouring countries (viz: Guinea, Liberia, Gambia etc).

Fourthly, and lastly, the study aims at providing some solutions (through suggestions / recommendation) on the problems threatening the life of distance learning in Africa and Sierra Leone in particular.

1.7 DEFINITION OF TECHNICAL TERMS.

DE	Distance Education
UNDP	United Nations Development Programme
ICT	Information Communication Technology
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	Secondary & 4 Years Tertiary Education
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WAEC	West African Examinations Council
IAMTECH	Institute of Advanced Management & Technology
SSL	Statistics Sierra Leone
T/V Cert	Technical/Vocational Certificate
SLADEA	Sierra Leone Adult Education Association
HTC	Higher Teachers Certificate

CHAPTER TWO

LITERATURE REVIEW

2.0 The second chapter after a critical analysis now takes the under mentioned shape:

2.1 THEORY OF DISTANCE LEARNING AND THEORETICAL FRAMEWORK OF THE DISSERTATION.

2.1.1 THEORY OF DISTANCE LEARNING:

NATURE AND SCOPE OF DISTANCE LEARNING.

a) Educational Experiments and Change

Alternatives to traditional higher education emerged in the U.S. in the 1960s and 1970s. Trends such as escalating college costs, a renewed interest in non-traditional education by a more mobile population, and success of Britain's Open University paved the way for numerous experiments in higher education (Gerrity, 1976).

Programs such as the University Without Walls, external degree programs, and imitations of the British Open University were encouraged by large grants from the Carnegie Commission on Higher Education.

The instructional technology movement was defining its purpose during the late 1960s and moving further away from equating instructional technology with audio-visual devices (Reiser, 1987). In 1970, the Department of Audiovisual Instructional changed its name to the Association for Educational. Communication and Technology, and defined educational technology as "a field involved in the facilitation of human learning through the systematic identification, development, organization, and utilization of a full range of learning resources .... (AECT, 1972, pp. 36-37). The same period saw an increased attention to instructional technology and "systems" approaches to the design of instruction based on theories of cognitive psychology and individualized instruction (Reiser, 1987).

Distance education programs which exist today have a wide range of approaches. The CALS program offers independent study courses through computer networking and relies heavily on computer-based student contact and feedback. Nova University offers computer-delivered instruction; and the students communicate with instructors through electronic mail, attend some concentrated centralized class sessions, and meet in weekend cluster groups. The Mind Extension University offers undergraduate and graduate degrees through cable networks, and it supplements video courses with texts and other collateral materials.

In summary, the history of distance education shows a field that appears to be in a constant state of evolution that is supported by theory, but in need of research which can fill many unanswered questions. The historical view of distance education shows a stream of new ideas and technologies balanced against a steady resistance to change, and it often places technology in the light of promising more than it has delivered. History shows non-traditional education trying to blend with traditional education while striving to meet the challenge of constantly changing learning theories and evolving technologies

b) Attempting to Defining Distance Education

Distance education is beset with a remarkable paradox - it has asserted its existence, but it cannot define itself." (Shale, 1988, p.25).

How distance education is best defined or differentiated from other educational approaches has been the subject of much debate. From the perspective of many educational technologists, distance education is "inexorably linked to the technology" (Garrison, 1987) and seems to be viewed as different from other forms of education, a factor which may contribute to course development and acceptance problems.

Focusing on the distance factor and on technology takes the emphasis off the "dialectical relationship between teacher and student" which Shale feels is the foundational principle in the educational process (Shale, 1988, p. 25). To Shale, "distance" (and the technology which accompanies it) is an incidental consideration

and not a "defining criterion" for education.

A broadening of the definition of distance education is urged by Barker, Frisbie and Patrick (1989) who acknowledge correspondence study as the historical foundation of distance education but suggest that there are really two forms of distance education. One is the traditional correspondence- based distance education which is independent study oriented and the second is telecommunications-based distance education which offers the teaching and learning experience simultaneously (1989, p. 23).

The Garrison and Shale definition of distance education (1987a, p. 10-11) offers a minimum set of criteria and allows more flexibility. They suggest that:

- Distance education implies that the majority of educational communication between teacher and student occurs none contiguously
- Distance education involves two-way communication between teacher and student for the purpose of facilitating and supporting the educational process

Distance education uses technology to mediate the necessary two-way communication.

The organizational pattern and operating practices of a distance education facility are generally based upon the educational philosophy of that institution as well as economic and political restrictions (Verduin & Clark, 1991). Most educators would prefer a more student-centered model while politics and economics might dictate a more institution-centered approach with greater control and a larger number of students.

Three different modes of operation under which distance education can operate are identified by Rumble (1986), including:

Sole responsibility - where the institution and its administration have distance education as their sole responsibility and purpose, such as with the Open University in the United Kingdom. Administration and faculty focus on distance education teaching methods and student needs, and are not controlled by other programs or purposes. Development of teaching techniques and innovative practices are seen as

primary benefits.

Mixed mode - institutions where both distance and conventional education occur, such as the University of New England in Australia and most traditional American universities. Organization may fall under a single department with university administration being responsible, several departments may offer distance education with each department administering its own program, or a distinct unit may offer distance education in a variety of areas and be solely devoted to this purpose. The mixed mode approach may have the advantage of being able to draw upon the resources of the resident faculty and services, but a disadvantage is that some faculty and administrators may consider distance education to be less effective and less important than campus-based instruction.

Consortium - a group of institutions or distance education programs devoted to distance education as a means of broadening or sharing distance education programming. Students may register with their own institution and use centrally-developed learning materials with credits being easily transferable. This is one of the fastest growing segments of distance education (Verduin & Clark, 1991) but it also experiences administrative problems when it comes to collaboration between universities and conflicts in philosophical differences, teaching resources, and cost sharing. The University of Mid-America failed in its attempt at a consortium but efforts such as the Mind Extension University(r) are viewed as a success.

Any organizational or administrative structure must have effective communication for it to succeed. Distance education, with its diversity of activities and staffing, the nature of its students, and externally based instructional programming, requires very effective communication. According to Verduin and Clark (1991), information must flow in such a manner that all involved are aware of common goals, activities and procedures, and the appropriate feedback is possible whenever necessary.

Kaye and Rumble (1981) cite the problems of educational institutions in introducing distance learning programs, and suggest that a major issue confronting many universities is how to resolve the conflict between distance education, which often

requires the management and structure of a business enterprise, and traditional academic areas which have a completely different style of governance. These differences "often find expression in a conflict between academic 'freedom of action' and the necessity for maintaining effective production mechanisms" (p. 179) necessary for distance education course development and distribution.

The separation between innovation and organization can "converge" as the innovation moves toward institutionalization through boundary expansion and resolution of conflicts (Levine, 1980, p. 14). It is this integration process which is the goal of most distance education programs at traditional universities, but studies suggest that there are often institutional barriers to the convergence of distance and mainstream education.

To focus on technologies without considering their role as a catalyst for change can adversely affect the ability of technologies to enact change (Heinich, 1982). Heinich suggests that we tend to treat all technological innovations almost the same, yet technologies such as television can affect the power structure in education, and faculty prefer the power structure the way it is.

Power and politics are primary forces in the implementation process; and school systems, like other social systems, have to be viewed in terms of the seeking, allocation and use of power (Meyer & Rowan, 1978). According to Sarason (1990), the communication network, which is dependent on personal contact and on who knows whom, often identifies the path for implementation of an innovation.

Innovators have been accused of being so passionate about their innovation that their reality is distorted and they fail to consider the importance of building constituencies to help support their cause (Sarason, 1990) and Rogers (1983) even identifies a "pro-innovation bias" which often appears in the implementation of an innovation and any related research which follows. Educational innovations seem to receive strong support from a relatively small segment of adopters but may have limited support from the group affected. Bardach (1978) suggests that even when an effort is made to develop support from constituents, it is difficult to find a cause with "a broad

commonality of interest that would form the basis for coalition building" (p. 42).

Educational change is technically simple and socially complex, and definitely not a linear process. Educational innovations such as the early distance education programs were probably motivated by a "vision" that Fullan (1991) would suggest "permeates the organization with values, purpose, and integrity for both the and how of improvement ... its formation, implementation, shaping and reshaping in specific organizations is a constant process" (p. 81-82). For a vision to become a reality, Miles stresses that it must be "shareable" and be shared with others; "it provides direction and driving power for change, and the criteria for steering and choosing" (1987, p. 12). And this vision must include a shared vision of the change process which can provide a strategy for implementation.

Although there are clear strategies for implementing innovations, change is often at the mercy of organizational culture. "Attempts at innovation in schools have usually ignored the cultural and structural traditions of the sociocultural system ... If a school has a culture in place, and there is ample evidence to suggest it does, those involved in the rigorous maintaining of the status quo are not going to be eager candidates for innovation" (Schrum, 1991, p. 37).

A case study of Athabasca University in Alberta, Canada by Shale (1985) showed some surprising results. Although the university was an "open" distance education facility and with a commitment to trying innovative educational approaches, over time it had become more and more traditional. In the beginning, the core of the academic program was the instructional designer with few academic staff, and multi-media were used heavily. But this emphasis on innovation changed and now the role of the instructional designer is not as important as that of the teacher, courses follow a more traditional lecture approach, and little use is made of media except to enhance written materials.

Shale suggests that understanding this shift back to the traditional lies "in a deeper understanding of what a university is" (1985, p. 11) and whether a traditional university allows for change and innovation. The educational technology point of

view appears to regard education as "packageable" while universities are traditionally characterized by process, academic staff, and research. Costs and the time required producing distance education courses are two factors suggested for this tendency to the traditional, but Shale also feels distance education has not dealt with some of the natural boundaries such as jurisdiction and coordination, factors which impact on the institutionalization of distance education programs.

Directions in Research

Much of the research done to date has centered on the use of new technologies for teaching and distance education's effectiveness as a teaching medium. A predominance of this research has used survey questionnaires with closed-ended questions with the range of options determined by the researcher (Morgan, 1984). This empirical research is useful for studying drop-out rates, learning about student preferences, and attempting to compare the variety of media used for delivery, but Morgan (1984) has urged that qualitative research methods be used to study distance education as a whole. Coldeway (1988) acknowledges that the focus of most distance education institutions is on the technology but suggests that the research is shifting to "the more human side" of the system as the programs age.

Holmberg (1984), as an international authority on distance education, strongly urges undertaking inductive studies of distance education "organization" to look at administrative framework, processes of developing and distributing learning materials, interaction between system members, and other activities required by society and the educational establishment. This type of study has not been done and seems to have value for establishing new distance education programs or making comparisons with other traditional and non-traditional programs

Roles in the Instructional Process

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 it would include academic content specialists, instructional designers, writers and editors, media specialists, and specialists in adult

learner behaviour and curriculum development (Verduin & Clark, 1991). These instructional development activities should support the institution's philosophy and goals, and the mission of the distance education program.

If anything is evident in this team approach, it has the potential to be complex and open to interpretation. The roles of academic content specialists, instructional designers, writers and editors, media specialists, and specialists in adult learner behaviour and curriculum development can be seen to overlap and to not be very clearly defined. An educational technologist may have skills in instructional design, as a media specialist, in adult learning behaviour and in curriculum development, and their job may begin with assessing program needs and end with product implementation. But their role may be perceived as someone working primarily to implement electronic technology into the learning system or simply be misunderstood. The counter problem is that "use of computers, television, teleconferencing, and other means of transmission does not make one an educational technologist" (Wagner, 1990, p. 62).

The relationship between distance education and educational technology is viewed as strong, but the problem of defining roles for instructional designers/ developers is difficult. And the role of the educational technologist may be defined, not by the field, but by the organization's philosophy of education and their broader educational goals. Wagner (1990) suggests that an issue to consider is whether "distance education can afford to emphasize technology" or whether "it must emphasize instruction" (p. 62). Wagner suggests that educational technology can serve as a holistic approach where process and product are both components of the system.

Teachers in Distance Education

The likelihood of significant increases in distance learning enrolments within the next decade will have a profound impact on faculty members' instructional roles, according to Beaudoin (1990). The changes that he envisions are tied to distance education's more learner-centered system, and he predicts that teachers accustomed to more conventional teaching modes will have to "acquire new skills to assume expanded roles not only to teach distance learners, but also to organize instructional

resources suitable in content and format for independent study" (Beaudoin, 1990, p. 21)

A key player in the distance education team should be the teacher since the use of telecommunications in higher education requires faculty acceptance (Dillon, 1989). But "negative faculty attitudes, ranging from apathy to open antagonism, remain a major barrier" to implementation of distance education programs (Brock, 1987, p. 40). A growing acceptance among university faculty is acknowledged by Brock and he blames faculty attitude on a resistance to required changes in familiar teaching patterns and the faculty having to relinquish a degree of control over the teaching-learning process.

A survey of Oklahoma administration, faculty and telecourse coordinators led Dillon to suggest expanded rewards and more faculty development efforts, and to express the belief that the success of distance education will "require changes in the practices and attitudes of faculty in an environment that is still suspicious of or threatened by the non-traditional. Only the system which effectively rewards it will succeed at change" (1989, p. 42). A survey of teachers using satellite delivery methods showed a significant growth in credit course delivery since 1984, but it also identified several problem areas. According to Albright (1988), needs assessments were rarely conducted prior to course development, interactivity was minimal due to the practice of up linking videotaped lectures, the visual components of most courses were underutilized, faculty training was limited to technical considerations, and faculty efforts were largely unrecognized for promotion and tenure.

A study by Clark (1993) has also attempted to measure faculty attitudes toward distance education and specific media used in distance education. Among Clark's finding were: 1) that university faculty who were slightly positive about the concept of distance education were more negative about their personal use of distance education, 2) faculty who were more familiar with distance education were more receptive, and 3) faculty was more positive toward telecourses and video conferencing, and less positive toward correspondence and audio conferencing.
Respondents expressed the normal concerns about course quality, student-teacher

interaction, and faculty rewards for teaching distance education courses. Clark suggests that, with faculty still being ambivalent about distance education, a cautious optimism regarding the future of distance education in the U.S. is appropriate.

Technology and Teaching Most educational technologists do link distance education to technology (Garrison, 1987) and may view it as different from other forms of education. Claims about the affect of new technologies on learning have caused many people to suggest a change in the way new technologies are evaluated for distance learning (Clark, 1989). Although Salomon (1981) and Clark (1991) make the point that instructional strategies and not the medium is the key to effective learning, technology and production considerations rather than teaching-learning theory or the instructional development process is often the driving force behind distance education programs.

The interest in utilizing "instructional technologies" to accomplish a variety of educational delivery needs has grown to the point where "preparing teachers to use technologies is assumed to be the main function and primary intellectual interest of the educational technologist" (Heinich, 1982). While Heinich feels that teacher preparation is needed, he points to this as a problem in defining the field of educational technology. Romiszowski (1981) suggests that the educational field "has been plagued with more than its fair share of solutions looking for problems" and suggests that developers often reflect a vested interest in technology or make premature decisions to the instructional solution before fully understanding the problem.

Studies on the use of various media in distance education have supported Schramm's view that "learning seems to be affected more by what is delivered than by the delivery medium" (1977, p. 273) and Clark's analogy of media "not influencing learning any more than the truck that delivers groceries influences the nutrition of a community" (1983, p. 3). Also, studies comparing education in the classroom with technologically-delivered classes (Beare, 1989; McCleary and Egan, 1989) showed no significant differences in academic performance.

Recent developments in technology are believed to be removing some of the disadvantages associated with media in distance education. Bates (1984) suggests that new technologies promise "a wider range of teaching functions and a higher quality of learning, lower costs, greater student control, more interaction and feedback for students" (p. 223). In fact, the 1990s are experiencing the emergence of digital media which has the potential to blur the lines which separate various media, as predicted by Baltzer (1985).

The issue of media vs. method is likely to continue to be debated in relation to distance education, but there is no doubt that distance education is different from other instructional approaches. A study by Gehlauf, Shatz and Frye (1991) on the reaction of teachers to the teaching experience in the traditional classroom compared to interactive television shows teachers wanting to cling to more traditional approaches but finding these methods not as effective, teachers feeling the need to be better organized, and feeling the need for training for distance education teaching.

2.1.2 **Characteristics of Distance Learning System** –

Anthony Kaye. In his submission, he maintained that the use of distance learning methods for university level education is a practice that has existed over 100 years ago. He added that these origins can partly be traced from the historical distinction between teaching and accreditation which was one of the key features of the Oxford and Cambridge system.[4]

a) The colleges taught and the university examined. It can be deduced that when the University of London was established in 1836, it had no teaching staff, but merely registered and examine students, in the UK and overseas. It is important to note that **the first model**[5] of the distance learning is the one particular pattern of provision, and perhaps the earliest: The correspondence tuition provided by the independent organization for degrees to be awarded by a public university.

[4] Distance Teaching for higher and adult Education – Anthony Kaye and Grevilte Rumble

[5] Distance learning plulusplер who experience the three variant of the second model.

b) **The second model** is that of a conventual's university which provides correspondence study facilities itself to external students, as well as examining and accrediting these students.

Ref: El-Bushra (1973) – he stated that there are: universities offering correspondence teaching in one department only (e.g. the school of Education at the University of the South Pacific).

- Also universities in which teaching departments are required to accept both internal and correspondence students, with a separate department responsible for administrative aspects of correspondence study. E.g. involved – the University of New England in Australia and the University of Zambia.
- Thus universities which have separate correspondence teaching units, with both teaching and adventure fund (e.g. the University of Queensland in Australia, of which Wisconsin is a well known example). It is also important to note that another example is presented by the established college and institution which our distance learning units in which broadcasting especially telegram, plays a major role, and where this emphasis alters radically the traditional correspondence teaching model.

c) **The third model of university level** – correspondence teaching is that of collaboration between a numbers of different institutions of higher education in catering for external students. Thus the El-Bushra cites, Massey University in New Zealand as an example[6].

It is pertinent to note that other examples of correspondence schemes are the regional groups of French Universities such as the **Entente de L est** and the **Crerman Institute for Distance Studies** at Tiibingen, which is charged with

[6] It provides correspondence education to students at all other New Zealand Universities.

arranging provision of correspondence education at University level in collaboration with the existing universities and broadenly organization.

d) **The fourth model is probably unique to France,** and is that of massive centralized state provision for correspondence education at all levels, including university levels. And the Centre **Natural de Tèlè – Ensignement** in France is directly under the control of the Ministry of Education and currently has some 200,000 students in its books, of which about 5,000 are studying at degree level. Examinations and qualifications attained are identical with those of the formal school / university.

It is however worthy to note that the model which represents the most newly development is that of autonums institute established solely and specifically for external students.

2.1.3 Theoretical framework of the Dissertation:

This write up is based on the assumed theory of whether Distance education is important for Africa or not irrespective of the Promises and Challenges around it.

2.2 A GENERAL HISTORY OF DISTANCE EDUCATION

The history of distance education could be tracked back to the early 1700s in the form of correspondence education might be best linked to the introduction of audiovisual devices into the schools in the early 1900s.

In the early 1700s, people have been using the postal services, which takes very long time to reach the supervisor and vice –versa.

In Africa, where access to modern technology is below fifty (50% percent; it takes over a century for the continent to grab this great opportunity. Distance learning systems are basically designed for "students who are remote from the providing institution, the courses provided are very much like conventional correspondence courses, though they may be supported by periods of residential study, or include

elements of study counseling and access to facilities for practical work at a local college or University"

In tracing the history of distance education, the phenomenon was actually conceived in Africa when, in 1873, the University of the Cape of Good Hope was founded to undertake independent learning by degree candidates.

The University of South Africa was the first institution established to run degree programs in Africa. Former South African President, Nelson Mandela, is one of their outstanding Alumni.

Throughout the history of human communication, advances in technology have powered paradigmatic shifts in education (Frick, 1991). Communication between teacher and student is a vital element of successful distance education. Media has played an essential role in the establishment of teacher and student communication. For communication to take place, at a bare minimum, there must be a sender, a receiver, and a message. If this message is intended as an instruction, then besides student, teacher, and content, we must consider the environment in which this educational communication occurs (Berg & Collins, 1995). Moore (1990) sees the success of distance education to be based on the content of the dialog between teacher and student and the effectiveness of the communication system in an educational process.

There are some discussions about the frequencies and nature of dialogue. Hoffman (1995) referred to dialogue as the capacity for teacher and student to respond to one another.

During the nineteenth century, in the United States, several activities in adult education preceded the organization of university extension beyond campuses. In 1873, Anna Ticknor created the society to encourage studies at home for the purpose of educational opportunities for women of all classes in the society. This Boston-based, largely volunteer effort provided correspondence instruction to 10,000 members over a 24-year period despite it's resolutely low profile (Ticknor, 1891).

Printed materials sent through the mail were the main way of communication, teaching, and learning. In 1883 a Correspondence University headquartered at Cornell University was established, but never got off the ground (Gerrity, 1976).

The first official recognition of education by correspondence came from 1883 to 1891 by Chautauqua College of Liberal Arts. This college was authorized by the state of New York to grant academic degrees to students who successfully completed work at the summer institutes and by correspondence during the academic year (Watkins, 1991). Interest regarding the effectiveness of correspondence study verses traditional study was the subject of debates and discussions. Watkins (1991) wrote that William Rainy Harper, professor of Herbrew at Yale University, who was authorized from 1883 to 1891 to grant degrees to students who completed correspondence study, believed that correspondence study "would not, if it could, supplant oral instruction, or be regarded as its substitutes." Watkins (1991) in her book cited that Vincent (1885) wrote,

the day is coming when the work done by correspondence will be greater in amount than that done in the classrooms of our academics and colleges; when the students who shall recite by correspondence will far outnumber those who make oral recitations.

Vincent's vision brought a new way of thinking about the value and future of distance education for institutions. Watkins (1991) explained that leadership for the development of university-level extension throughout the nation was provided by Herbert Baxter Adams, the foremost historian of his day. His enthusiasm for the extension movement was a positive force for his students at John Hopkins University. Ultimately, his students would carry on his extension work across the country.

Correspondence study has grown in popularity, acceptance, and effectiveness. In 1915, creation of the National University Extension Association (NUEA) broadened the focus to other issues, such as necessity of new pedagogical models and new national level guidelines, such as university policies regarding acceptance of credit from correspondence courses, credit transferral, and standard quality for correspondence educators.

The University of Chicago faculty survey findings in 1933, suggested that correspondence study should be justified on an experimental basis, generating innovations and research data leading to improvements in teaching methodology (Gerrity, 1976). This research study was very important for the future knowledge base in this field. The medium of mail was a dominate delivery system for over forty years, but new delivery technologies started to provide additional options for correspondence study. Pittman (1986) wrote,

Visual instruction, including lantern slides and motion pictures was added to the repertory of many extension units in the period of 1910-1920, but most promising new technology for correspondence instruction was instructional radio.

In the years between the World Wars (1918-1946), the federal government granted radio broadcasting licenses to 202 colleges, universities, and school boards. With all the demands and popularity of instructional radio, by the year 1940 there was only one college-level credit course offered by radio and that course failed to attract any enrolments (Atkins, 1991). Still, the concept of education by radio was a major reason for development of educational television by the mid 20th century. More and more association and social support developed for distance education around the country. Packing companies, railroads, the American Banking Association, Labour Unions, Army and Navy, and state and national welfare associations recognized the merits of correspondence instruction (Watkins, 1991). With the growth of popularity and needs for correspondence study, new questions such as learners' characteristics, students' needs, effectiveness of communication, and value of outcomes in comparison with face-to-face study became public interests. From the pursuit of answers to these questions emerged needed research initiatives such as Gale Childs' (1949) dissertation studying the effectiveness and reliability of correspondence study as an educational method (Watkins, 1991). The interest in finding answers for these questions was the reason for many new research studies which have contributed to the growth of the knowledge base of distance education. Clark (1996) wrote, "the studies of improvement of teaching by using media have been part of educational research since Thorndike (1912) recommended pictures as a labour-saving device in instruction." In response to wartime needs, extension programs also provided a variety of technical and mechanical training opportunities, as well as short courses

and refresher courses (Watkins, 1991). After World War II, television was considered as another delivery option in the correspondence study.

In the early 1950s, despite the efforts of leaders in the field, correspondence study struggled to gain acceptance, and it was still seen as suspect by academics (Wright, 1991). During this period, research helped to further the acceptance and extension of correspondence study. As Childs (1973) indicated, little research existed to support the apparent and perceived strengths of the methodology, and there was little or no sense of professionalism. During the fifth International Conference on Correspondence Education (ICCE), in Alberta, Canada, delegates from universities, governments, and proprietary institutions reflected a growing interest in the research of correspondence study (National University Education Association (NUEA), 1957). Over the past half century, the Ford Foundation has played an important role in the development and support of area and international studies within American higher education. With a Ford Foundation grant, Childs initiated a project, in 1956, to study the application of television instruction in combination with correspondence study. From this important and needed study, Childs concluded "television instruction is not a method. Television is an instrument by means of which instruction can be transmitted from one place to another" (Almenda, 1988). Childs also found no appreciable differences in regular classrooms by means of television, or by a combination of correspondence study and television (Almenda, 1988).

During the 1960s and 1970s, a number of alternatives to traditional higher education developed in the United States. The major reasons were broad national trends that included rapidly escalating costs of traditional resident education, interest in informal and non-traditional education, an increasingly mobile American population, the growth of career-oriented activities, necessity of learning new competencies, public dissatisfaction with educational institutions in general and the early success of Britain's Open University (Gerrity, 1976).

Britain's Open University brought a new vision of independence for distance education as distinct from traditional education. Britain's Open University played a major role in the development of much of the important research in distance learning

(Zigerell, 1984). Britain's Open University is the largest and most innovative educational organization in the world. It is a leader in the large-scale application of technology to facilitate distance learning. Open University brought the needed respect and confidence to the correspondence program around the world. The success of Britain's Open University was the major reason for the development of open universities in other countries, such as America and Japan. Open University not only overcomes the restrictive concept of place and time, but also eliminates the boundary of nations and nationalities. There are more than 218,000 people currently studying with the Open University, and the principal qualifications awarded by this university are BA, and Bsc degrees, Masters, an MBA, and research degrees including Bphil, Mphil, and PhD (Open University, 1996).

The first United States open university was New York State's Empire State College (NYSES), which commenced operation in 1971 (Gerrity, 1976). One of the main purposes of the NYSES was to make higher education degrees more accessible to learners unable to attend traditional programs, campus-based courses. The program in NYSES modified the concept of academic credits and provided a greater flexibility regarding degree requirements and time limitations than was characteristic of tradition-based degree programs (Gerrity, 1976).

Providing a direction for advancement of research activities in distance education was a major concern of leaders in this field. Two individuals who played major roles in the advancement of the state of scholarly research in the field are Charles Wedemeyer of the University of Wisconsin and Gayle Childs of the University of Nebraska (Wright, 1991). Wedemeyer and Childs made major contributions in the transformation of correspondence study into a profession. Both played major roles in the advancement of distance education research. They were recognized as leaders of the movement throughout the 1950s, 1960s, and 1970s (Wright, 1991). Wedemeyer and Childs not only provided needed leadership to their universities correspondence programs, but also provided direction for the national and international growth of this method of teaching and learning. Both men made major contributions in the Correspondence Study Division of the NUEA and Internal Conferences on Correspondence Education. Wedmeyer and Childs publications, books, and films on

correspondence study have provided teachers and students with an invaluable source of process design, teaching, and learning.

In mid 1960, the development of the Correspondence Education Research Project was a major hope for more research activities and definition of the status of the correspondence study in American higher education. In 1968, the division of Correspondence Study changed its name to the Division of Independent Study; this new division provided more options for delivery of education in the form of videotape, programmed instruction, television, telephone, and other multimedia teaching and learning (National University Extension Association (NUEA), 1969).

In the last 20 years, with the advancement in technology, independent study has become more accessible for distance education students. Zigerell (1984) wrote, "the ease with which modern communications technologies can link educational institutions to homes, work-sites, and community centers has made adult education and lifelong learning matters of national policy" (P. 53). At the same time, the loads and responsibilities of adults have become of interest to experts and educators in distance learning. Feasley (1983) stated that individuals who must learn at a distance have ongoing obligations such as employment, family responsibilities, handicaps, or live in geographically isolated area. The 1970s and 1980s introduced the related concept "distance education" which posed new challenges to traditional independent study, forcing a re-examination and redefinition of the place of independent study in this new international movement (Wright, 1991).

In the late 1970s and early 1980s, cable and satellite television came into use as a delivery medium for distance education courses (Wright, 1991). During the 1980s, many quality telecourse offerings were available by using cable and satellite delivery. But as Munshi (1980) said, "Unfortunately, systematic efforts to evaluate telecourses have been the exception rather than the rule." In the fall of 1991, eighteen institutions, including the University of California, the University of Oklahoma, Penn State, and Washington State, used the Mind Extension University (MEU), Educational Network to deliver video course materials for independent study courses (MEU catalog, 1991). Women’s desire and participation in distance education helped

the growth of distance education in the 1980s and 1990s. The report of the survey of telecourse enrolments in five states showed 67% of the participants in the distance education were women (Instructional Telecommunication Consortium, 1984). Participation of women in distance learning was directly related to political and social changes in women's position within the family and society, technological changes in the work place, and the economic necessity of participation, and the job market and new job opportunities.

The research activities of Britain's Open University provided new directions and emphasis for more research in this field. Publication of Research in Distance Education in 1989 provided great opportunity to collect information about ongoing research projects and the results of current research in the field of distance education. Until the arrival of this new periodical, most research institute descriptions were found in sources difficult to access in the United States (Moore, 1985; Rumble & Harry, 1982).

Coldeway (1982) identified the following reasons for the limitation of research activities in distance education.

1. Educational researchers are rarely present during the design of distance learning systems.
2. There is no clear paradigm for research in distance learning, and it is difficult to attract funds to develop one.
3. Some institutions are averse to defining boundaries and variables clearly.
4. Educational researchers often ask questions of no practical or even theoretical relevance.
5. Researchers in the distance learning test variables that are really classes of variables (such as comparisons of distance and classroom learning).

Advancement in telecommunications and computer technologies will speed up national and international cooperation in both research and documentation (Feasley, 1991). Technology makes the process of research, collection of data, analysis of data, and generation of reports easier and faster. Calvert (1986) provided a helpful

conceptual framework for distance education research by identifying three principal kinds of variables: input, process, and outcome. The input and outcome variables can be divided into student or system variables, and process variables are divided as either development or delivery variables.
With the increase in demand for distance education, the growing concerns were knowledge about effectiveness of distance education and changes in pedagogy enabled and required by the advancement of technology.

A recent American Federation of Teachers (AFT) task force report states that too little is known about the effectiveness of distance learning and that more independent research is needed (Twigg, 1996). At the same time, Clark (1996), in his paper mentioned that media forms are mere vehicles that deliver instruction, but do not influence student achievement any more than the truck that delivers our groceries causes changes in our nutrition. Clark believes that it is not media, but variables such as instructional method that foster distance learning.

Even with the growth in the amounts of distance education in our higher educational institutions, few studies examined students learning experiences, effectiveness of instructional methods, and strengths and limitation of this model of teaching and learning. Russell (1996), Office of Instructional Telecommunications at North Carolina State University, provided brief quotations from 218 research reports, summaries, and papers, from 1945 to the present that compare technology-driven education methods with traditional classroom instruction. The compiled citations and quotations indicate that students learn equally well from education delivered by technology as measured by these 218 reports at a distance and face-to-face. In addition to the effectiveness of learning experiences, the reasons for learners' participation in distance education are another attractive topic of systematic investigation by researchers.

Wallace (1991) in her dissertation, Faculty and Student Perceptions of Distance Education Using Television (TV), provided rich information about the reasons adults participate in the TV education. Her conclusion of study revealed the reasons for participation were opportunity to earn an MBA (90.9%), opportunity to upgrade

work skills (75.1%), and the opportunity to learn more about business concepts (83.2%). Her finding was a strong display of the objectives of participants in the adult continuing education. Most students participating in TV programs found their courses to be challenging and had favourable experiences with technology. Wallace's recommendation for additional investigation includes: further research in educational resources and training needs of both students and teachers, attitudes of faculty toward distance learners, evaluation of educational experiences with regards to lack of personal interaction in the group, and follow-up study for comparison of performance of this group with face-to-face class students. Wallace also recommended that incorporating the electronic mail system with TV education can facilitate better communication between students and teacher. The main finding of the Wallace study is that continuing education is necessary for better job performance and advancement in the job market. Her recommendation for combining asynchronous technology (e-mail) with synchronous technology (TV), and training needs of distance education students and teachers are major issues in the distance education program.

Understanding the Route of Distance education:

Understanding the history of distance education is valuable in that it shows there was more than one historical path to distance education and that the evolution of distance education has not been easy. Many of the same problems facing implementation and acceptance of educational innovations today have been faced by distance education throughout its history.

The history of distance education could be tracked back to the early 1700s in the form of correspondence education, but technology-based distance education might be best linked to the introduction of audiovisual devices into the schools in the early 1900s.

The first catalog of instruction films appeared in 1910 (Reiser, 1987) and in 1913, Thomas Edison proclaimed that, due to the invention of film, "Our school system will be completely changed in the next ten years" (Saettler, 1968, p. 68).

This dramatic change didn't occur, but instructional media were introduced into many extension programs by 1920 in the form of slides and motion pictures just as they were in the classroom.

In tracing the history of distance education, the introduction of television as an instructional medium appears as an important entry point for theorists and practitioners outside of the correspondence education tradition, and marks parallel paths for correspondence study and instructional media.

Although instructional radio failed in the 1930s, instructional television was viewed with new hope. In 1932, seven years before television was introduced at the New York World's Fair, the State University of Iowa began experimenting with transmitting instructional courses.

World War II slowed the introduction of television, but military training efforts had demonstrated the potential for using audio-visual media in teaching (Wright, 1991).

The apparent success of audio-visual generated a renewed interest in using it in the schools and in the decade following the war there were intensive research programs (Reiser, 1987). Most of these studies were directed at understanding and generating theory on how instructional media affected classroom learning.

The 1940s saw great interest in television by educators but little action (Adams, 1958), and by 1948 only five U.S. educational institutions were involved in television with Iowa State being the first on the air.
Early studies by educators tended to show that student achievement from classroom television was as successful as from traditional face-to-face instruction. A study by Parsons (1957) showed only borderline differences in achievement, and Lapore and Wilson (1958) offered research showing that learning by television compared favourably with conventional instruction.

By the late 1950s, 17 programs used television in their instructional materials. The use of educational television tended to grow slowly but by 1961, 53 stations were

affiliated with the National Educational Television Network (NET) with the primary goal of sharing films and coordinating scheduling (Hull, 1962).

Although instructional television would never realize what many thought was its potential, it was having limited success and had, unlike instructional radio, established a foothold in the minds of educators.
In 1956 the Correspondence Study Division of the NUEA conducted a study of the use of television to support correspondence instruction (Wright, 1991). The survey report recommended research to measure the effectiveness of television as an educational tool and, with a grant from the Ford Foundation, Gayle Childs studied television instruction in combination with correspondence study.

In one of the earliest education vs. media studies, Childs concluded that television is not an instructional method, but an instrument for transmitting instruction. He also found no appreciable difference in the achievement level of students taught in regular classrooms by means of television or by a combination of correspondence study and television (Almeda, 1988).

In the early 1960s, the innovative Midwest Program on Airborne Television Instruction (MPATI) launched its "flying classroom" from an airfield near Purdue University in Lafayette, Indiana to broadcast instructional programs to school systems and the general public in Indiana and five surrounding states (Smith, 1961).

At its peak, MPATI would transmit educational television programs to nearly 2,000 public schools and universities reaching almost 400,000 students in 6500 classrooms in Indiana and five surrounding states (Gordon, 1965).

This experiment in learning was the culmination of an educational vision for some educators and the result of a $7 million grant from the Ford Foundation (Carnegie Commission, 1979), a small part of the $170 million spent by the foundation.

Although the airborne teaching experiment came down in 1968, the MPATI project succeeded in several ways, including stimulating enough interest in educational

television (ETV) in its region that new ETV stations were started. Many schools began using their own closed circuit television (CCTV) systems, and others began experimenting with Instructional Fixed Television Service (ITFS) microwave systems.

An even greater accomplishment (Wood and Wylie, 1977, p. 209) was that the MPATI project got educators from the six-state region to work together to select curriculum and to design and produce "the best example of an agreed-upon body of inter-institutional curriculum materials." And finally, it succeeds in organizing hundreds of autonomous school districts to work together for a common educational goal.

The number of educational television stations grew more rapidly in the 1960s and, by 1972, 233 educational stations existed (Carnegie Commission, 1979). Ohio University, University of Texas and the University of Maryland were among the earliest universities to create networks to reach for both on-campus and off-campus student populations (Brientenfield, 1968), and many universities were considering how to bring distance learning to select student populations.

By the mid 1960s, much of the interest in funding instructional television had abated, and the Ford Foundation shifted its support to public television. Much of the blame was placed on the mediocre quality of the instructional programming which was often little more than a teacher delivering a lecture (Reiser, 1987).

The 1967 Carnegie Commission on Higher Education concluded that "the role played in formal education by instructional television has been on the whole a small one... With minor exceptions, the total disappearance of instructional television would leave the educational system fundamentally unchanged" (pp. 80-81). Reasons given for instructional television not being adopted included teacher resistance to television in the classroom, the expense of the television systems, and the inability of television alone to meet the various conditions for student learning (Reiser, 1987).

In the late 1960s and early 1970s, microwave technology developed, costs went down, and universities began to set up microwave networks to take advantage of the

Instructional Television Fixed Service (ITFS) authorized by the Federal Communications Commission. The Carnegie Commission on Higher Education predicted that, by the year 2000, more than 80 percent of off-campus and 10 to 20 percent of on-campus instruction would take place through telecommunications (Carnegie Commission, 1972).

Systems utilizing ITFS technology were able to reach regional campuses and other universities, but it remained a closed circuit concept (Wood and Wylie, 1977) reaching only the sites linked to the system and not the general public. It did appear that, for the first time, distant students were considered part of the extended classroom, and television existed to access those not able to come to campus (Dean, 1982).

2.3 DEVELOPMENT OF OPEN LEARNING IN AFRICA

DEVELOPMENTS OF OPEN LEARNING IN AFRICA

SECTION I:

INTRODUCTION: AN OVERVIEW OF THE STATE OF ADULT AND CONTINUING EDUCATION IN AFRICA

Since 1928 when Eduard C. Linderman made more explicit, even if controversial, the meaning, purpose, scope and methods of Adult Education. Akpovire Oduaran book titled, the meaning of Adult Education, the discipline has undergone significant transformations. It has moved away from a narrow and pedantic discipline to bring into being vigorously active components like continuing education, distance education, flexible learning, life long learning and others.

The history of the European colonial enterprise and its implications for Africa has been well told many history books. Magdoff (1982) has described the link between the annexation of foreign territories and the domination of weaker peoples by stronger powers as these events relate to imperialism and its sustenance.

Many of the impediments to the development of several under developed nations, particularly in Africa, are squarely located in the imperialist fervour that is still blowing like a wild wind throughout the world to date.

The scramble for and partition of Africa has meant the manifestation of cultural imperialism. Part of this cultural imperialist manifestation has been the educational influence, which was inherited at independence beginning from the 1950s.

Cultural imperialism has influence Africa's educational systems in a tremendous way.

Africa has come a long way in the comprehension and application of adult and continuing education to development. Development has been experienced in Africa, and different disciplines are being challenged to prove their relevance to the development process.

FUTURE TRENDS

Africa is faced with a series of challenges, mostly arising from the current globalization. Unless Africa is able to explore the possibility of developing her adult population to respond to the demands of new technology and professional development. Africa may remain a passive observer living in the 17th century when the whole world moves to the 21st century. Already is it obvious that in many ways Africa and Africans are taken for granted in the resolution of several issues in contemporary world. During the preparation for the Fifth international conference on adult and continuing education, African countries who assembled in Senegal, the Seat of UNESCO Regional office for Africa, insisted that adult and continuing education on the continent must continue to promote the cultural values of the continent, and assist in establishing a unique identity for Africans. It was also agreed that skill acquisition is an urgent necessary in the face of increased poverty, unemployment and degradation in most African countries, education for All is also being increasing adopted by most countries, which now seek to provide free and compulsory education for all the citizens up to age 15. The UNESCO Regional

Office for Education in Africa confirm that most countries are resolved to explore all opportunities to improve access to education and bring literacy and life long learning at the door step of every African.

Significant post
Independence Developments in Adult and Continuing Education in Africa.

DEVELOPMENTS SINCE 1960

At the international level since 1960, when many African States became independent, the three major world conferences on Adult Education held in Montrel in 1960, Tokyo in 1972, and Paris 1985 addresses significant issues such as universal literacy, establishing peace and international co-operation. Creating a genuine spirit of democracy, increasing learning opportunities for all age groups and promoting gender equality.

In Africa, when Ghana became independent in 1957 and launched its mass literacy drive, it was only in the early 1960's that a large number of African member states of the OAU became independent that adult education started to gain momentum through the Addis Ababa plan of Action on education in 1961.

METHODS ODF EVALUTION OF ADULT AN CONTINUING EDUCATION PROGRAMMES

The outcomes of the three major adult education programmes will be evaluated as follows:

i. Functional Literacy, Post-Literacy and the promotion of national Languages. This programme of adult literacy is set within the framework of two sub-programmes: the Regional programme for the Eradication of illiteracy in Africa and the follow – up Action Programme on Basic Education for All (EFA).

ii. Continuing Education and Extension Programmes since there are no adequate statistical data on such programmes, the evaluation will be centered on the

effectiveness of existing programmes, through the integrated approach

iii. Distance Education and open Universities the evaluation would be based on the effectiveness of existing programmes since there are no statistical data available. There have been great interests in the setting up of distance education programmes and open Universities over the past five years in the African region. Within this period and even before, the following countries have set-up distance education programmes: Kenya, Swaziland, Lesotho, Botswana, South Africa, Tanzania, Nigeria, Ivory Coast, Ethiopia, Mauritius, and Namibia. There are also many other countries which have planned to establish such a programme: Sierra Leone, Gambia, Zimbabwe, Zambia, Senegal, Uganda, Malauli.

The value of distance education programmes is felt in area of access to education for workers who are highly motivated to succeed in various courses. The enrollment of the existing distance teaching programmes has continued to rise sharply in Tanzania, Kenya and South Africa. In the next ten years, this programme will become a high impact area because of the stress on Adult learning while learners are employed. However, it is regrettable that there are no adequate statistical data in this domain at present.

DISTANCE EDUCATION FOR ECONOMIC DEVELOPMENT

In a region with such high unemployment and levels of poverty, economic development is of paramount importance.

With the context of globalize economics, economic development and adult education, or adult learning become even more urgent and complex. Marcos Arruda's proposed that the goal for globalization must be the development of human capacities of all citizens. Within a context like South Africa, these are pertinent and hotly debated issues within organizations of state civil society and business. Adult learning is implicated in these debates, which refer to competing development frameworks.

Within the debates on globalization are debates about the importance and the role of information communication technologies (I C T) in economic development. Africa is the most poorly serviced continent in I C T less than 1% of Internet users are in Africa and of those, the majorities are in South Africa. This is seen as another major barrier to Africa's development and one, which will lead to even greater inequality both within the continent and between Africa and other regions.

LEARNING A KNOWLEDGE SOCIETY THROUGH DISTANCE AND OPEN LEARNING IN CAMEROON

Within the last two decades (1980 – 1999), a new and equally deprived group joined the ranks of the destitute and disenfranchised the Urban and new poor (Nji, 1994; World Bank, 1995). Yet, since the 1970s, the attention of development planners, decision-makers and specialists are being draw to the merits of distance education as an effective strategy, to increase wider access to educational opportunities and to satisfy the variety of educational needs of learners, particularly adults (Verduin and Clark 1919: 4).

Learning by adults falls in three categories:

i. Adult basic education, which refers to the teaching of adults according to any organized formal or informal plan of education with the ultimate goal of helping adults better their occupation opportunities and quality of life.

ii. Career education involves helping adults to prepare for a vocation or profession or to upgrade their job-related skills. This type of distance education tends to have the largest number of students because of its goal – appeal. Often, working and unemployed adults must enroll in courses continuously or recurrently because of the ever – increasing pace of change in the Job market and the need for new skills. People out of work seek retraining to enable them fit into a job market in constant flux. As Verduin and Clark (1991: 7) have noted, most proprietary education at a distance, and much of the post-secondary distance study that takes place through colleges and Universities, is under taken by adults to prepare for, upgrade, or change careers.

iii. Leisure and enrichment education is the type of adult education that seeks to provide adults learning experiences that enable them to achieve the highest point in the Legendary Abraham Maslow's hierarchy of human needs, self–actualization. Self – actualization of self – fulfillment is achievable when well– tailored educational programmes enrich the lives of participating students as well as those with whom they interact. This takes place through the development of both self – esteem and a sense of well – being. A good number of adult learners studying at home would take a course merely for personal interest or self– improvement. Many senior citizens fall in this group of learners at a distance.

THE BENEFITS OF THE LEARNER

The flexibility of timing makes distance learning especially attractive for people who other wise cannot obtain the desired knowledge or acquire needed skills through on-campus instruction. Fortunately, numerous agencies and organizations now offer distance education using various media and state – of –the art technologies. These include night and day classes, weekend programmes, with greater use of tele-computer conferencing, Internet and even traditional classroom situations.

The state of Adult and continuing Education in Africa.

ODL. Shares in common with non-formal education, broadly described as a method of assessing the needs and interests of adults and out-of-school youth, combs et al, (1973); Niehoff and Neff (1997). In their view, non-formal education plays crucial role in developing countries because it provides opportunities for communicating with, both the young and adult learners, motivating them to participate in development projects, helping them to acquire skills and adopt behavioral patterns, which could lead to increased productivity and improvements in living standards.

Rural development in Africa within the last three decades demonstrates that formal school programs have by passed the needs of the rural poor, because most of the

education programs were founded on a much narrower conception of development. However, successful rural development requires integration between sector programmes and multidimensional analysis and interventions. For example, the successful transformation of rural communities will depend on careful and concerted efforts on the part of specialists in agriculture, small industry and commerce, transportation and irrigation, health, nutrition, and other aspects of human activity including co-operatives and community development.

1. **ODL – Open Distance Learning**

   Also successful rural developments must tap the advantages provided by innovative and alternative educational approaches such as ODL. These benefits cover all aspects of living and take into consideration the needs of deprived, marginalized peoples and populations with special needs.

Social Scientists have continued to express concern over the failure of the formal educational system, particularly its inability to take into account the contextual issues involved in social change and development and their nation of the opportunity structure of many people.

FORMATION OF THE AFRICAN COUNCIL FOR DISTANCE EDUCATION.

BACKGROUND

The African Council for Distance Education (ACDE) is a continental educational organization comprising African universities and other higher education institutions, which are committed to expanding access to quality education and training through open and distance learning. It is registered under the laws of Kenya as an International NGO. As a unifying body of distance education providers and practitioners in Africa, the ACDE was formally launched in January 2004 at Egerton University, Kenya. In August 2005 the ACDE held its Inaugural Conference and General Assembly at the University Of South Africa (UNISA) in Pretoria, during which it was resolved to establish a permanent ACDE Secretariat in Nairobi, Kenya.

Our Vision

The vision of ACDE is to become a major player in the promotion and advocacy for open and distance learning in Africa.

Our Mission

Promote research, policy and quality in open and distance learning to increase access to education and training in Africa.

GOALS AND OBJECTIVES OF ACDE

Promote open and distance learning, flexible and continuing education in Africa.

Promote research and training in open and distance learning in Africa.

Contribute to the development of policies essential to the advancement of open and distance learning.

Foster continental and global collaboration in open and distance learning.

Provide a forum where individuals, organizations and governments can deliberate on policy matters on open and distance learning.

Promote the development of appropriate methods and technologies in education and training relevant to open and distance learning.

Provide a forum for interaction, sharing and dissemination of ideas on open and distance learning

GOVERNANCE OF ACDE

The ACDE is headed by the Executive Director as the Chief Executive, who reports to the ACDE Executive Board. The Executive Board consists of nine members who are elected from among Vice Chancellors and Rectors of member Universities, to serve a 3-year term, renewable upon re-election. The Executive Board reports to the ACDE General Assembly comprising all members of ACDE.

PRIORITIES FOR 2006-2008

Priority 1: To establish and equip the ACDE Secretariat in Nairobi, strengthen its ICT capacity, and consolidate the ACDE funding base.

Priority 2: To expand the membership base of ACDE in all categories and regions.

Priority 3: To publish regularly and ensure wide distribution of the ACDE Journal – "African Journal of Distance Education".

Priority 4: To develop a comprehensive ACDE Data Base on Open Learning and Distance Education in Africa, with focus on: ODL Models; the programmatic, technology and resource gaps; the expertise available; and the development and investment priorities in Distance Education.

Priority 5: To establish a Pan African Standards and Quality Assurance Body for distance education, by setting up ACDE as an accreditation institution for distance learning across Africa, thereby setting, promoting and sustaining continental standards for ODL.

Priority 6: To promote Research and Development in Distance Education by; a) developing a prioritized research and development agenda, b) establishing a Research and Development Fund, and c) establishing a sustainable Centre for Research in Open and Distance Learning/Research and Development Unit.

Priority 7: o develop collaborative partnerships which promote sharing of resources in teaching, research and community outreach, as well as build relationships between and among member institutions and organizations.

Priority 8: To build and enhance human and infrastructural capacity of member institutions that will enable them to improve the development, delivery and management of Open Learning and Distance Education, and significantly proliferate opportunities for learning, scholarship and academic exchange.

Priority 9: To improve the quality of teacher education, training and research.

Priority 10: To improve Bandwidth and Connectivity in ACDE member institutions, in particular make accessible and affordable broad band available to African Universities and higher education institutions in order to enhance learning and the use of ICT in the management of distance education.

Priority 11: To develop, implement and continuously review a program of advocacy that will be effective and efficient in mobilizing African leadership for policy implementation in a way that distance education and open learning is prioritized.

Priority 12: To acquire land and build the headquarters for a permanent ACDE Secretariat in Nairobi, Kenya.

2.4 SUCCESSFUL COMPARATIVE MODELS

2.4.1 The main theme of the **first model** is that: - Correspondence Tuition is provided by an independent organization and degrees are awarded by another but public university. This model has some pitfalls; firstly, those who award the degrees evaluate the learner's level on the final assessment/presentation. This means the continuous assessment is provided by the tutors. And if a student who scores 50, 60, 70, 75, and 50 is awarded a third class degree, it will be based on perhaps the weight of his final paper which is 50 and his manner of presentation.

A second pitfall of this model is perhaps the fact that the awarding body has little or no knowledge about the Bio-data of the learner. The justification here is draw from the fact that the applicant presents his curriculum vitae (C.V) to the independent Institution that will have to enroll and teach the course. Thus the background of every scholar will influence the way he/she will responds to questions put forward to him[7]. For instance a man who has worked for about a decade of years in a Development organization (NGO's) will use his experience gained in the development world to answer his

[7] Anthony Kaye and Grevilte Rumble – Distance teaching for Higher and Adult Education.

modular questions in the correspondence courses. Such answers will be accepted and appreciated by the teaching staff but the degree awarding staff may tend to reject such responses and this may likely alter the value of the degree awarded to the student.

2.4.2 The **second model** prescribes that there is a conventual's university, which provides both correspondence study facilities and also **examine** and accredit these **students**. To El-Bushra[8], the 2nd model has three variant characteristics:

Viz:

I) it includes the universities that offer correspondence teaching in one department **only**.

II) It also includes those universities in which teaching departments are required to accept both internal and correspondent students, with a separate departmental responsibility for administration aspect of correspondence study.

III) The model also takes into cognizance those universities which have separate correspondence teaching units, with both teaching and administrative functions.

Even though many universities do fall within these three variables, yet still it is but worthy to mention that there are certain limitations provide by it not all but specifically these three classes.

Considering the first sub-class of module 2, the offering of correspondent teaching in one department only may tend to reduce the number of applicants for such a course. Because not all the students will go in for the same course for example, if the English Language is taught at correspondence level while other courses are internal, those who don't favour the English Language may go without learning in a particular period. But when the learners attempt to go against their interest (i.e.) choosing to do the only correspondent taught course) the end will lead to poor quality degrees or

[8] He provided the three variants of the 2nd model.

even qualifying without making one of the paper.

In the second, sub-sector of the 2nd model, it is true that the teaching departments are required to accept both internal and correspondence students but with a separate department responsible for the administrative aspects of the correspondence study.

In this scenario, the departments under the internal students section will have their own Administrative department. And when this happens, there is high cost being entered into by the university because the introduction of each course is highly dependent on the fact that, there is an existing administrative office. The other sections are left with or no administrative supervision.

The third ranut of the 2nd model prescribes that there are universities which have separate correspondence teaching units, with both teaching and administrative functions. This classification is printed to the Rmyab University in India as well as the Wisconsin University of America.

Well the fact remains, many universities will like to enter this classification wherein, they both teach and administer their Institutions. The only problem is that such students resume very limited recognition with respect to those universities that have separate awarding bodies.

The third model is perhaps the most widely acclaimed by many learners. In this model, the universities came together, and teach a wider number of students in various courses and also jointly award the degrees to the external students. There is an increase in the number of Institution that does recognize such students but it is also important to add that combination of universities may lead to a clash of interest. And when this happen, the learners are very likely to suffer.

The fourth model prescribes a more centralized state provision of correspondence education at all levels, with the university level as no exemption. This is appropriate to some students, but to those who will like to enjoy the in-campus student's facilities, such an offer or a system is not suitable or is important to note that several

students who enroll into the university see the campus as a form of \freedom center. For it may be offering the first opportunity to the youth and young adult to leave his/her home and stay on his own. When this opportunity is prevented or not forthcoming the idea of "colleague" is derived and in most cases the students go unhappy.

In conclusion, the autonomous Institution model need to be mentioned whose general features are as listed below: -

- It is one in which the teaching, assessment and accreditation functions are integrated (not possibly with the **first model** based on external degrees and separate correspondence colleges);
- This institution is totally committed to external students (this is not so with some universities that have correspondence studies/ external degree departments), hence an academic staff have no conflict between loyalties to external and internal students, and there is a strong motivation to develop and enhance distance teaching methods, free from the constants and tradition of face to face teaching;
- It is also important to add that this institution is in principle, far freer to devise new educational programmes for new target groups and to explore to a maximum the potential of distance education methods;
- Above all this model is also free to choose learning methods and media curricula, course structure, assessment procedures and accreditation policies.

2.5 CURRENT STATE OF THE ART IN MY COUNTRY/ SIERRA LEONE

In Sierra Leone, Distance education still faces promises as well as Challenges:

The Promises include:

The need for Positive attitudinal change will likely change the poor attitudes of the people to Distance Learning.

The arrival of a new Government after the 2007 Elections will also improve the

Distance Education in the Country.

In Sierra Leone today, there are several institutions moving towards Distance Education. The reasons being the majority of the people are barred from pursuing the traditional educational system due to the domestic and or official responsibilities. Hence Teacher Education and majority of the Trainings are now being decentralized and championed under Distance Education.

2.6 Key Variables of Problems/Obstacles to DL and its implementation.

2.6.1 The Promises of Distance Learning

Many of the promises of distance learning are financial in nature. Universities hope to save money by delivering education to students that are unable to attend classes because of time or distance. The theory is that class size increases while the overhead remains the same. In a 2001 article by Burton Bollag and Martha Ann Overland, they say that developing countries are turning to state run distance education programs to take the place of ever increasing enrollments and a lack of physical building space. Places such as Beijing, Jakarta, and South American countries such as Brazil and Argentina have all begun to use distance-learning techniques to reach those that would by any other means be unreachable. Bollag and Overland say countries like China are moving from “elite to mass education,” and that “traditional universities cannot meet the demand” (pg. A29). China uses a radio and television delivery system to serve 1.5 million students, two-thirds of which are in a degree program.

In Australia, Curtain University uses compressed video conferencing to reach remote students in Western Australia, and to enhance classes in Business Studies by connecting with students in Singapore. Other examples can be found in the UK and Norway where several sites have been linked together (Keegan, 1995). Of course there is also wide use in the United States, both in the public and private sectors. It should be obvious by these examples and by the definition of distance learning, that it can meet the promise to deliver

classes to a geographically broad and diverse population. Not only that, but the need seems to be strong for such programs. According to the American Council on Education, the number of students in distance learning doubled from 1995 to 1998 totaling 1.6 million (Devarics, 2001). Another market forecast says that by the year 2002 there will be 2.2 million students in distance education program, a full 15 per cent of all U.S. college students (Rochester, et.al., 1999, cited in Dibiase 2000). Many Universities are feeling the pressure to control their costs, improve quality of instruction, focus on customer needs, and respond to the competitive pressures (Horgan, 1998, p.1). Distance learning technologies have the potential to assist in solving these problems. In 1994, Basom and Sherritt surveyed higher education administrators and state politicians to find out what they thought would be the major problems facing American higher education in the next millennium. The answers they most often received were: "meeting increased demands at a time of decreased resources, increasing or maintaining access, using technology more efficiently, and sharing resources across state lines so that colleges won't have to be all things to all people" (Pg. 4). Distance learning seems to address all of these issues. Administrators hope that distance learning methods will help make higher education more cost-effective (Dibiase, 2000). This type of answer may be seen as a quick fix for many administrators. If not approached seriously however, the distance programs can quickly become second rate.

The convenience of time and space is a big promise made by distance learning. Students do not have to physically be with the instructor in space and, depending on the method used, they do not have to be together in time as well. This is a great advantage for non-traditional students who cannot attend at regular times. Satellite campuses such as the ones Arkansas State University have recently opened are drawing out a "hidden market" of adult students in small towns and recent high school graduates who don't want to go away to a bigger city to get an education. The satellite campuses could conceivably help the school's enrollment to grow tenfold (Savoye, 2001).

2.6.2 Problems of Distance Learning

Despite the promises and obvious advantages to distance learning, there are problems that need to be resolved. These problems include the quality of instruction, hidden costs, misuse of technology, and the attitudes of instructors, students, and administrators. Each one of these has an effect on the overall quality of distance learning as a product. In many ways, each of these issues relates to the others. We will examine each of these issues separately.

a) Quality of Instruction

The first issue is the quality of instruction that is given through distance learning programs. Much of the quality of instruction depends on the attitude of the administration and the instructor. Data collected in a 1999 study by Elliot Inman and Michael Kerwin showed instructors had conflicting attitudes about teaching distance education. They report that after teaching one course, the majority of instructors were willing to teach another, but that they rated the quality of the course as only equal or lower quality than other classes taught on campus. Many times it seems that the administration believes the technology itself will improve the quality of the class. Palloff and Pratt (2000) remind us that "technology does not teach students; effective teachers do" (pg. 4). They make the point that the issue is not technology itself, but how it is used in the design and delivery of courses. Too often instructors do not design their lessons to take advantage of the technology presented. This affects the quality of the instruction. Research suggests that the effectiveness of distance learning is based on preparation, the instructor understands of the needs of the students, and an understanding of the target population (Omoregie, 1997). Sherritt (1996) found in her survey of higher education administrators that many of the decision makers view distance programs as second rate, a "necessary but deficient form of education" (pg.2). She writes that this attitude also was found in academic departments that "have no strong mandates to adjust their curriculum and instruction to fit distance learning beyond cursory cooperation" (pg. 2). There are no rewards

for doing so and the effort takes away from research time. Sherrit also cites a study by Caffarella et al. done in 1992, which found off campus instructors to be "a demoralized bunch, perceiving poor working conditions, isolation, personal and professional deprivation" (pg.3). This attitude hardly seems conducive to an effective learning environment for the students. If the administration and instructors are lacking in true commitment, it is bound to have a negative influence on the entire distance learning experience

b) Cost Effectiveness

The second issue is the true cost and the cost effectiveness of distance learning programs. Are they actually cost efficient? A study by Phelps et al. (1991) found that "the potential cost-effectiveness of using online technologies in distance education is still uncertain" (pg. 303). The study further showed that the concepts of costs and effectiveness are not as simple as they first appear. Atkinson (1983, cited in Ng, 2000) notes, "it is possible for a program to be efficient but not cost effective if the outputs which are actually produced do not contribute to the program objectives: that is it may be efficient at doing the wrong things" (pg. 306). Ng also comments on the cost of human capital. He states, "Human capital and the costs of conversion are expenses that can easily be underestimated" (pg. 306). Ng notes that the cost of online courses is affected by how they are implemented: as an enhancement or as the primary teaching medium. If it is implemented as a primary teaching medium, it is considerably more expensive. The teaching purpose of the different approaches needs to be taken into account. If this is not factored in by administration, there may be costs that are not apparent at first glance. Caffarella et al. (1992) found in a study at the University of Northern Colorado that when electronic distance delivery costs were compared with those of instructor travel directly to the site, the least costly alternative was the live instruction with the instructor traveling to the remote site compressing the class into fewer weeks. This alternative was one-third the cost of any other alternative.

Starting a compressed video distance-learning program is not cheap.

Southern Arkansas University-Magnolia decided to try compressed video as an alternative to other methods. The startup equipment for the unit was approximately $80,000. Establishment of a permanent T-1 telephone line was another $1,200 per month (Weber, 1996). These costs are startup only and do not reflect any of the human capital costs as discussed earlier. Carr (2001) discusses a report by the California State University System that looked at cost savings in distance learning programs. The report found that only in really large courses with many sections would cost savings be possible. Courses in excess of 500 students would benefit from this setup, while it was still more cost effective to teach smaller groups in a traditional setting. The startup costs, maintenance costs, and personnel costs should also be factored in to arrive at a true cost for a distance-learning program. The minimum number of staff required for delivery of a compressed video class would be one instructor and two technicians, one at each site. This means a minimum of three people is needed to deliver the same class as one instructor does in a traditional setting. The costs associated with training technicians and instructors should not be overlooked. For effective distance education to take place, the staff delivering the instruction should be well trained.

c) Misuse of Technology

Besides the cost of the technology, there is the possibility of not utilizing all its potential. Some of these problems arise from a lack of training, some from the instructor's attitudes about using the technology, and still others by hardware problems. It seems to be self evident those instructors need to be trained to use distance learning technology, but too often they are not. Once again, it appears that administration may feel that the technology itself will improve the course. Advancement in technology does not lead to effective distance education. The best distance education practices depend on creative, well-informed instructors (Greenberg, 1998). Bates (1995) suggests that newer technologies are not inherently better than old ones and many of the lessons learned from the application of older technologies will still apply to any newer technology. Again, the instructor should be trained to take advantage of both their experience and being able to adapt that experience to

the new environment of distance learning. The instructors must be trained "not only to use technology, but also to shift the way in which they organize and deliver material" (Palloff & Pratt, 2000, pg. 3).

d) The Role of the Technicians

One overlooked factor in the success or failure of distance learning programs is the role that the technicians play in distance learning. Of course they play a large role in the technical delivery, but little is known about the non-technical activities of the technicians that could have an influence on the instructional process. In a 1995 study, Olenski et al., found that technicians could indirectly influence the learning environment by "orientating participants to the technology, reducing the anxiety of the participants" (including the instructor), "and by advising the instructor on instructional techniques" (pg. 3). This type of role, if viewed negatively by the instructor, can have a huge impact on the quality of the presentation, yet many times the instructor and the technicians do not meet until the initial class meeting. Olenski also found that the technicians felt the instructors were given inadequate orientation to the equipment and really could not operate it until they had hands on experience. The technicians also saw a difference in the instructors who could adapt their styles to the technology, and those who could not. Those who adapted were, in the opinion of the technicians, superior in conducting the classes. So we see not only does the instructor need to adapt to the educational environment, they must also adapt to another person in the room that can help or hinder the delivery of the lesson. Much of the outcome depends on the attitude of the instructor.

e) Problems with Equipment

Equipment and hardware malfunctions can be a great detriment to the effectiveness of distance learning. When a problem occurs in a class everything comes to a standstill and the learning environment is interrupted. If there are too many instances, the entire course can be affected. For instance, if an overhead projector goes out during an instructor's presentation, an alternate way of delivering that information can easily be

found. However, if a compressed video presentation has problems, the entire class must be stopped until the problem is resolved. If the instructor goes ahead with the lesson, one site will miss out on that information. Carter (2001) did a study of students taking courses by compressed video in the Mississippi Gulf Coast Community College program. One of the questions he asked pertained to the equipment and technology operating correctly. His results from three groups spread over the different sites showed that only 42% agreed with the statement that the equipment and technology operated correctly. A program studied by Teaster and Bliesner (1999) found that unanticipated technical problems with the system shortened the class time and discussion that negatively affected the overall quality of the presentation. In one presentation the connection was lost twice prior to the students arriving and ten times during the actual instructional session. During this particular session there was never more than a four-minute period before the connection to one of the sites was lost. This may be an extreme example, but according to the instructor involved in the presentation, the course experience was "better, but similar to past experiences" (pg. 743). At Southern Arkansas University-Magnolia, they discovered that using compressed video as a single medium of delivering distance education was not as effective as was first hoped. Because of this they developed a different concept of an "electronic classroom" that did not rely on just one mode of delivery (Weber, 1996). Their experience was that compressed video had connection problems and did not work well broadcasting information delivered by lecture. The failure of the hardware can be a very frustrating thing for all involved in distance learning. For the instructor, it means they can be well prepared for the class only to have a bad connection or camera failure cause the entire lesson to go bad. For the technician, the frustration and inability to keep the class running smoothly may affect the instructor's view of their competency, causing friction. For the student, an inability to get a flow to the class and feel like progress is being made can hinder the learning process. Those students used to the traditional face-to-face instruction and who do not have a tolerance for ambiguity will have a difficult time.

f) Attitudes towards Distance Learning

Despite problems with hardware that may or may not get worked out with new advances in technology, we must come back to instructors and their attitudes towards teaching in a distance-learning environment as a major potential roadblock to effective distance education. As in any educational situation, the instructor can set the tone for learning in the educational environment. That instructor must be properly trained and motivated to be effective. An instructor must have technological skills and confidence to use all of the various electronic devices in order to be truly effective in the electronic classroom. Instructors must also change the manner in which information is delivered. While lecture does not work well, multimedia presentations are successful (Weber 1996). Of course this means more preparation time for the instructor and the motivation must be there. (Walcott 1994, cited in Carter, 2000) found in a study of adult distance learning that "to effectively bridge the gaps between classroom and distance teaching, faculty need to look at the distance teaching from the students' point of view" (pg. 249). The faculty must also be aware of getting instructional materials, handouts, tests, and other class items to both sites simultaneously. It is important for the instructors to develop a sense of community between the sites, achieve maximum participation, and get the participants to buy in to the process. The idea of learning as a collaborative process is very important when students are separated by distance. According to research by Palloff and Pratt (2000), "collaborative learning processes assists students to achieve deeper levels of knowledge generation through the creation of shared goals, shared exploration, and a shared process of meaning making" (pg. 6). It is up to the instructor to be aware of this in the distance learning environment and to encourage collaborative learning and a sense of community among the students.

Another important consideration for the instructor is their view regarding the goal of distance education. There are two main thoughts on this. Schlosser and Anderson (1994, cited in Imel, 1998) put this thought forward in a review

of distance education literature. They submit that the goal of distance education in the United States is "to offer the distance student an experience as much like that of traditional, face-to-face instruction as possible" (pg. 3). This would mean that distance learning pedagogy would not differ much from that used in an ordinary classroom. Bates (1995) has a different idea. He suggests that instead of using technology to replicate traditional methods, it should be used to improve instruction. Holmberg (1989) also discusses these two schools of thought and concludes that distance education as a mode of education in its own right has very different consequences (than viewing it as a substitute for face-to-face instruction). The instructor must decide which attitude they will adopt because it has a profound impact on their approach to instruction.

Instructors also have adaptations they need to make to the technology. An instructor used to visual cues may find it difficult to adapt to a situation such as compressed video. The students at the remote site are not always in clear view of the instructor. West (1994) calls adapting to the lack of visual cues a major adaptation for the instructor. Part of this can be alleviated by good communication with the technician, but as we have seen earlier, that communication is not always present. McKnight (2000) contends that proximity and eye contact are important factors in education that are limited in the distance learning environment. She says that we inherently recognize the connection these provide, but in the distance learning environment they are "both severely and sometimes permanently compromised" (pg. 2). She asserts that professors are unable to observe the emotions of the students and cannot detect "moments of anxiety," thereby limiting their ability to respond to student needs. This puts a burden on the instructor and causes the students to respond differently than they might in a traditional classroom setting. As we saw earlier, creating a community is an important factor for the instructor to have an effective class. The instructor must do all he can to overcome the limits of the technology and involve the students in an environment of interaction, which can work to create the feeling of a true class (Hiltz & Wellman, 1997).

g) Instructor Concerns

Instructors have other concerns about distance learning, primarily how it will change their role in education. Clark (1993) found in a national survey of attitudes of higher education faculty that there was a moderately positive attitude about distance learning in general, but moderately negative attitudes about their own use of it. Writing about geography educators, Gober (1998) worries that if they rely too much on distance-learning techniques, the discipline would "risk losing our collective soul in the rush to convenience, cost-effectiveness, and accountability" (pg. 130). Instructors worry about putting their course materials online because once there, the knowledge and course design skill in that material is out of their possession. This puts the administration in a position to hire less skilled, and cheaper, workers to deliver the technologically prepackaged course (Noble, 1998 cited in Dibiase, 2000). Instructors are not always convinced that administration is behind distance learning. The rewards are not always there for the good distance-learning instructor. "Tenure and promotion usually does not recognize excellent off campus teaching which, in fact, takes valuable time from research agendas" (Sherritt, 1996, pg. 4). This puts the instructors behind when trying to publish to get their department recognized. The increased amount of time necessary to adequately prepare for distance learning takes away from the activities they will be evaluated on, such as grant writing and publishing. Many of the instructors concerns are valid and should be addressed by administration as distance learning becomes more common, as is predicted to happen.

h) Student Concerns

Finally, there are the students and their concerns with distance learning classes. Not all students are suited to this type of learning and not all subjects are best taught via this medium. More mature students are the most likely to find success with distance learning. The successful student needs to have a number of characteristics such as tolerance for ambiguity, a need for autonomy, and an ability to be flexible (Threkeld & Brzoska, 1994). Hardy

and Boaz (1997) found that "compared to most face-to-face learning environments, distance learning requires students to be more focused, better time managers, and to be able to work independently and with group members" (p.43). Many distance learners are different from traditional undergraduates in that they are already in professions. They have well defined goals and are more motivated (Dibiase, 2000). As we saw earlier, distance education students need to feel a part of a community. Greenburg (1998) describes this as a virtual learning community.

Students in these communities often feel less pressure to perform individually, and more pressure to collaborate and be part of the team (Kantor, 1998 cited in Greenberg, 1998). Being involved in a collaborative learning process is an important part of forming the foundation of a learning community. When this is not encouraged, participation is generally low and dialog is absent (Palloff & Pratt, 2000). Students also need the attention of the instructors. This may be truer in a distance situation than in a traditional classroom. In a situation where eye contact and proximity are limited, students cannot be disciplined nor affirmed by eye contact and body language (McKnight, 2000). Students may also have a difficult time reading the reactions of the remote location class members. This lack of interaction can cause problems when there is a dissenting opinion that cannot be picked up on with non-verbal cues, and is misperceived as a verbal attack. This type of miscommunication can cause the community problems as the class progresses. It is fair to say that compressed video can magnify the strengths and weaknesses of the instructor. Students are prone to pick up on a lack of organization and direction and respond with apathy and absenteeism (West, 1994).

Conclusions

What may we conclude from the promises and problems of distance learning? Are there possibilities for improvement in the future? The technology will undoubtedly keep improving and the price will drop, as technology is prone to do once it comes into general use. Already we see improvement in the delivery systems of

compressed video and computer assisted instruction. Despite student problems with distance learning, studies indicate they are relatively satisfied with what they are receiving. A study of students at Indiana University of Pennsylvania found 75% were very satisfied with the instruction they received and 90% rating the technology as satisfactory (Fergusin & Wijekumar, 2000). Another study by Harner et al., (2000) was done on a distance learning accounting course at the University of Connecticut. They found that 57.5% would take another such course. Two other findings were generally favorable and included comments on how the course could be improved. The first suggested the instructors needed to be comfortable with the medium, and that the students needed to have more guidance on how to fully take advantage of the presentation (Teaster & Blieszner, 1999). The second showed that students were highly satisfied with the instructors and the course, but that direct interaction with the instructor played no role in the students' satisfaction (Inman & Kerwin, 1999).

It would seem one element that needs immediate improvement is with instructors. The literature indicates a need for instructors to adapt their teaching methods to the distance learning format. Keegan (1995) shows many excellent ways that instructors can better prepare for the classroom including multimedia use, speaking voice, and even font size considerations. Instructors also need to realize that the technician is an integral part of the experience of distance learning and treat them as such. Many times opinions and communication between the technician and the instructor are not shared either because the technician's role is unclear, or there is a shared perception of a difference in status between the two (Olenski et al., 1995). Instructors must be motivated to prepare adequately for classes. Part of the responsibility for motivation must lie with the administration and their support of the program. "Because teaching a distance learning class involves a new role for instructors, administrators must provide them with the time, the tools, and the training to meet these new responsibilities" (Inman & Kerwin, 1999, p.586). Administration needs to train and educate instructors on this role and how to meet the challenges. Sherritt (1996) found in her survey of higher education administrators that "for whatever reasons, higher education administrators and politicians understand the need for technology. But, lacking the heart for distance education, they cannot bring themselves to support

it with adequate personnel, simple supplies, and a reasonable operating budget" (pg. 4). This sort of attitude from administration can do nothing but trickle down into the instructors and the students. Administrators need to carefully weigh their goals and objectives when taking on a distance education program.

Despite the need for improvement, the future of distance learning seems bright. Increasing numbers of students enrolling in distance learning classes underscore the need for "comprehensive and thoughtful evolution of distance education if it is to become the educational model of the future" (Harnar, et al., 2000, pg. 37). Despite the cost, coordination, and training that must be put into a program, it has "great potential to deliver and receive educational programs to and from remote sites" (Weber, 1996, pg. 219). Perhaps Keegan (1995) puts it best when he says "the challenge is to design cost-effective and educationally-effective systems for use in the new millennium of the new technologies that permit for the first time in history (electronic) teaching of students face-to-face at a distance" (pg. 53).

2.7 LITERATURE SUPPORT FOR DISSERTATION RESEARCH DESIGN AND METHODOLOGY.

This study is focusing on two research designs.

Qualitative, when the study basically uses statistical facts to present and analyze the data collected. The statistical facts or variable include:

The use of:

Tables: - two column, three column and more than three column tables.

Figures: - percentages, ratios, cardinal numbers, decimals, whole numbers, fractions etc.

Illustrations: - in the form of charts, graphs, pie-charts and the like.

Quantitative, when the study emphases the wider use of words and descriptions to discuss, explicate, express and provide meaning to the collected data.

The research literature focus on collecting information based on the opinion of the

people on the theme “Distance Learning can solve the numerous Educational problems in the third-world Africa.

As a sacrifice research, justification will be due to the use of both quantitative and qualitative design nature. But for a better understanding, the design shall be 60% Quantitative and 40% Qualitative.

In the study, some of the responses were coded and quantified using the weights 5, 4, 3, 2, 1 to represent the under mentioned evaluation weights: -

Excellent (5)
Very Good (4)
Good (3)
Poor (2)
Very Poor (1)

It is equally important to add that the models are used to compare the various distance learning types and forms which will be highly examined whether they will or have helped to solve the problem of third world Africa.

CHAPTER THREE

METHODOLOGY OF THE STUDY

3.1 LINKING RESEARCH QUESTIONS TO RESEARCH DESIGN

3.1.1 About Research Questions in general:

A Research Question is a statement that identifies the phenomenon to be studied. For example, "What resources are helpful to new and minority drug abuse researchers?"

To develop a strong research question from your ideas, the Researcher should ask the following Questions:

- Do I know the field and its literature well?
- What are the important research questions in my field?
- What areas need further exploration?
- Could my study fill a gap? Lead to greater understanding?
- Has a great deal of research already been conducted in this topic area?
- Has this study been done before? If so, is there room for improvement?
- Is the timing right for this question to be answered? Is it a hot topic, or is it becoming obsolete?
- Would funding sources be interested?
- If you are proposing a service program, is the target community interested?
- Most importantly, will my study have a significant impact on the field?

Furthermore, a strong research idea should pass the "so what" test. One has to think about the potential impact of the research s/he is proposing. What is the benefit of answering your research question? Who will it help (and how)? If the researcher cannot make a definitive statement about the purpose of his/her research, it is unlikely to be funded.

It is important to note that a well-thought-out and focused research question leads directly into the hypotheses. What predictions to be made about the phenomenon to be examined? This will be the foundation of the application.

Hypotheses are more specific predictions about the nature and direction of the relationship between two variables. For example, “Those researchers who utilize an online grant writing tutorial will have higher priority scores on their next grant application than those who do not.”
Strong hypotheses:

- Give insight into a research question;
- Are testable and measurable by the proposed experiments;
- Spring logically from the experience of the staff;

In conclusion, Research questions all relate to the long-term goal of the research, which should be an important undercurrent of the proposal. Again, they should be a logical extension of the research question, hypotheses, and specific aims.

3.1.2 In formulating a Research Design

Creating an effective research design is likely to be one of the most difficult and eminently useful tasks in drafting a proposal. An effective research design links abstract and stylized concepts and questions with the empirical world's complexities and challenges. A research design must at once be specific and highly flexible. It must be expansive enough to adapt these very complexities while still pointing you towards relevant data. The methods to be used should be extensions of your substantive question and orientation. Contrary to some disciplinarians' claims, there is no single research model that one can or should follow. Numerous alternatives must always be considered and choices made.

However, to enable any Researcher prepare and carry out an effective Study, following is a set of general principles and questions to consider in making

those choices. Whether or not these questions help, they will help guide you as you start to conduct the Research.

a) **Identify the kind of research you intend to do.** Depending on discipline, project, and personal inclination, social science research projects may contain a wide range of empirical and theoretical objectives. While most researchers hope to explore and document some form of "reality" -something important in the real world -- the reasons for doing so vary tremendously.

   Identifying your normative motivations and your theoretical foundations will considerably influence how you design your research: where you go, for how long, with whom you talk, and the kind of questions you ask. Deciding if you intend to test or elaborate existing theory or are trying to build a new, grand theory, or are using existing theory in a new way, has implications in the kind of information you need to collect.

b) **Be realistic.** The world is infinitely more complicated than anything you can possibly represent in a comprehensible text, be it your proposal or dissertation. Given the technical, financial, and chronological restraints you will face in conducting your research (see fieldwork below), you are going to have to make choices. Conducting a household survey may mean that you cannot also do participant observation, an in-depth ethnography, and extensive archival research. Such questions become even more complicated when conducting research at multiple sites or with ethnically or linguistically diverse populations. Selecting and justifying a limited number of approaches will demonstrate that you have thought through your agenda and the kind of information you need to make your point. Demonstrating that you have the technical skills to execute these approaches will only make your statement stronger.

c) **Be precise.** As with any concept you hope to use, you must be prepared to tease out and concretize the methods you select. If you intend to conduct open-ended interviews, you must ask a whole series of secondary questions:

   What do I want to get out of these interviews?

With whom am I going to conduct these interviews?
How do I know they will talk to me?
How many interviews must I do?
The same goes for "process tracing" (e.g., what process, where do I see this process, etc.), "archival research" (what archives, what sources, what about accessibility? reliability?), or with any other approach. Not all of your answers to these questions need to go in the proposal as well as the study.

d) Be flexible. While realism and precision require excluding some possible approaches, a research design that is too strictly curtailed raises its own set of hazards. To the contrary, the scholar must have the flexibility of mind to overturn old ways of looking at the world, to ask new questions, to revise research designs appropriately, and then to collect more data of a different type than originally intended. It may be useful to consider what you will do if you cannot access a certain data set, speak to a particular official, or live among a certain group of villagers. Developing a research design that allows you to incorporate these contingencies will help persuade grant-makers that you are ready for what lies ahead.

e) As much as possible, test your methods in advance. Trying out drafts of your questionnaire, interviewing technique or skills at facilitating focus group discussions can prove invaluable. Ideally, this would be done "in the field" on a pre-dissertation trip, but most of us are not lucky enough to get such a chance. You may be surprised, however, at just how quickly you can eliminate or refine particular questions or approaches by trying them with strangers at home. Moreover, you can help see what methods you realistically think you will be able to use. Doing this ahead of time will not only save invaluable time when you get to the field, but can help you decide what methods you are most comfortable (and most competent) using.

f) Consider revising your research question; consider revising your methods. For some, research design and methodology are seen as ways of operationalizing a research question. Others, often those with more technical leanings, choose a

research question that highlights their methodological prowess. There are merits to both approaches. A research question must be answerable by the methodological tools available to you, the researcher. Conversely, the methods, however sophisticated, must help you to answer a question of significance to both you and your discipline. Similarly, as your thinking evolves and your research question changes, you must be prepared to reformulate your research design.

3.1.3 About the Research Questions and Design of this Study:

In this study, the research questions seek to discuss facts, opinion and the attitudes of the people towards Distance education in Sierra Leone.

Thus to establish this, the questionnaire is by designed into four classes:

Class A – Targeting 500 members of the public.
Class B – Targeting 100 teachers of the primary schools.
Class C – Targeting 100 pupils of the secondary schools.
Class D – Targeting 100 teachers of the secondary schools.
Class E – Targeting 100 students of tertiary institutions
Class F – Targeting 100 tutors of tertiary institutions.

Further more, each questionnaire set has two sections such as
Section A – The questions that are designed to collect information on the Bio-data of the respondents with special reference to the sex, age, institution, marital and occupational status etc.

This section is varied as it is different in some aspects as compared to the existing classes. Some information like sex, age range etc is needed in all the question section A such as, marital status, educational status, occupational status etc may not necessarily be so.

The questions in section B, are common to all the classes of questionnaires.

They start with an introduction of the term distance learning and followed by questions that seek to discuss the knowledge, attitudes and practice of the distance learning in Sierra Leone.

These questions in this section are in most cases used in the discussion and oral interviews techniques in collecting additional data to the research.

3.2 IDENTIFICATION OF VARIABLES

3.2.1 Variables in General:

No one is able to do very much in research unless s/he knows how to talk about variables. A ***variable*** is *any entity that can take on different values.* Then what does that mean? Anything that can vary can be considered a variable. For instance, *age* can be considered a variable because age can take different values for different people or for the same person at different times. Similarly, *country* can be considered a variable because a person's country can be assigned a value.

Variables aren't always 'quantitative' or numerical. The variable 'gender' consists of two text values: 'male' and 'female'. We can, if it is useful, assign quantitative values instead of (or in place of) the text values, but we don't have to assign numbers in order for something to be a variable. It's also important to realize that variables aren't only things that we measure in the traditional sense. For instance, in much social research and in program evaluation, we consider the treatment or program to be made up of one or more variables (i.e., the 'cause' can be considered a variable). An educational program can have varying amounts of 'time on task', 'classroom settings', 'student-teacher ratios', and so on. So even the program can be considered a variable (which can be made up of a number of sub-variables).

In dealing with variables one has to talk about attributes.

An ***attribute*** is a specific value on a variable. For instance, the variable *sex* or *gender* has two attributes: *male* and *female*. Or, the variable *agreement* might be defined as having five attributes:

- 1 = strongly disagree
- 2 = disagree
- 3 = neutral
- 4 = agree
- 5 = strongly agree

Another important distinction having to do with the term 'variable' is the distinction between an ***independent*** and ***dependent*** variable. This distinction is particularly relevant when you are investigating cause-effect relationships.

In fact ***the independent variable is what you (or nature) manipulates*** -- a treatment or program or cause. The ***dependent variable is what is affected by the independent variable*** -- your effects or outcomes. For example, if you are studying the effects of a new educational program on student achievement, the program is the independent variable and your measures of achievement are the dependent ones.

Finally, there are two traits of variables that should always be achieved. Each variable should be ***exhaustive***; it should include all possible answerable responses. For instance, if the variable is "religion" and the only options are "Protestant", "Jewish", and "Muslim", there are quite a few religions I can think of that haven't been included. The list does not exhaust all possibilities. On the other hand, if you exhaust all the possibilities with some variables -- religion being one of them -- you would simply have too many responses. The way to deal with this is to explicitly list the most common attributes and then use a general category like "Other" to account for all remaining ones. In addition to being exhaustive, the attributes of a variable should be ***mutually exclusive***; no respondent should be able to have two attributes simultaneously. While this might seem obvious, it is often rather tricky in practice. For instance, you might be tempted to represent the variable "Employment Status" with the two attributes "employed" and "unemployed." But these attributes are not necessarily mutually exclusive -- a person who is looking for a second job while employed would be able to check both attributes! But don't we often use questions on surveys that ask the respondent to "check all that apply" and then list a series of categories? Yes,

we do, but technically speaking, each of the categories in a question like that is its own variable and is treated dichotomously

3.2.1 Variables in this study:

In this survey the variables are mainly:
Knowledge
Attitude and
Practice of distance education in Sierra Leone.

The survey seeks to discuss the level of awareness of the respondents on the concepts of distance education, this mean whether a greater number of the population really know what Distance Education is and how many people the respondent know that are engaged in the study.
The other variable to be mentioned is the attitude of the respondents to the distance education as well as the other people they know.

The third variable to be mentioned is the level of practice of distance education among the people of Sierra Leone. This level includes the current and the prospective. This implies how many people are actually engage in it, or have given through the distance education process as well as those who are willing as those who are willing to engage in it in the future.

With respect to knowledge, it is also important to note that the study will seek to discuss the various problems that distance education will solve if appropriately carried out in a third-world country like Sierra Leone.

3.3 Explanation of how the variables will be factored in and accounted for

Knowledge variable – This will be introduced in section A of each questionnaire as well as the section B. In section A, the questionnaire will be ended by briefly introducing distance education such as –

- Distance education is the type of education which takes place in off campus institutions.

- Distance education occurs on the e-line,
- Distance education does not require a face to face contact between the teacher and the students

In section B, the knowledge of the number of people who are engaged or have engaged in distance education will be factored in the questionnaire

- Do you know any one who is engaged in distance education?

  Yes ☐ No ☐

If yes, how many people? …….

ATTITUDES –

- Do you like distance education? Yes ☐ No ☐
- What are the attitudes of the people on distance education?

Yes ☐ No ☐

With the answers to the above questions and the like, the attitudes of the people/respondents towards distance education will be measured and recorded.

PRACTICE – The level of practice of distance education will be discovered by asking questions such as –

- Have you ever engaged in distance education? Yes ☐ No ☐
- What are some of the problems in distance education?

……

……

……

- Provide solution to the identified problems.

3.4 **Validation of survey institutions questions:**

There are three main questions used in the survey institutions. Firstly there are factual questions which require the respondent to tick the most appropriate answer to the question. Examples include: -

Sex: Male ☐ Female ☐

Occupational status

Employed ☐

Self-employed ☐

Privately employed ☐

Unemployed ☐

Secondly, there are opinion questions to be answered, which required some amount of words, phrases or sentences to be placed in given blanks e.g.

- Give one reason for your answer in Q 1 ……
- Suggest one solution to the identified problems ……

Thirdly questions that seek to measure or quantify the opinion of the respondent answers. E.g. include

What is your ranking about distance education in Sierra Leone?

Excellent ☐ Poor ☐

Very good ☐ Very poor ☐

Good ☐

VALIDITY OF QUESTIONS

The factual questions used are employed in order to collect the existing facts from the respondents such as:

I) The number of respondents

II) The sexes of the respondents

III) Their institutions

IV) Their occupational status etc

Secondly the open questions are valid because they provide the researcher with various studies of opinions with regards to the topic of research.

Thirdly, the quantitative questions seek to measure Levels, rates and numbers, and above all rank or printed the reminded facts of the research.

3.5 IDENTIFICATION OF SAMPLE QUESTIONS TO BE USED.

The sample questions administered are as presented below:

3.5.1 RESEARCH SAMPLE A – 500 MEMBERS OF THE PUBLIC

1. Sex: Male ☐ Female ☐ (Please tick)
2. Age range

10 – 15	☐	31 – 35	☐	51 – 55	☐
16 – 20	☐	36 – 40	☐	55+	☐
21 – 25	☐	41 – 45	☐		
26 – 30		45 – 50	☐		

3. Place of residence in Sierra Leone

Northern Province ☐
Southern Province ☐
Western Area ☐
Eastern Province ☐

4. Occupational status

Employed ☐
Self-employed ☐
Privately employed ☐
Unemployed ☐

5. Marital status

Married	☐	Widowed	☐
Single	☐	Separated	☐
Divorced	☐		

6. Educational status

Illiterate ☐
Literate in English ☐
Literate in French ☐
Literate in Arabic ☐
Literate in another official language ☐ (Please state ……)

7. If literate in an official language up to what level?

Primary ☐
Secondary ☐
Tertiary ☐

8. Have you ever engaged in Distance Education?

Yes ☐ No ☐

9. If yes to question 8, then at what level?

Primary ☐

Secondary ☐

Tertiary ☐

SECTION B – DISTANCE EDUCATION AND THE SOCIETY

INTRODUCTION – This research considers distance education to be learning that takes place off campus (i.e. through the internet, through the post office, via telephone and the like). It also implies the non face-to-face learning and teaching between the student/leaner and the tutor/supervisor.

10. How many people do you know that have gone through distance education?……. (Male …… Female ……)

11. What is the output of majority of them?

Excellent ☐ Poor ☐

Very good ☐ Very poor ☐

Good ☐

12. What is the employment rate of distance education graduates?

Excellent ☐ Poor ☐

Very good ☐ Very poor ☐

Good ☐

13. What is the attitude of the public towards the distance education in your community? Positive ☐ Negative ☐

14. What is your attitude towards the distance education in general?

Positive ☐ Negative ☐

15. What do you think about the distance education in Sierra Leone?

It must be stopped ☐

It must be encouraged ☐

It must continue ☐

It must be expended ☐ (Tick only one answer)

16. Give any two reasons for your answer in Question 15.

……

……

……

……

17. List down any five problems that may likely affect the distance education system in Sierra Leone.

……

……

……

……

……

18. Name any one solution for each of the identified problems in Q. 17.

……

……

……

……

……

19. List down any five problems the distance education has solved in third world Africa.

……

……

……

……

……

20. Provide any two questions for the researcher: -

……

……

……

……

3.5.2 RESEARCH SAMPLE B – 100 PRIMARY SCHOOL TEACHERS

1. Sex: Male ☐ Female ☐

2. Age range

10 – 15	☐	31 – 35	☐	51 – 55	☐
16 – 20	☐	36 – 40	☐	55+	☐
21 – 25	☐	41 – 45	☐		
26 – 30	☐	45 – 50	☐		

3. Place of residence in Sierra Leone

Northern Province ☐

Southern Province ☐

Western Area ☐

Eastern Province ☐

4. About your school

Name ……...

Type: Government ☐ Private ☐ Mission ☐

School roll……

Which classes do you teach ……

Location of school in Freetown

Western	☐	Eastern	☐
Central	☐	Outskirts	☐

5. Your Highest Educational Qualification

'O' level ☐ First degree ☐ (specify …….)

'A' level ☐ 2nd degree ☐ (specify ……)

T. C ☐ H.T.C ☐

6. Length of experience in Teaching. (No. of years ……..)

7. Have you ever engaged in distance education?

Yes ☐ No ☐

8. If yes to question 7, at what level?

Primary ☐

Secondary ☐

Tertiary ☐

SECTION B – DISTANCE EDUCATION AND THE SOCIETY

INTRODUCTION – This research considers distance education to be learning that take place off campus (i.e. through the internet, through the post office, via telephone and the like). It also implies the non face-to-face learning and teaching between the student/leaner and the tutor/supervisor.

9. How many people do you know that have gone through distance education?

……. (Male …… Female ……)

10. What is the output of majority of them?

Excellent ☐ Poor ☐

Very good ☐ Very poor ☐

Good ☐

11. What is the employment rate of distance education graduates?

Excellent ☐ Poor ☐

Very good ☐ Very poor ☐

Good ☐

12. What is the attitude of the public towards the distance education in your community? Positive ☐ Negative ☐

13. What is your attitude towards the distance education in general?
Positive ☐ Negative ☐

14. What do you think about the distance education in Sierra Leone?
It must be stopped ☐
It must be encouraged ☐
It must continue ☐
It must be expended ☐ (Tick only one answer)

15. Give any two reasons for your answer in Question 15.
……
……
……
……

16. List down any five problems that may likely affect the distance education system in Sierra Leone.
……
……
……
……
……

17. Name any one solution for each of the identified problems in Q. 17.
……
……
……
……
……

18. List down any five problems the distance education have solved in third world Africa.

……

……

……

……

……

19. Provide any two questions for the researcher: -

……

……

……

……

3.5.3 RESEARCH SAMPLE C – 100 SECONDARY SCHOOL PUPILS

1. Sex: Male Female

2. Age range

10 – 15	☐	31 – 35	☐	51 – 55	☐
16 – 20	☐	36 – 40	☐	55+	☐
21 – 25	☐	41 – 45	☐		
26 – 30	☐	45 – 50	☐		

3. Place of residence in Sierra Leone

Northern Province ☐

Southern Province ☐

Western Area ☐

Eastern Province ☐

4. About your school

4.1 Name …….

4.2 Type: Government ☐ Private ☐ Mission ☐

4.3 School roll……

4.4 Which classes do you teach ……

4.5 Location of school in Freetown

Western ☐ Eastern ☐

Central ☐ Outskirts ☐

5 What are your two best subjects?

5.1 ……

5.2 ……

6 Give one reason for each of your answers in question 5.

6.1 ……

6.2 ……

7 Have you ever engaged in any distance education?

Yes ☐ No ☐

8 If yes to question 7, please state the course and core subjects ……

8.1 Course ……

8.2 Core Subjects ……

9. If no, would you like to engage in it in the future? Yes ☐ No ☐ ,

Give a reason for your answer ……

…..……

SECTION B – DISTANCE LEARNING AND THE SOCIETY

INTRODUCTION – This research considers distance education to be learning that take place off campus (i.e. through the internet, through the post office, via telephone and the like). It also implies the non face-to-face learning and teaching between the student/leaner and the tutor/supervisor.

10. How many people do you know that have gone through distance education?

…… (Male …… Female ……)

11. What is the output of majority of them?

Excellent ☐ Poor ☐

Very good ☐ Very poor ☐

Good ☐

12. What is the employment rate of distance education graduates?

Excellent ☐ Poor ☐

Very good ☐ Very poor ☐

Good ☐

13. What is the attitude of the public towards the distance education in your community? Positive ☐ Negative ☐

14. What is your attitude towards the distance education in general?

Positive ☐ Negative ☐

15. What do you think about the distance education in Sierra Leone?

It must be stopped ☐

It must be encouraged ☐

It must continue ☐

It must be expended ☐ (Tick only one answer)

16. Give any two reasons for your answer in Question 15.

16.1 ……

……

16.2 ……

……

17 List down any five problems that may likely affect the distance education system in Sierra Leone.

17.1 ……

17.2 ……

17.3 ……

17.4 ……

17.5 ……

18 Name any one solution for each of the identified problems in Q. 17.

18.1 ……

18.2 ……

18.3 ……

18.4 ……

18.5 ……

19 List down any five problems the distance education have solved in third world Africa.

19.1 ……

19.2 ……

19.3 ……

19.4 ……

19.5 ……

20 Provide any two questions for the researcher: -

20.1 ……
……

20.2 ……
……

3.5.4 RESEARCH SAMPLE D–100 SECONDARY SCHOOL TEACHERS

1. Sex: Male ☐ Female ☐
2. Age range

10 – 15	☐	31 – 35	☐	51 – 55	☐
16 – 20	☐	36 – 40	☐	55+	☐
21 – 25	☐	41 – 45	☐		
26 – 30	☐	45 – 50	☐		

3. Place of residence in Sierra Leone

Northern Province ☐

Southern Province ☐

Western Area ☐

Eastern Province ☐

4. About your school

4.1 Name ……....

4.2 Type: Government ☐ Private ☐ Mission ☐

4.3 School roll……..……

4.4 Which classes do you teach ……..……

4.5 Location of school in Freetown

Western ☐ Eastern ☐

Central ☐ Outskirts ☐

5 Your Highest Educational Qualification

'O' level ☐ First degree ☐ (specify …….)

'A' level ☐ 2nd degree ☐ (specify ……)

T. C ☐ H.T.C ☐

6 Length of experience in Teaching. (No. of years ……..)

7 Have you ever engaged in distance education?

Yes ☐ No ☐

8 If yes to question 7, at what level?

Primary ☐

Secondary ☐

Tertiary ☐

SECTION B – DISTANCE EDUCATION AND THE SOCIETY

INTRODUCTION – This research considers distance education to be learning that take place off campus (i.e. through the internet, through the post office, via telephone and the like). It also implies the non face-to-face learning and teaching between the student/leaner and the tutor/supervisor.

9 How many people do you know that have gone through distance education?
……. (Male …… Female ……)

10 What is the output of majority of them?

Excellent	☐	Poor	☐
Very good	☐	Very poor	☐
Good	☐		

11 What is the employment rate of distance education graduates?

Excellent	☐	Poor	☐
Very good	☐	Very poor	☐
Good	☐		

12 What is the attitude of the public towards the distance education in your community? Positive ☐ Negative ☐

13 What is your attitude towards the distance education in general?
Positive ☐ Negative ☐

14 What do you think about the distance education in Sierra Leone?

It must be stopped	☐	
It must be encouraged	☐	
It must continue	☐	
It must be expended	☐	(Tick only one answer)

15 Give any two reasons for your answer in Question 15.

15.1 ……

……

15.2 ……

……

16 List down any five problems that may likely affect the distance education system in Sierra Leone.

16.1 ……

16.2 ……

16.3 ……

16.4 ……

16.5 ……

17 Name any one solution for each of the identified problems in Q. 17.

17.1 ……

17.2 ……

17.3 ……

17.4 ……

17.5 ……

18 List down any five problems the distance education have solved in third world Africa.

18.1 ……

18.2 ……

18.3 ……

18.4 ……

18.5 ……

19 Provide any two questions for the researcher: -

19.1 ……

……

19.2 ……

……

3.5.5 **RESEARCH SAMPLE E – 100 TERTIARY INSTITUTION STUDENTS**

1. Sex: Male ☐ Female ☐ (Please tick)

2. Age range

10 – 15	☐	31 – 35	☐	51 – 55	☐
16 – 20	☐	36 – 40	☐	55+	☐
21 – 25	☐	41 – 45	☐		
26 – 30	☐	45 – 50	☐		

3. Place of residence in Sierra Leone

Northern Province ☐

Southern Province ☐

Western Area ☐

Eastern Province ☐

4. About your Institution

4.1 Name ……

4.2 Type: Government ☐ Private ☐ Mission ☐

4.3 Roll……

4.4 Your classes/form ……

4.5 Location of school in Freetown

Western ☐ Eastern ☐

Central ☐ Outskirts ☐

5 What are your two best subjects?

5.1 ……

5.2 ……

6 Give one reason for each of your answers in question 5.

6.1 ……

6.2 ……

7 Have you ever engaged in any distance education?

Yes ☐ No ☐

8 If yes to question 7, please state the course and core subjects……

8.1 Course` ……

8.2 Core Subjects ……

9. If no, would you like to engaged in it in the future? Yes ☐ No ☐,
Give a reason for your answer ……
……

SECTION B – DISTANCE EDUCATION AND THE SOCIETY

INTRODUCTION – This research considers distance education to be learning that take place off campus (i.e. through the internet, through the post office, via telephone and the like). It also implies the non face-to-face learning and teaching between the student/leaner and the tutor/supervisor.

10. How many people do you know that have gone through distance education?
…… (Male …… Female ……)

11. What is the output of majority of them?

Excellent	☐	Poor	☐
Very good	☐	Very poor	☐
Good	☐		

12. What is the employment rate of distance education graduates?

Excellent	☐	Poor	☐
Very good	☐	Very poor	☐
Good	☐		

13. What is the attitude of the public towards the distance education in your community? Positive ☐ Negative ☐

14. What is your attitude towards the distance education in general?

Positive	☐	Negative	☐

15. What do you think about the distance education in Sierra Leone?

It must be stopped ☐

It must be encouraged ☐

It must continue ☐

It must be expended ☐ (Tick only one answer)

16. Give any two reasons for your answer in Question 15.

16.1 ……

……

16.2 ……

……

17. List down any five problems that may likely affect the distance education system in Sierra Leone.

17.1 ……

17.2 ……

17.3 ……

17.4 ……

17.5 ……

18 Name any one solution for each of the identified problems in Q. 17.

18.1 ……

18.2 ……

18.3 ……

18.4 ……

18.5 ……

19 List down any five problems the distance education has solved in third world Africa.

19.1 ……

19.2 ……

19.3 ……

19.4 ……

19.5 ……

20 Provide any two questions for the researcher: -

20.1 ……

……

20.2 ……

……

3.5.6 RESEARCH SAMPLE F – 100 TERTIARY INSTITUTION TUTORS

QUESTIONNAIRE SERIAL NO: -

1. Sex: Male ☐ Female ☐ (Please tick)
2. Age range

10 – 15	☐	31 – 35	☐	51 – 55	☐
16 – 20	☐	36 – 40	☐	55+	☐
21 – 25	☐	41 – 45	☐		
26 – 30	☐	45 – 50	☐		

3. Place of residence in Sierra Leone

Northern Province	☐
Southern Province	☐
Western Area	☐
Eastern Province	☐

4. Marital Status

Married	☐	Widowed	☐
Single	☐	Separated	☐
Divorced	☐		

5. About your Institution

5.1 Name ……

5.2 Type: Government ☐ Private ☐ Mission ☐

5.3 Roll……

5.4 Which levels of students do you teach ……..…..

5.5 What are your main teaching subjects?

……

……

……

5.6 Location of your institution in Freetown

……

……..

6 Your Highest Educational Qualification

'O' level	☐	First degree	☐	(specify ……...…….)
'A' level	☐	2nd degree	☐	(specify ……)
T. C	☐	H.T.C	☐	

7 Length of experience in Teaching. (No. of years ……..)

8 Have you ever engaged in distance education?

Yes ☐ No ☐

9 If yes to question 8, at what level of your learning/education?

Primary ☐

Secondary ☐

Tertiary ☐

SECTION B – DISTANCE EDUCATION AND THE SOCIETY

INTRODUCTION – This research considers distance education to be learning that take place off campus (i.e. through the internet, through the post office, via telephone and the like). It also implies the non face-to-face learning and teaching between the student/leaner and the tutor/supervisor.

10 How many people do you know that have gone through distance education?

…… (Male …… Female ……)

11 What is the output of majority of them?

Excellent ☐ Poor ☐

Very good ☐ Very poor ☐

Good ☐

12 What is the employment rate of distance education graduates?

Excellent ☐ Poor ☐

Very good ☐ Very poor ☐

Good ☐

13 What is the attitude of the public towards the distance education in your community? Positive ☐ Negative ☐

14 What is your attitude towards the distance education in general?

Positive ☐ Negative ☐

15 What do you think about the distance education in Sierra Leone?

It must be stopped ☐

It must be encouraged ☐

It must continue ☐

It must be expended ☐ (Tick only one answer)

16 Give any two reasons for your answer in Question 15.

16.1 ……

……

16.2 ……

……

17 List down any five problems that may likely affect the distance education system in Sierra Leone.

17.1 ……

17.2 ……

17.3 ……

17.4 ……

17.5 ……

18 Name any one solution for each of the identified problems in Q. 17.

18.1 ……

18.2 ……

18.3 ……

18.4 ……

18.5 ……

19 List down any five problems the distance education have solved in third world Africa.

19.1 ……

19.2 ……

19.3 ……

19.4 ……

19.5 ……

20 Provide any two questions for the researcher: -

20.1 ……

……

20.2 ……

……

3.5.7 DESCRIPTION AND JUSTIFICATION OF POPULATION SIZE USED SAMPLE SIZE

POPULATION SIZE – The research in any field of study must consider a given population size. By population size, it means the available number of people or elements that will provide the requisite information of the research questions. For instance if the study is on the topic:

- The causes and effects of prostitution in the XYZ community.
- Thus the research population is the number of prostitutes in the XYZ community. This can be in tens, one hundreds, thousands, millions etc

In this study, where the statement: "Distance Education can solve the numerous educational problems in third-world Africa" needs to be substantiated, the available research population is drawn from the current population in Sierra Leone i.e.: 5.5 million.[9]

This population has about 2.5 million children, 2 million youths,1 million Adults. This means, the youths and adults (2 + 1 million) are capable of poverty answers to this research. Hence the research population is 3 million people in Sierra Leone.

USED SAMPLE SIZE – The phrase sample size refers to the subset of a research population that is capable of providing the element of a research. In the example already mentioned (i.e. the prostitutes in the XYZ community), the sample size is a proportion or subset that is selected (by sampling methods) from the available research population. And if the research populations were 1000 and only 100 elements were to be investigated on, this means the sample size is 100.

In this study's research population the chosen sample size has the undermentioned status:

Sample

A – members of the public	=	500
B – primary school teachers	=	100
C – secondary school pupils	=	100

D – secondary school teachers	=	100
E – tertiary institution students	=	100
F – tertiary institution tutors	=	100
Total number	=	1000

This study assumes that 1000 people drawn from the research population will provide answers to the questionnaires of the surveys inorder to validate the statement of the research.

Members of the public refers to every individual that is outside samples B to F during the conduct of the research.

Primary school teachers – These are teachers who teach in the various primary schools in Sierra Leone. The classes they teach range from primary 1 to primary 6. They cater for the fundamental level children in education in the Sierra Leone society.

Secondary school pupils – These as in the sample that covers those learners in Junior Secondary school I on to II as well as Senior secondary school I on to II. They are normally in the age grade 10 – 22 years.

Secondary School Teachers – This sample reflects those who teach in the JSS I-III as well as SSS I to III. They possess the qualifications that range from 1st degrees on to masters level.

Tertiary Institution Students – This refers to the class of respondents in the highest educational institution level in Sierra Leone. The Sierra Leone Ministry of Education refers to this level as the one catering for the last four of the 6-3-3-4 education system.

Tertiary Institution Tutors – This refers to the class of teachers – respondents in the survey and they are drawn from the existing tertiary institutions in the country. Some of them are: -

[9] Results of the 2004 population census in Sierra Leone.

- The Institute of Advanced Management and Technology
- The Milton Margai College of Education and Technology.
- The Fourah Bay College
- The Northern Poly-technic – Makeni
- The Eastern Poly-technic – Kenema
- The Njala University College etc

3.6 CONTINGENCY PLANS FOR THE METHODOLOGICAL COMPONENT

The research had used mainly the undermentioned methods of data collection and sampling.

Data collection methods:

Tools – The questionnaires will designed well ahead of time and then administered in the following quantity:

Members of the public	-	550
Primary school teachers	-	130
Secondary school pupils	-	130
Secondary school teachers	-	130
Tertiary institution students	-	130
Tertiary institution tutors	-	130

The additional 50 and 30 on each of the above mentioned questions will be used to make up for those that will not be returned to the researcher on time. This serves as a contingency plan for the administering of the questionnaires.

In the use of discussion method of collecting data, the method will be applied during the school session this also applies to the tertiary institutions. The research was conducted during the second term i.e. January 2006 – March 2006 in Sierra Leone.

Another contingency plan used that is worthy to mention is that of the selection of the samples.

For the members of the public, there is no research on who to belong in the sample size. Then in the other samples: A to F only the targeted elements such as teachers, pupils, teachers etc, are to be included and interviewed in the research survey.

CHAPTER FOUR

DATA COLLECTION, PRESENTATION AND ANALYSIS

4.1 RESEARCH SAMPLE

Should research samples reflect the diversity of the population?

In an attempt to answer the above Question (Should research samples reflect the diversity of the Population ?), The following can be applied.

Recent research governance documents say that the body of research evidence must reflect population diversity. The response to this needs to be more sophisticated than simply ensuring minorities are present in samples.

For quantitative research for instance, a Study looking primarily at treatment effects of drugs and devices four suggestions are made. (Allmark P., 2005)

First, identify where the representation of minorities in samples matters—for example, where ethnicity may cause different treatment effects.

Second, where the representation of a particular group matters then subgroup analysis of the results will usually be necessary.

Third, ensuring representation and subgroup analysis will have costs; deciding on whether such representation is worthwhile will involve cost benefit analysis. (Allmark P., 2005)

Fourth, the representation of minorities should not be seen as mainly a locality issue.

For qualitative research it is argued that the representation of diversity is often important. Given the small samples of many qualitative projects, however, the best way to ensure representation occurs is to allow a proliferation of such research, not to stipulate such representation in samples.

In this research, both the Qualitative and the Quantitative features are being taken into consideration**.** The research sample comprises the following category of people i.e.

- Members of the public - 500
- Primary School Teachers - 100
- Primary School Pupils - 100
- Secondary School Teachers - 100
- Students - 100
- Tertiary institution Teachers - 100

The research considers the above group and questionnaires were administered to every group on the basis that distance education is learning that takes place off campus, through the Internet, through the post office etc.

SAMPLING METHODS

In a Scientific Research, there are various Sampling Methods one can use.
But, it is incumbent on the researcher to clearly define the target population. There are no strict rules to follow, and the researcher must rely on logic and judgment. The population is defined in keeping with the objectives of the study.

Sometimes, the entire population will be sufficiently small, and the researcher can include the entire population in the study. This type of research is called a census study because data is gathered on every member of the population.

Usually, the population is too large for the researcher to attempt to survey all of its members. A small, but carefully chosen sample can be used to represent the population. The sample reflects the characteristics of the population from which it is drawn.

Sampling methods are classified as either *probability* or *no probability*. (***Stat Pac Inc. 1997-2007***).In probability samples, each member of the population has a known non-zero probability of being selected. Probability methods include random

sampling, systematic sampling, and stratified sampling. In nonprobability sampling, members are selected from the population in some non-random manner. These include convenience sampling, judgment sampling, quota sampling, and snowball sampling. The advantage of probability sampling is that sampling error can be calculated. Sampling error is the degree to which a sample might differ from the population. When inferring to the population, results are reported plus or minus the sampling error. In nonprobability sampling, the degree to which the sample differs from the population remains unknown. ***(Stat Pac Inc. 1997-2007)***

Random sampling is the purest form of probability sampling. Each member of the population has an equal and known chance of being selected. When there are very large populations, it is often difficult or impossible to identify every member of the population, so the pool of available subjects becomes biased.

Systematic sampling is often used instead of random sampling. It is also called an Nth name selection technique. After the required sample size has been calculated, every Nth record is selected from a list of population members. As long as the list does not contain any hidden order, this sampling method is as good as the random sampling method. Its only advantage over the random sampling technique is simplicity. Systematic sampling is frequently used to select a specified number of records from a computer file.

Stratified sampling is commonly used probability method that is superior to random sampling because it reduces sampling error. A stratum is a subset of the population that share at least one common characteristic. Examples of stratums might be males and females, or managers and non-managers. The researcher first identifies the relevant stratums and their actual representation in the population. Random sampling is then used to select a *sufficient* number of subjects from each stratum. "*Sufficient*" refers to a sample size large enough for us to be reasonably confident that the stratum represents the population. Stratified sampling is often used when one or more of the stratums in the population have a low incidence relative to the other stratums.

Convenience sampling is used in exploratory research where the researcher is interested in getting an inexpensive approximation of the truth. As the name implies, the sample is selected because they are convenient. This nonprobability method is often used during preliminary research efforts to get a gross estimate of the results, without incurring the cost or time required to select a random sample.

Judgment sampling is a common nonprobability method. The researcher selects the sample based on judgment. This is usually and extension of convenience sampling. For example, a researcher may decide to draw the entire sample from one "representative" city, even though the population includes all cities. When using this method, the researcher must be confident that the chosen sample is truly representative of the entire population.

Quota sampling is the nonprobability equivalent of stratified sampling. Like stratified sampling, the researcher first identifies the stratums and their proportions as they are represented in the population. Then convenience or judgment sampling is used to select the required number of subjects from each stratum. This differs from stratified sampling, where the stratums are filled by random sampling.

Snowball sampling is a special nonprobability method used when the desired sample characteristic is rare. It may be extremely difficult or cost prohibitive to locate respondents in these situations. Snowball sampling relies on referrals from initial subjects to generate additional subjects. While this technique can dramatically lower search costs, it comes at the expense of introducing bias because the technique itself reduces the likelihood that the sample will represent a good cross section from the population.

In this study, the researcher had extensively made the under mentioned:
Quota Sampling and
Random Sampling

QUOTA SAMPLING

Before the research, the researcher had a pre-set quota of respondents to interview so as to provide the required information in the study.

This quota includes:

500 – Members of the Public.
100 – Primary School Teachers.
100 – Secondary School Pupils.
100 – Secondary School Teachers.
100 – Students in Tertiary Institutions and
100 – Tutors of Tertiary institutions. All this yielded to a total quota of 1000 respondents which provided the guide on how many people to be interviewed or not.[10]

RANDOM SAMPLING

From the provided quota, the researcher had also employed the random sampling techniques. This involved the selection of respondents and a survey purely based on luck/chance. And that each item/element in the study has an equal chance of being selected and not being selected.

And on the members of the public, primary school teachers, secondary school pupils and teachers, students and the tertiary institutions as well as the tutors were randomly selected to satisfy the set quota.

4.2 TOOLS USED IN THE STUDY

4.2.0 The research had used the methods mentioned below of data collection and sampling methods.

- Discussion.

[10] Judd et all , Research Methods in Social Relations, Sixth edition

- Interviews.
- Questionnaire.

The survey aimed to achieve 1000 interviews within a specific period of time. Interviews had to be completed within three months period of time (i.e. February, 2006 – April, 2006).

4.2.1 HOW THE METHODS WERE USED

(A) **DISCUSSIONS**: - Both official and unofficial discussions were held with the targeted and non-targeted respondents with respect to the theme. Distance education in the third-world countries using Sierra Leone as a case study.

The discussion held were both formal and informal, formal discussions were held with people in senior positions of trust's such as the Director General in the Ministry of Education, the Commissioners, of Basic Education as well as the Deputy Minister of Education in the republic of Sierra Leone.

And informal discussions were held with students at libraries, colleges and school campuses in major towns in Sierra Leone – such as Freetown, Bo, Makeni, and Kenema etc.

The discussions termed formal were simply described as that way because there was need for official letters to be written or appointments to be fixed before the discussions are made in the approval visit. But in the case of the informal discussions, no prior notice is required and the discussions do not use structured questions and answers. Even the language is not official as Krio and the vernacular language is been used throughout the discussion process.[11]

[11] Zechmeister E.B. et all , A Practical Introduction to Research Methods in Psychology Third Edition

Above all, the formal discussion have employed to a greater extent English as the medium of communication, and only at very few instances where classification is required the respondents or researcher may use the Krio (which is the lingua franca) of the Sierra Leonean community.

(B) **INTERVIEWS**: - the researchers are holding both structured and unstructured interviews with the respondents. The structural interviews go along with set or laid down questions and answers provided by the respondents are being recorded down.

In the case of the unstructured interviews, no pre-set questions are used in the process, but the researcher is guided by his/her purpose to collect information on the theme distance education in Africa.

(C) QUESTIONAIRES

The study has also used questionnaires to collect the demand data. Hence 1200 questionnaires were demand and were applied as stated below.

To:

- Members of the Public - 600
- Primary School Teachers - 120
- Secondary School Pupils - 120
- Secondary School Teachers - 120
- Students - 120
- Tutors - 120

Total - 1200

This come out of the retrieved completed questionnaires, the undermentioned were used to present and asnalyse the data:

- Members of the Public - 500
- Primary School Teachers - 100
- Secondary School Pupils - 100
- Secondary School Teachers - 100
- Students - 100
- Tutors - 100

Total - 1000

Responses from the selected and targeted No. of questionnaire were analyzed and compiled before presented. The quantification is done as follow:

E.g. when the question (what is the attitudes of the people towards distance education in Sierra Leone) was asked the answers were:
Positive B / Negative B.

The data was recorded as
Sample Table 4.1 (C)

RESPONDENTS	**TALLY**		**FREQUENCY**	
	POSITIVE	**NEGATIVE**	**POSITIVE**	**NEGATIVE**
A). Members of the Public	1111 1111 11	1111 111	12	8
B). Primary School Teachers	1111 1	1111 11	6	7
C). Secondary School Pupils	1111 1111 111	1111	13	5
D). Secondary School Teachers	1111 1111 1111	1111 1111	15	9
E). Students	1111 1111 1111 1111	1111 1111	20	10
F). Tutors	1111	1111	5	4
TOTAL	-	-	**71**	**43**

Hence the above method was extremely employed to tally results of the study.

(D) **LITERATURE RESEARCH** – Was also employed in the research, which involves the reaching of information from reference books, textbooks, novels, periodicals and the like.

4.3 PRIMARY SOURCES OF THE DATA

The study being on education had several sources of data. The primary, secondary as well as the tertiary sources of data.

In the primary source, information required is collected from the people that are directly related to the distance education in the country. And this includes people such as:

- Primary school authorities.
- Secondary school authorities.
- Secondary school pupils.
- Tertiary educational institutions learners and tutors.
- Parents and guardian that are members of the public.

4.4 SECONDARY SOURCES OF THE DATA

The study was not limited alone on interviewing the people referred to as respondent, but also included the collection of data from published and unpublished data sources such as newspaper, magazines, manuals, periodicals, textbooks and the like.

The information collected was through literature research. As the researchers read the secondary sources of information to obtain meaning and clarification of key concepts such as education, distance education, open learning, the history of distance education and many others.

4.5 ANALYSIS AND PRESENTATION OF THE DATA

Introduction – There are two main sections to the analysis and presentation of the data. They are: The presentation and analysis of the Bio-data of the respondents – Section A, and the responses of the interviewees with respect to the main research questions provided in the study.

The two sections are thus presented as expressed below.

4.5.1 DEMOGRAPHIC OF THE RESPONDENTS

(A) SEX DISTRIBUTION OF THE RESPONDENTS

TABLE 4.5.1(A)

RESPONDENTS	**MALE**	**FEMALE**	**TOTALS**
A). Members of the Public	199	301	500
B). Primary School Teachers	36	64	100
C). Secondary School Pupils	47	53	100
D). Secondary School Teachers	68	32	100
E). Students	52	48	100
F). Tertiary Institution Teachers.	69	31	100
TOTAL	**471**	**529**	**1000**
%	**47.1**	**52.9**	**100**

Source: - Dr. A. P. Kamara's 2006 survey.

From the table above (table 4.5.1A), it can be seen that:

i. There are more female respondents than the male.
ii. Five hundred members of the public were used in the sampling frame of the study.
iii. There were more female members of the public respondents than the male members.
iv. There is a higher proportion of females in the country (Sierra Leone) as compared to their male counterparts.

B AGE RANGE OF THE RESPONDENTS

TABLE 4.5.1 (B)

AGE RANGE	MALE		FEMALE		TOTALS	
	NO.	%	NO.	%	NO.	%
10 – 15 Years	08	0.8	10	1.0	18	1.8
15 – 20 Years	37	3.7	45	4.5	82	8.2
21 – 25 Years	13	1.3	26	2.6	39	3.9
26 – 30 Years	18	1.8	57	5.7	75	7.5
31 – 35 Years	101	10.0	140	14.0	241	24.1
36 – 40 Years	121	12.1	90	9.0	211	21.1
41 – 45 Years	100	10.1	70	7.0	170	17.0
46 – 50 Years	33	3.3	57	5.7	90	9.0
51 – 55 Years	30	3.0	28	2.8	58	5.8
55+ Years	10	1.0	06	0.6	16	1.6
TOTAL	**471**	**47.1**	**529**	**52.9**	**1000**	**100**

Source: - Dr. A. P. Kamara's 2006 survey

The above table (4.5.1B) expresses that:

i. 24.1% (241/1000) of the respondent belonged to the age bracket 31-35 years, while
ii. 21.1% (211/1000) were in the age bracket 36-40 years.
iii. The least % of the respondents is found in the age bracket 55+ years.
iv. The second least of respondents are found in the age bracket 10-15 years (1.8% i.e. 1 of 1000).

C PLACES OF RESIDENCE IN SIERRA LEONE BY INTERVIEWEES

TABLE 4.5.1 (C)

RESPONDENTS	**RESIDENCE LOCATION**				
	NORTH	**SOUTH**	**EAST**	**WEST**	**TOTALS**
A). Members of the Public	121	96	74	209	500
B). Primary School Teachers	30	26	11	33	100
C). Secondary School Pupils	28	18	15	39	100
D). Secondary School Teachers	26	17	14	43	100
E). Students	28	14	12	46	100
F). Tutors	30	16	16	38	100
TOTAL (000)	**263**	**187**	**142**	**408**	**1000**
(%)	**26.3**	**18.7**	**14.2**	**40.8**	**100**

Source: - Dr. A. P. Kamara's 2006 survey

The table below shows that:

40.8% of the respondents were in the Western Area,
26.3% of them were in the Northern Region,
18.7% of them were in the Southern Region,
14.2% of them were in the Eastern Region.

This means, more of the respondents were in the Western Region of the country.

D OCCUPATIONAL STATUS OF THE REPONDENTS

TABLE 4.5.1 (D)

RESPONDENTS	**OCCUPATIONAL STATUS**				
	EMPLOYED PRIVATE	**SELF EMPLOYED**	**PUBLIC EMPLOYED**	**UNEMPLOYED**	**TOTALS**
A). Members of the Public	36	103	85	276	500
B). Primary School Teachers	20	-	80	-	100
C). Secondary School Pupils	-	-	-	100	100
D). Secondary School Teachers	35	-	65	-	100
E). Students	-	-	-	100	100
F). Tutors	24	-	76	-	100
TOTAL (NO.)	**115**	**103**	**306**	**476**	**1000**
(%)	**11.5**	**10.3**	**30.6**	**47.6**	**100**

Source: - Dr. A. P. Kamara's 2006 survey

This table 4.5.1 (D) provides an occupational status explanation of the respondents, such as:

47.6% (i.e. 476/1000) are unemployed.
30.6% (i.e. 306/1000) are employed by the government (either national or local).
10.3% (i.e. 103/1000) are self employed.
11.5% (i.e. 115/1000) are employed in the private sector.

This statistics shows a high unemployment rate for Sierra Leone.

E MARITAL STATUS OF THE RESPONDENTS

TABLE 4.5.1 (E)

RESPONDENTS	MARITAL STATUS					
	MARRIED	**SINGLE**	**DIVORCED**	**WIDOWED**	**SEPARATED**	**TOTALS**
A). Members of the Public.	101	240	102	27	30	500
B). Primary School Teacher.	41	32	10	07	10	100
C). Secondary School Teachers	36	40	08	06	10	100
D). Secondary School Pupils.	-	100	-	-	-	100
E). Student.	19	30	13	10	28	100
F). Tutors.	26	33	11	08	22	100
TOTAL NO.	**223**	**475**	**144**	**58**	**100**	**1000**
%.	**22.3**	**47.5**	**14.4**	**5.8**	**10.0**	**100**

Source: - Dr. A. P. Kamara's 2006 survey.

In table 4.5.1 (E) the question, of the marital status of the respondents was answered and responses received were as expressed below:

i. 47.5% of the entire respondents is 475/1000 claimed to be single.
ii. 22.3% claimed to be married.
iii. 14.4% claimed to have got a divorced relationship.
iv. While 5.8% are widowed and 10% have got a separated relationship.
v. 10.0% claimed to be separated.

F ANGUAGE PROFICIENCY OF THE RESPONDENTS

TABLE 4.5.1 (F)

RESPONDENTS	**LITERATE IN**				
	ENGLISH	**FRENCH**	**ARABIC**	**ANOTHER LANGUAGE**	**TOTALS**
A). Members of the Public	289	91	100	20	500
B). Primary School Teachers	100	(26)	(14)	(3)	100
C). Secondary School Pupils	100	(11)	(21)	(8)	100
D). Secondary School Teachers	100	(8)	(7)	(5)	100
E). Students	100	(12)	(18)	(09)	100
F). Tutors	100	(16)	(21)	(08)	100
TOTAL (NO.)	**789**	**91**	**100**	**20**	**1000**
(%)	**78.9**	**9.1**	**10.0**	**2.0**	**100**

Source: Dr. A. P. Kamara's 2006 survey.

The table 4.5.1 (F) attempts to describe the educational status of the respondents and it prescribes that:

i. 789/out of 1000 respondents were literate in English.
ii. 289 out of 500 members of the public were literate in English.
iii. 20 out of 500 members of the public were literate in another language.
iv. There in brackets show that even though they are literate in English yet still they are also literate in another language (viz: French, Arabic etc.)

G LANGUAGE PROFICIENCY OF THE LITERATE RESPONDENTS

TABLE 4.5.1 (G)

RESPONDENTS	LITERACY LEVELS			
	PRIMARY	SECONDARY	TERTIARY	TOTALS
A). Members of the Public	89	131	69	289
B). Primary School Teachers	-	11	89	100
C). Secondary School Pupils	-	100	-	100
D). Secondary School Teachers	-	7	93	100
E). Students	-	-	100	100
F). Tutors	-	-	100	100
TOTAL (NO.)	**89**	**249**	**451**	**789**
%	**11.2**	**31.6**	**57.2**	**100**

Source: - Dr. A. P. Kamara's 2006 survey

In table 4.5.1 (G) above, the question of assessing the educational level of those who claimed to be literate in English was answered.

Hence, 57.2% claimed to have a tertiary level of English literacy.
31.6% claimed to have a secondary level literacy in English.
11.2% claimed to have a primary level of literacy level.
And the total number of literates in English is 789.

(H) ENGAGEMENT IN DISTANCE EDUCATION

TABLE 4.5.1(H)

RESPONDENTS	**RESPONDENTS**		**TOTAL**
	YES	**NO**	
A). Members of the Public	46	454	500
B). Pri. School Teachers	11	89	100
C). Sec. School Pupils	00	100	100
D). Sec. School Teachers	13	87	100
E). Students	05	95	100
F). Tutors	10	90	100
TOTAL (NO.)	**85**	**915**	**1000**
%	**8.5**	**91.5**	**100**

Source: - Dr. A. P. Kamara's 2006 survey.

The table above (4.5.1 H) shows that 91.5% of the respondents are not engaged in distance education, while 8.5% have claimed to have engaged or are engaged in distance education.

This means the level of engagement in distance education in the country is very low.

(I) LEVEL OF ENGAGEMENT OF THE RESPONDENTS WHO HAVE ENGAGED IN DISTANCE EDUCATION

TABLE 4.5.1 (I)

RESPONDENTS	**LEVEL OF ENGAGEMENTS**			
	PRIMARY	**SECONDARY**	**TERTIARY**	**TOTALS**
A). Members of the Public	-	-	46	46
B). Primary School Teachers	-	-	11	11
C). Secondary School Pupils	-	-	00	00
D). Secondary School Teachers	-	-	13	13
E). Students	-	-	05	05
F). Tutors	-	-	10	10
TOTAL (NO.)	**-**	**-**	**85**	**85**
%	**-**	**-**	**100**	**100**

Source: - Dr. A. P. Kamara's 2006 survey.

This table 4.5.1 (I) states that the level of engagements at primary and secondary is Nil while at tertiary is 100% i.e. 85/85.

This is indicative of the fact that the level at which people engages in the distance education is basically at tertiary level. And that the primary and secondary engagement in the distance education is yet to be discovered in Sierra Leone.

(J) KNOWLEDGE LEVEL ABOUT DISTANCE EDUCATION

TABLE 4.5.1 (J)

RESPONDENTS	**KNOWLEDGE LEVEL**					
	EXCELLENT	**V. GOOD**	**GOOD**	**POOR**	**V. POOR**	**TOTALS**
A). Members of the Public.	93	112	135	100	60	500
B). Primary School Teacher.	13	29	30	18	10	100
C). Secondary School Pupils	10	15	13	32	30	100
D). Secondary School Teacher	25	30	18	17	10	100
E). Student.	19	18	23	21	09	100
F). Tutors.	51	30	12	6	1	100
TOTALS NO.	**211**	**234**	**231**	**194**	**120**	**1000**
%.	**21.1**	**23.4**	**23.1**	**19.4**	**12.0**	**100**

Source: - Dr. A. P. Kamara's 2006 survey.

When asked about their knowledge level on the distance education is as stated below:

234 out of 1000 claimed to have a very good knowledge.

231 out of 1000 claimed to have a good knowledge.

While 211 out of 1000 claimed to have an excellent knowledge.

From the record it can be stated that only 194 out of 1000 (i.e. 19.4%) claimed to have a poor knowledge about the distance education.

4.5.2 **RESPONDENTS' ANSWERS TO KEY RESEARCH QUESTIONS.**

A) QUESTION – Knowledge about No. of people that have gone through Distance Education.

TABLE 4.5.2 (A)

RESPONDENTS	**ESTIMATED NO. OF GRADUATES**						**TOTALS**
	10 and Below	**11-20**	**21-30**	**31-40**	**41-50**	**50+**	
A) Public Members	26	60	198	146	67	3	500
B) Primary School Teachers	24	30	17	16	7	6	100
C) Secondary School Pupils	20	27	20	25	3	5	100
D) Secondary School Teachers	23	26	26	15	6	4	100
E) Students	15	18	25	35	4	3	100
F) Tutors	29	13	10	11	19	18	100
TOTAL (NO.)	**137**	**174**	**296**	**248**	**106**	**39**	**1000**
(%)	**13.7**	**17.4**	**29.6**	**24.8**	**10.6**	**3.9**	**100**

Source: Dr. A. P. Kamara's 2006 survey.

From the table above, (table 4.5.2. A), it can be deduced that:

Only 3.9% of the respondents (39/1000) estimated the No. of distance education graduates to be 50 and above.

While 10.6% estimated it to be 41-50.

13.7% estimated it to be 10 and below.

17.4% estimated it to be 11-20.

24.8% estimated it to be 31-40.

29.6% estimated it to be 21-30.

The above results are indicative of the fact that more people have got a knowledge about the Distance Education in Sierra Leone.

B) ASSESSMENT ABOUT THE OUTPUT OF THE DISTANCE EDUCATION GRADUATES

TABLE 4.5.2 (B)

RESPONDENTS	OUTPUT ASSESSMENT					TOTALS
	VERY POOR	POOR	GOOD	VERY GOOD	EXCELLENT	
A) Public Members	46	78	193	105	78	500
B) Primary School Teachers	11	10	49	20	10	100
C) Secondary School Pupils	10	13	50	20	7	100
D) Secondary School Teachers	9	32	38	13	8	100
E) Students	6	19	46	20	9	100
F) Tutors	5	13	54	18	10	100
TOTAL NO.	**87**	**165**	**430**	**196**	**122**	**1000**
%	**8.7**	**16.5**	**43.0**	**19.6**	**12.2**	**100**

Source: - Dr. A. P. Kamara's 2006 survey.

The table 4.5.2 (B) above, expresses the assessment of the output of the distance education graduates as done by the 1000 respondents of the study.

Hence:
8.7% claimed their assessment as very good.
12.2% claimed their assessment as excellent.
16.5% claimed their assessment as poor.
19.6% claimed their assessment as very good and
43.0% claimed their assessment as good.

From the above analysis, it can be stated that the output of the distance education graduates was good.

C) ASSESSMENT ABOUT THE EMPLOYMENT RATE OF THE DISTANCE EDUCATION GRADUATES

TABLE 4.5.2 (C)

RESPONDENTS	EMPLOYMENT RATE ASSESSMENT					TOTALS
	VERY POOR	POOR	GOOD	VERY GOOD	EXCELLENT	
A) Members of the Public	5	15	97	165	218	500
B) Primary School Teachers	7	13	37	23	20	100
C) Secondary School Pupils	10	15	45	24	6	100
D) Secondary School Teachers	8	17	48	17	10	100
E) Students	11	19	40	18	12	100
F) Tutors	6	9	51	24	10	100
TOTAL NO.	**47**	**88**	**318**	**271**	**276**	**1000**
%	**4.7**	**8.8**	**31.8**	**27.1**	**27.6**	**100**

Source: Dr. A. P. Kamara's 2006 survey.

In table 4.5.2 (C), an assessment about the employment rate of the distance education graduate was represented and the following can be deduced:

That:
27.6% of the respondents (276/1000) assessed it as excellent.
27.1% of the respondents (271/1000) assessed it as very good.
31.8% of the respondents (318/1000) assessed it as good.
8.8% of the respondents (88/1000) assessed it as poor.
4.7% of the respondents (47/1000) assessed it as very poor.

Hence the above results can testify that, the employment rate is good/satisfactory.

D) ATTITUDE OF THE PUBLIC TOWARDS DISTANCE EDUCATION IN THE RESPONDENTS COMMUNITY

TABLE 4.5.2 (D)

RESPONDENTS	**RESPONSES**		**TOTALS**
	POSITIVE	**NEGATIVE**	
A) Public Members	113	387	500
B) Primary School Teachers	45	55	100
C) Secondary School Pupils	31	69	100
D) Secondary School Teachers	41	59	100
E) Students	38	62	100
F) Tutors	47	53	100
TOTAL NO.	**315**	**685**	**1000**
%	**31.5**	**68.5**	**100**

Source: Dr. A. P. Kamara's 2006 survey.

This table 4.5.2. (D), expresses the attitude of the people/public towards the distance education in the Sierra Leone society. And that:

68.5% on the whole claimed that the pupils attitude is negative, while.
31.5% claimed that the people's attitude is positive.

E) PERSONAL ATTITUDE OF THE RESPONDENTS TOWARDS THE DISTANCE EDUCATION

TABLE 4.5.2 (E)

RESPONDENTS	**RESPONSES**		**TOTALS**
	POSITIVE	**NEGATIVE**	
A) Public Members	246	254	500
B) Primary School Teachers	48	52	100
C) Secondary School Pupils	41	59	100
D) Secondary School Teachers	40	60	100
E) Students	38	62	100
F) Tutors	36	64	100
TOTAL NO.	**449**	**551**	**1000**
%	**44.9**	**55.1**	**100**

Source: Dr. A. P. Kamara's 2006 survey.

When asked about the respondent's personal attitudes towards the distance education, the results obtained were: -

Negative – 55.1%
Positive – 44.9%

Though the "positive" is still less yet it can be referred to as encouraging because it was very low five years back. And so five years to come, there will be a change from the present state of affairs. It will be expected as:

Positive attitudes = higher.
Negative attitudes = lower.

F) RECOMMENDATION ABOUT THE FUTURE OF THE DISTANCE EDUCATION IN SIERRA LEONE

TABLE 4.5.2 (F)

RESPONSES	**MALE**	**FEMALE**	**TOTALS**	
			NO.	**%**
i). It must be stopped.	63	67	130	13.0
ii). It must be encouraged.	115	194	309	30.9
iii). It must be continued.	210	177	387	38.7
iv). It must be expanded.	83	91	174	17.4
TOTAL (NO.)	**471**	**529**	**1000**	**100**
%	**47.1**	**52.9**	**-**	**-**

Source: Dr. A. P. Kamara's 2006 survey.

Recommendations were sought from the 1000 respondents of the study. And what was collected is as expressed below from table 4.5.2 (F)

That:

13.0% of (130/1000) recommended that distance education must be discontinued.

30.9% (309/1000) recommended that distance education must be encouraged.

38.7% (387/1000) recommended that distance education must be continued.

17.4% (174/1000) recommended that distance education must be expanded.

SUMMARY OF THE DATA FINDINGS

1. Sex Distribution

There are more female respondents than the males (viz. 52.9% male, 47.1% female)

11. Age Range

There are more respondents within the age bracket 31- 35 years, (24.1%) and 36-40 years (21.1%) than the other age brackets.

111. Places of Residence

There are more people in the west of Sierra Leone than the other regions. (40.8%)

IV Occupational Status:

The unemployment rate is high (47.6 %)

V. Marital Status

The unmarried rate is high (47.5 %)

vi. Educational Status

There are respondents Literate in English than any other Language (789/1000).

vii. Educational Level

Tertiary	57.2%
Secondary	31.6%
Primary	11.2%

ix. Engagement in Distance Education

Yes = 8.5% (85/1000)

No = 91.5% (915/1000)

x. Level of Engagement of the Respondents

- Tertiary level = 100%
- Secondary Level = 0%
- Primary Level = 0%

xi. Knowledge Level About Distance Education

Excellent	- 21.1%
Very Good	- 23.4%
Good	- 23.1%
Poor	- 19.4%
Very Poor	- 12.0%

xii. Knowledge about number of People that have gone through Distance Education.

50+ = 3.9%

41 – 50 = 10.6%

31 – 40 = 24.8%

21 - 30 = 29.6%

11 – 20 = 17.4%

Xiii. Out-put of the Distance Education Graduates – Assessment

Excellent = 12.2%

V. Good = 19.6%

Good = 43.0%

Poor = 16.5%

Very poor = 8.7%

xiv. Employment Rate of the Distance Education Graduates – Assessment.

Excellent = 27.6%

Very Good = 27.1%

Good = 31.8%

Poor = 8.8%

Very Poor = 4.7%

xv. Attitude of the public towards Distance Education in the respondents community

Positive = 31.5%

Negative = 68.5%

xvi. Respondents attitudes towards Distance Education

Positive = 44.9%

Negative = 55.1%

xvii. Future Respondents of Distance Education

a) Distance Education must be continued 38.7%

b) Distance Education must be encouraged 30.9

CHAPTER FIVE

CONCLUSION: FINDINGS

5.0 PREVIEW OF CHAPTER

This final chapter will provide a synopsis of the findings, based on the hypothesis for the research. It is expected that the results of the findings will provide indicators for further research on the topic: "Distance Education as a Solution to Third World Educational Problems of Africa." This could enhance a continued search for the way forward in developing distance-learning structures. They will not only focus on the Sierra Leone situations but possible replications of our experience which could create multiplier effects as concepts could pervade the boarders of Sierra Leone to other countries in the Africa sub-region through Tran-sectional and international memorandum of understanding (MOU).

5.1 SUMMARY OF KEY POINTS:

The research questions address the following matters and constituents below:

i) (A) Research Sample

(B) Members of the Public

(C) Primary School Teachers

(D) Secondary School

(E) Tertiary institution Students

(F) Tertiary institution Tutors

ii) Distance Education and the Society to include the following:

(a) The concept and knowledge about distance Education, vis-à-vis the interpretations of the concept and knowledge about its related activities as seen by the public.

(b) The varied methods employed to reduce the gap, and the impact of Distance Education can be seen between the learners and their supervisors, i.e. trying to debunk the interpretation that the no face-to-

face phenomenon as impersonalization and or alienation - the focus and bottom line being proper and personal time management.

However, for purposes of being discrete, the questionnaires were prepared and designed to target 1000 respondents, allowing respondents who are likely not to return their questionnaires to the researcher on time. Hence the additional 50 and 30 on each of the below mentioned questionnaires:

Members of the public – 550
Primary school teachers – 130
Secondary school pupils -130
Secondary school teachers – 130
Tertiary institution students – 130
Tertiary institutions tutors – 130

Thus for the rest of the research findings, the 4000 research population were used, and only 100 elements were to be investigated on, meaning the sample size is 1000. As a result, the chosen sample size has the underemntioned status:

A - Members of the public	-	500
B - Primary school teachers	-	100
C - Secondary school pupils	-	100
D - Secondary school teachers	-	100
E - Students	-	100
F - Tutors	-	100
Total Number		1000

5.2 INDICATIONS OF HOW EACH QUESTION HAS BEEN ANSWERED.

Upon application, the question – what is the attitude of people towards Distance Education in Sierra Leone? Was asked, and the answers were: Positive A / Negative B. From the results of the tally, Primary school Teachers indicated the lowest negative attitude towards Distance Education. All these research questions set have the above answers from the following category of people:

- Members of the public
- Primary school teachers
- Secondary school pupils
- Secondary school teachers
- Tertiary institution students
- Tertiary institutions tutors

The 1,000 questionnaires were administered and applications made on the above areas of the research for ease of reference please refer to table 4.1 (C).

5.3 EVALUATION OF THE DEGREE OF RELIABILITY OF THE ANSWERS.

The data collected was diversified to cover a wide ground for research. This includes discussions, interviews, questionnaires, and literature review from reference books, textbooks, novels and periodicals. This was intended to cover a broad based and comprehensive presentation of the research, and to fit squarely into the aims and objectives for the search.

Primary and Secondary data were therefore part of the inquiries. The Primary data included discussions, interviews, and questionnaire surveys to cover the following:

Members of the public
Primary school teachers
Secondary school pupils
Secondary school teachers
Tertiary institution students
Tertiary institutions tutors
The Secondary data included literature that assisted in clarifying key concepts relating to Distance Education, open learning and the history of Distance Education.

Responses to interviews and questionnaires were answered willingly by respondents, since the questions were specifically designed to avoid embarrassing anyone, and no

questions were asked to relate to very private and personal issues, other than community issues.

The quotations from the different literature were also carefully chosen to reflect a well throughout research endeavor, for a proper report of findings.

From the data findings, the following were deduced:

1. 52.9% (529/1000) of respondents were female, while 47.1% (471/1000) of respondents were male.

2. Respondents between 31-35 years age bracket were more than the rest, i.e. 24.1% (241/1000), followed by the age brackets 36-40 21.1% - (211/1000).

3. About 40% of the people reside in the western area of Sierra Leone than in other parts - 40.8%

4. The unemployment rate is high – 47.1%

5. Unmarried rate is high – 47.5%

6. Most of the respondents were literate in English, and within the western area, than in other regions – 789/1000

7. Tertiary level respondents were – 57.2%
   Secondary level respondents were 31.6%
   Primary level respondents were – 11.2%

8. From respondents, the percentage engaged in Distance Education is as below:
   Yes – 8.5% (85/1000)
   No – 91.5% (915/1000)

9. By educational level, the respondents engaged in Distance Education revealed that 100% were Tertiary and 0% in primary and secondary schools.

10. People's knowledge level about Distance Education is 21.1% excellent, 23.4% very good, and 23.1% Good. This is an average percentage of 22.1% of respondents' knowledge, with poor and very poor showing 19.4% and 12%, respectively.

11. People who have gone through Distance Education among respondents are prominent between (29.6%) within the age bracket 21-30 years (29.6%).

12. Output level of Distance Education graduates i.e. assessment, is on the average, good at 43.0%, followed by very good, 19.6% and 12.2. Poor and very poor are at the bottom at 16.5% and 8.7%, respectively.

13. Employment of respondents of Distance Education provides an assessment level as follows:
Good – 31.8%, Excellent – 27.6%, Very good – 27.1%. Poor and very poor follow – 8.8% and 4.7%, respectively.

14. Attitude of the public in respondent's community.
Positive - 31%
Negative – 68.5%

15. Respondents' attitude towards Distance Education:
Positive – 44.9%
Negative – 55.1%

16. Future of Distance Education according to respondents
To be continued – 38.7%
To be encouraged – 30.9%
A O B - 30.4

5.4.1 Evaluation of Findings as being sufficiently of statistical significance to draw conclusions.

The research findings have all the qualities of being of sufficiently statistical significance to be able to draw conclusions, because the research methodology covers a wide variety of techniques to provide both qualitative (description) and quantitative (scientific) data relevant to the best international practices in research activities.

As presented for analysis, the original number of questionnaires was 1200, the 200 was meant to cover for those respondents who were likely not to return their questionnaires. Thus the 1000 was utilized for the research exercise, and the results of the data findings were straight forward enough to be used for any scientific explanation, as and when required to research on Distance Education in general. The targeted groups responded well, and the tally method revealed a 71% positive and 29% negative respectively.

The data findings as presented in the tables indicated by the results of the investigations, considering the following:

(a) Demographic data of respondents
(b) Age-range of respondents
(c) Places of residence of respondents in Sierra Leone.
(d) Occupational status of respondents
(e) Language proficiency of respondents
(f) Language proficiency level of literate respondents.
(g) Level of engagement of respondents in Distance Education
(h) Respondents' answers to key research questions as indicated below:

- Assessment on the output of Distance Education graduates
- Assessment on the employment rate of Distance Education graduates.
- Attitude of public towards Distance Education.
- Personal attitude of respondents to Distance Education
- Research about the future of the \distance Education in Sierra Leone.

- Summary of data findings

It is important to note that throughout the length and breath of this research, the tables were the results of data collected by the researcher herself.

Concerns about the future of Distance Learning:

Distance learning is changing for the following factors:

- The economical and social contexts have changed;
- The number of unemployed workers is increasing and all they need to be retrained;
- Knowledge has became one of the most important economical forces ("forces productives");
- Knowledge is rapidly expanding and its life time becomes increasingly shorter;
- To survive in the market, companies need to change, to train and retrain their employed;
- Investing in the human resources seems to be the only way for a sustainable development.
- So the labour market is changing and the needs for training and retraining are strongly increasing. In this frame, distance education seems to be considered as one of the most adequate and attractive means to face these changes. All those arguments are well known and do not need to be further developed.

1. Distance education evolution: the main features in the field

The first question is: "what are the main features of this evolution?" As far as I know, one can characterize the distance learning development by the following key features:

a) Teaching *vs.* learning

There is a new vision developed during the past 15-20 years, strongly influenced by the social and cognitive sciences. The educational system is

now focused on learning rather than on teaching. The developments of learning theory have changed the nature of learning and the perception of the learner. Knowledge is considered as "socially constructed through action, communication and reflection involving learners." (Pea, 1992:77).

In addition, the classical view of teaching as telling or delivering curricula has turned into "modelling expert practice, and promoting learning conversations that negotiate meaning to promote change in learner concepts and strategies toward proficient performances." (ibidem).

For instance, teachers then will gradually become advisors, managers and facilitators of learning rather than providers of information (Bates, 1993). Necessarily, distance education has been involved by this evolution.

One can obviously find the trail of this general evolution in the terminology used. For instance, in French we used to speak about "enseignement à distance" but we now speak about "formation à distance" or "apprentissage à distance". The same change could be found in the English expressions: "distance learning" has replaced "distance education".

b) "Closed" distance learning *vs.* "open flexible" distance learning (OFDL)

This opposition can define the main difference between these two universities: "open university" *vs.* "closed university". Contrary to that model, the OU is, as its name indicates, a university open to any interested person over 18 independently of his or her qualifications. The OU philosophy is grounded on the "four openness": access, curriculum and program, study organization and management, duration and flexible timetabling.

Those two universities are proto-typical examples of the two different distance learning institution types. Their features are the centre of an important debate both theoretical and methodological.

c) Full degree vs. qualifying

Why do the students learn? What do they wish? For instance, in the university context we can show two main trends, related to two kinds of (re) training needs.

1. On one hand, students are interested in a complete curriculum to obtain a new degree, a new diploma. Those students generally are engaged in the professional life and they are working already: distance education is for them the only way to begin - to pursue- a high-level full degree curriculum. So, distance education appears a "second chance education". For those students, assessments, examinations, curriculum, and all the constraints that are those of a classical university are important.

2. On the other hand, some students do want to acquire some new knowledge, a new qualifying related to their professional practice. They are only interested either in one matter or in one technical ability that they need for updating their competencies or enhancing their professional practice. They then don't care much for obtaining a diploma after a full degree curriculum. To be better qualified seems to be their main, their only goal.

   In the field of distance education, those two kinds of needs allow to trace a border-line between two types of learning project that can be developed by two particular types of institution and organization.

d) Teaching and research university *vs*. teaching university

What are the priorities of the distance education institutes? What is the respective importance of research and teaching in each distance institution or university? In our study mentioned above we analyse the official mission that the two universities are entrusted with. One other main difference between those two universities lays in the conception of the teacher role and his duties. The identification of the Fu with a classic university model has as consequence the involvement of titular professors in fundamental research as much as --if not more than -- in teaching. As to the OU, it is primarily dedicated to teaching and broadcasting knowledge; research is thus an accessory activity for its teachers.

The specificities of these general viewpoints have repercussions not only on the organizational forms of these institutions but especially on the methodology of designing teaching documents.

5.5 GENERAL RECOMMENDATIONS ON DISTANCE EDUCATION:

Even though Distance Learning takes place in several locations, but serving the same world, yet still it is vital to mentioned that there are various challenges the Program and the management might face. Hence this study will have the under mentioned as general concerns and recommendations:

5.5.1 TECHNOLOGICAL LITERACY - INCLUDING COMPUTER LITERACY:

Distance education takes place in the university without walls, so there is every need for technological Literacy.

Hence a significant majority of the target population will require training in the use of the tools, and so will the providers. Instructors will need focused training in order to make effective use of the technologies involved. The training will not only enable the target group to conduct the distance education effectively, but it will inevitably increase productivity.

5.5.2 Program Evaluation and Accreditation:

There are of course many Distance education providers today, but the million dollar Question is: Are the programs evaluated and accredited by independent and recognised bodies?

In this regard, Care must be taken to ensure that distance education programs are as well developed as their in-house counterparts. Mechanisms need to be developed for faculty evaluation of programs originating at their institutions. There need to be standards for course evaluation and program accreditation. Successful programs need to be re-evaluated before implementing them in a different cultural environment in this increasingly global village.*5

The attack many Distance Learning providers face today are from on-campus education centers.The latter look at the former as the route of their low students' admission, so no On-campus learning centres will be in a happy mood to evaluate and provide accreditation to Distance education providers.

It is there fore important to add that Other Accredited Distance education providers accredit after evaluating the Distance learning Providers.

5.5.3 Losing the Content in the Technology:

Educational technology points out the fact that, Distance learning to some extent is loosing Content in the technology.

In this light, there is a need to avoid simply providing information, rather than instruction; or of simply transmitting lectures through this new medium. This would be a disservice to the learners, and a *reduction* in content and functionality over the intended result. Avoid focusing on the technology rather than the instructional design and support**.* 6** though the learning provides no contact, facially by the provider and recipient of knowledge, yet it is important to note that, the Technology should not carry all the content.

5.5.4 Alienating Instructors Faculty should be involved in the whole process, and should understand that while one goal may be to reduce costs; this will not be at the expense of faculty jobs. Distance education technologies are not alternatives to teaching. Failing to address these issues can lead to significant faculty rejection of the proposals, and may include Union confrontation**.***7

5.5.5 Non-Native Language Instruction Many of the tools available, whether on the Internet or not, have severe limitations in their ability to accommodate non-native language instruction. Many programs that take place in English, French, German etc, cannot be easily comprehended by no-native speakers of the cited languages. This is slowly becoming less of an issue on the Internet as standards begin to coalesce.

5.5.6 Institutional Support for Distance Learners Academic institutions must remember that course content is just one element of the education they

provide. If distance learners are being sought, they will need to be provided with similar support to that received by on-campus users. This includes everything from *full* library support to academic counselling ¯ in addition to more mundane administrative assistance. ***8**

5.5.7 Increasing Regional Focus It is not credible to expect that learners who are a dozen time zones apart will be interested in participating in live programs when they would normally be asleep. As interactive programs develop, we may see an increase in two alternatives. First, institutions seeking to market their educational products beyond their shores will offer sessions tailored to the needs of students in specific areas. Second, regional consortia or education hubs may begin to form. There is a danger of becoming isolated from the more global learning environment. In most cases there will be benefit in designing programs which include challenge and stimulation, and which involve the learner in discussion and collaboration with those outside their immediate circle of fellow 'classmates'.

5.5.8 Copyright Issues While few researchers raise the issue explicitly, all are aware that many questions of copyright in an electronic environment remain unanswered. It is important to examine the goals and intentions of the program, and make sure that the necessary clearances have been obtained as needed.

5.6 Conclusions, comments and reflections.

This research exercise has stretched my academic and professional competencies, and the knowledge I have acquired so far permeates my original knowledge relating to Distance Education and learning. The results could be rudimentary information for use in the diasporas on issues of alternative education for the non-formal school sector. Similarly so, I have acquired more knowledge in respect of the problems related to Distance Education promotion in specific settings, but noting the Sierra Leone situation as a reference point. It is expected that the rationale for such an intervention is viewed with the importance it deserves, injecting such an intervention as a new trend in addressing the relationships between learning at your leisure time, and at the same time performing your job functions, uninterrupted, but building your

capacity for a better future in your place of work, and even beyond.

It is also the intention of the research to invite new ideas into policy formulations that will be devised to chart the ways forward for a comprehensive approach to Distance Education, as an invocation which caters for the underserved people in the formal school system, but who are a latent potential to utilize the same human resources for academic and professional competencies.

Distance education is not new in Africa. Several countries have had national distance education programmes for over twenty years. In this article I attempt to assess the contribution that such institutions have already made to national development, and go on to consider developments that are desirable and likely for the future. Distance education in Africa (discussion of which, in this paper, is restricted to the 39 countries in sub-Saharan Africa) cannot sensibly be discussed separately from the rest of education. From the 1960s, as countries achieved independence, education was seen as a crucial means for national development. Efforts were made to develop national systems of formal education, which had remained underdeveloped under the colonial powers. Achievements have been remarkable, with access to education at all levels increasing many times over almost everywhere, and the literacy rate for the region as a whole rising from 9% in 1960 to 42% in the early eighties (World Bank, 1988:14). In many countries, government correspondence schools have provided back up for these achievements. The value of investment in school as a priority has been demonstrated by changes in basic indicators of development. Schooling results in, for example, greater agricultural productivity and reduced mortality of children of educated parents (Jamison and Lau, 1982, and Cochrane et al, 1980).

Despite these achievements, education in Africa is now in crisis. Recent analysis reveals stagnation and decline, along with falling investment in the region since 1980. The pattern of school enrolments is the main indicator of stagnation. First within the continent there are considerable variations between countries. By 1983, 11 of the 39 countries could accommodate 100% of the age group in primary schools; on the same count, 28 had not reached this stage, and 9 were still below the half-way mark. Similar disparities occur at secondary and tertiary levels, with only a relatively

small proportion of the age group—20% and 1.4% respectively—passing on to these levels. Thus, despite considerable achievements, Africa has far to go before access to education is universal.

Second, and more alarming, the rate of increase of school enrolments is dramatically slower than in the 1970s. The school-age population is growing faster than the schools. Relative or actual decline in enrolment can be attributed to the economic situation, both the decline in national investment in education and the economic squeeze on families which may result in the withdrawal of children from school, or non-continuation to the next stage. This affects girls particularly, who form only one third of the secondary school population (World Bank 1988:31).

In many countries, the education provided is of poor quality. Partly, this is because there is not enough money to cover the basics: teachers, buildings, materials; partly, it is a consequence of earlier rapid expansion: large numbers of teachers are untrained or under-trained. How else could children be accommodated in school, but by recruiting more and more people to teach them? And as a result those children who complete school are unlikely to have a better grasp of the subjects they have studied than had the teachers who taught them. In-service training for these teachers can have a substantial effect on quality.

The crisis in education is serious:

Because of the invidious combination of rapid population growth and economic stagnation, the gap between Sub-Saharan Africa and the rest of the world appears to be widening...unless steps are taken to address the serious problems in education, this gap will in time become a gulf.

(World Bank. 1988:28)

Educational expansion and adjustment takes place today in this climate of economic austerity. Education is in competition for resources with other sectors, and with the extra demands made in so many countries as a result of natural disaster and political instability. In every country, the improvement of efficiency of the formal system has to have priority. No country can, however, entirely neglect its leftouts, dropouts and—as Kenneth Kaunda defined them in 1973—its squeeze-outs—the millions of

adolescents and adults who are illiterate or half educated, who form the present workforce and electorate, and who are the parents of the growing generation.

It is in this context that distance education has assumed importance. It is seen not only as a complement to the formal education system, but also as a low cost alternative to expanding conventional education. Ministries of education see it as an important or even necessary tool for national development—very different from its position in richer countries as a useful adjunct to conventional education. In the rich world everyone has access to formal school, both at primary and secondary level. Distance education provides supplementary opportunities to adults to continue their education, or a means for helping people learn new skills for changing work. In the poorer countries, distance education is of more fundamental value. Its main function is to expand and extend formal education.

In seeking to identify ways of improving education in Africa, the World Bank has identified distance education as a crucial tool, for providing primary teachers with in-service education in the subjects that they teach, for giving them support through radio programmes, and for expanding secondary education more cheaply than by conventional means. In each case these recommendations are derived from experience, sometimes long, in Africa and elsewhere. If that experience is so long and extensive, why has distance education not already had the effects on the formal system that it is expected to have in the future? And why is distance education only now taking up a prominent position?

In fact, in some countries distance education has made a substantial contribution to educational improvement. Let us now consider that experience.

DISTANCE EDUCATION SINCE INDEPENDENCE: AN OVERVIEW

Correspondence education has had some significance in Africa since early in the century. Many of independent Africa's first generation of intellectuals and leaders had acquired their education partly through such colleges as Wolsey Hall and Rapid Results. In southern Africa the University of South Africa became the world's first dedicated correspondence university in 1951. (It had been founded in 1873 as the

University of the Cape of Good Hope, changed its name in 1916 but until 1951 taught as well by conventional means.) UNISA was particularly important in enabling Africans from all over the region to obtain degrees.

As the former colonies became independent, the new ministries of education saw the potential of correspondence study as a means both of expanding educational opportunity and of providing trained manpower. The largest immediately obvious demand for distance education was at secondary level, particularly for unqualified primary teachers, and it was here that governments first took action. The Zambian National Correspondence College was set up in 1964, with the Malawi Correspondence College following suit in 1965. Around the same time some of the francophone countries began to develop training programmes for civil servants or teachers, modelled on French programmes. Since that beginning the main developments have been in anglophone Africa, and have concentrated on supplementing the school system. Today, most anglophone countries have public distance education institutions. Typically, they provide correspondence courses for adults in a range of subjects at secondary level. Usually there are some radio programm es which accompany the courses. Few science subjects are offered. Often, these courses have been started for the benefit of untrained teachers, as well as for the general public. Primary school teachers receive a general education by correspondence in subjects at secondary level and may also receive some training in teaching methodology.

Public institutions, university departments, and specialist institutions have all been responsible for various initiatives in nonformal education at a distance. One of the most significant has been the work of INADES—Formation (Institut Africain pour le Developpement Economique et Social) which from its headquarters in Abidjan has since 1962 been providing correspondence courses to several francophone and some anglophone countries in agriculture and agricultural economics. In a few countries—Tanzania, Botswana and Zambia—nationwide radio study campaigns have been used to educate the public on development issues. In such campaigns the three main media of distance education—print, broadcast and face-to-face—are used together in study groups. This method has been used for political education, for health

education, for a tree planting campaign, and for educating members of cooperatives. Universities, such as Nairobi and Botswana, have contributed to literacy work and adult education by using distance education to train adult educators. Overall, however, non-formal distance education has remained small-scale, sporadic and weak. The discussion from this point on is restricted to distance teaching for formal education.

University level education at a distance in anglophone Africa has also remained weak, even though the university sector has expanded at a faster rate than any other. The universities of Zambia and Lagos were both established with a commitment to provide correspondence degrees written into their constitutions, and both have launched degree programmes some years ago, in 1967 and 1975 respectively. Since then only the University of Nairobi has followed suit with an external degree programme in 1986.

Several of Africa's programmes have been innovative. Tanzania used distance education to train the teachers needed for universal primary education. Over a five year period, 45,534 new teachers were recruited and 35,028 successfully completed their training (Chale, 1983). Zimbabwe has used distance teaching to help replace the old colonial curriculum without interrupting or disrupting schooling. Malawi and Zambia have developed the supervised study group system, a way of providing alternative schooling to thousands of adolescents who cannot be admitted in secondary schools. Countries in crisis such as Somalia and Sudan have shown how to use distance education to provide education in an emergency for displaced people. These are the more spectacular developments. Others are rather smaller scale, but none the less significant, such as the multi-purpose national distance teaching organizations, like the Lesotho Distance Teaching Centre and the Mauritius College of the Air.

THE UNDERDEVELOPMENT OF DISTANCE EDUCATION

Despite these achievements, distance education on the continent remains underdeveloped and undervalued.

The main reason is underfunding. Governments intended their public institutions to be low cost, and most planned to use combinations of print, radio and face-to-face, modelled variously on programmes in Australia, France, Britain, New Zealand and the USA. Often institutions were established as a protection against foreign commercial colleges, but some, coming under pressure from lack of funding, slipped towards providing courses of a similar low standard. The greatest disservice that commercial correspondence colleges have done for distance education is to set a standard for distance education on the cheap. In an environment where second rate correspondence education was the norm, it has been exceedingly difficult for distance educators to persuade their governments to finance their institutions to a level where they can provide courses of a high standard. Good intentions resulted in, all too often, boring and sketchy correspondence courses and teaching systems which showed little awareness of the need for good tuition and face-to-face support. This has worsened over the years; governments have given even less to their distance teaching sector, rather than seeing this as a cost effective way of providing education that could help them respond to the economic pressures. Many institutions have been progressively starved of money.

At the same time it has often been difficult to identify and train suitable personnel to prepare courses and to teach by correspondence, and to provide and maintain the infrastructure to produce and deliver the courses. Some institutions have from time to time stopped working for periods of months on end, due to a shortage of paper or lack of a spare part for a printing press or typewriter. A shared government print shop may be requisitioned by the ministry of information, or a petrol shortage may bring all but essential communications to a standstill.

There are cases where effective programmes have been terminated. One notable example was the in-service primary teacher training project run at William Pitcher College in Swaziland in the 1970s. Six hundred teachers began the course, and almost all worked their way through to the end. This had a considerable impact on schooling all over the country:

Because of ... two things—the amount of accompanying teaching materials (schemes of work, supplementary worksheets, etc,) supplied to teachers undergoing the course work, and the amount of tutor contact, there is a very high degree of enthusiasm amongst these teachers and a high rate of curriculum activity. With teachers from the programme in every school in the country (most average 2) the 'ripple effect' on the curriculum of the schools has enormous potential. (Aarons and Hawes, 1977)

This programme had been set up for a finite task, to train a particular cohort of teachers, as had an earlier similar programme in Botswana. By the time the programme finished, however, other teachers were ready to be trained. Why were the programmes not adapted and continued? Was it lack of imagination about how to use the resources created for the original programmed? Or was it concern about costs or lack of conviction of the value of distance education?

This last point is critical to almost all distance education in Africa. Until now, few politicians and ministry of education officials have demonstrated any strong commitment to distance education. Despite its extensive use, in most countries it has low status and remains on the periphery. Solid but unadventurous, reflecting the formal system in both its good and bad points—that is the main picture. Opportunities for innovative developments have been missed, although it is hard to make such a criticism when resources of all kinds have been so scarce. Under resourced and sluggish, it has nevertheless persisted.

RESOURCE MOBILISATION

The various resources required for a distance education project can be divided into four categories: human, physical, financial and technological.

Human resources

Distance education requires teams of people performing different tasks and working at different levels to accomplish a common goal set by the project. Some of the staff might operate at the national level while others will be working at the local and institutional levels. The processes of recruitment, training and retention of staff

should be well articulated and coordinated to ensure maximum efficiency and effectiveness. Some elements of staff development should include training for succession, sustainability and renewal mechanisms. Many of the distance education projects in Africa have inadvertently missed some of these elements and, as a result, have experienced stunted growth.

Physical resources

Distance education systems demand substantial capital investment at the initial stages in order to establish specialist facilities for the design, production and delivery of programmes. An efficient infrastructure is required within the main powerhouse from which all the major administrative and academic activities are coordinated. As far as possible, a distance education institution should make maximum use of existing resources and facilities wherever they are to be found in the country and should, therefore, strive to work closely with other institutions and agencies within government and outside. A part of the initial planning, for example, may include a review of the communications infrastructure in the country and of the arrangements that can be made for library facilities and other learner support services. By the same token, distance education institutions should be prepared to share their facilities and services with other educational institutions and organisations. There might be need to augment and strengthen the facilities at these institutions to enable them to cope with increased demands.

It is essential to emphasise the paramount importance of developing effective, responsive and flexible learner support systems in distance education. These should constitute an integral and vital part of the programme, without which it will not be effective. The delivery of the programmes will rely on the efficiency of the local learning centres and resources and on the coordination of the various support services required by the learners at convenient locations throughout the country. The project should therefore endeavour to establish and sustain effective support services that may include the following:

a. organised study groups that meet regularly
b. timely and constructive feedback on assignments

c. access to sufficient learning materials, including audio and video cassettes
d. photocopying facilities and laboratories for experiments
e. guidance and counselling
f. problem solving on administrative and practical work arrangements
g. facilities for the production of science experiment kits
h. record keeping and management systems
i. assessment, evaluation and accreditation systems

Financial resources

Starting a new distance education institution from scratch is a heavy and expensive undertaking that requires considerable investment up front. The output of that investment and its economic efficiency can only be realised over several years with the growth of enrolments against fixed costs. Many distance education institutions in Africa have been started without adequate funding and their rapid growth and expansion outstrip the available resources, and as a result they have been unable to maintain both the quantity and quality of their services as well as the efficiency of their operations. Many of the distance education institutions that have been in existence for over ten years are in need of careful strategic planning and restructuring in order to prepare them for the educational challenges ahead.

Technology Resources

Although print remains as the principal medium of delivery of distance education programmmes in Africa, there are attempts to apply various technologies to support these programmes in those countries, which have the required resources and infrastructures. Modern advances in telecommunications and information technologies are offering exciting new opportunities for developing and delivering distance education programmes in selected countries including South Africa.

Audio, video and computer technologies are currently being used to support correspondence teaching and face-to-face instruction in a number of countries, with varying degrees of success. It seems, from a closer examination of the success stories, that these modern technologies will stand a better chance of success where they provide greater interaction and feedback between the learners and the teachers

and among learners and teachers themselves, or additional sources of information and knowledge. There are, nevertheless, wide gaps where these modern technologies have hardly made any impact in Africa such as course planning and design, learner assessment and record systems, administrative and financial management of the distance education systems.

If new technologies are to be successfully used in distance education and open learning, they need to be affordable, accessible and conveniently located for learners. In developing countries, community-based resource centres containing classrooms, conference rooms, laboratories and libraries, as well as media and technologies for distance education, are needed in an increasing number of countries. There are several ways to build and equip such centres, which would provide multi-purpose learning resources for the communities as has been demonstrated by the network of the Open University of Tanzania.

Issues of costs of distance education systems are difficult to resolve partly because of the poor quality of data that is available and partly because of the differences between the economic structures of distance education and those of conventional education. The choice of teaching media in distance education, for instance, will have a direct influence on the total cost of setting up the system (with most costs having to be met up-front), and therefore on the cost per student. The data collected in the study is grossly inadequate for any conclusive comparisons or generalisations to be made. A great deal more work is required.

There is a whole new series of technological developments that will have the most profound effect on education and training, certainly by the 1990s and beyond. The microcomputer is already well established and is spreading to households in a number of countries. Developments like cable television and Internet may become extremely influential in education.

One feature of some new technology is that it offers an interactive capacity on a scale not previously available. Further, the teacher's authority and control over knowledge will be somewhat diluted and in the new millennium students will have

access both in schools and homes to the largest multi-media libraries in the world. Knowledge will be available to all who will have access to these technologies.

However, it is reasonable to predict that, as we move towards the twenty-first century, there will be many alternatives to school and campus-based education and greater prospects of the workplace, the home and the community centre becoming more significant sites for learning. Computing, broadcasting, film, publishing, music, theatre, museum and telecommunications industries have now emerged organisationally and technologically as powerful agencies for education and training. The age of "knowledge industry" is already here, and it is a global industry that regards education and training as its most important market.

It is also reasonable to predict that printed sources will remain central in distance learning because of their flexibility, user friendliness and cost advantages. The development of digital technologies, on the other hand, will enhance the design, distribution and delivery of courses, while computers will assist in individualised instruction, records keeping, management and networking of distance education systems. The traditional library will be transformed into a comprehensive information and learning resource centre.

Resources and their management

By its nature, distance education is not cheap. Good distance education is expensive. It requires considerable investment in terms of human, physical, financial and technological resources well in advance of the enrolment of students on the courses. It also requires sufficient lead-time to allow for proper planning, preparation and distribution of learning materials, and establishment of learner support services. The product of that investment and its economic efficiency can only be measured over several years when the programmes will be reaching substantial numbers of students in several intakes. Further economies of scale will be realised when learning materials become more widely available to larger audiences than those formally enrolled.

It is also possible for a particular project to demonstrate its cost-effectiveness through its adoption or adaptation by the various national governments and local institutions and agencies. The examples here would include the use of learning materials for both in-service and pre-service teacher education programmes, and the sharing of standard materials by three or four countries within a sub-region.

There are six guiding principles in the mobilisation of resources in order to effectively and efficiently:

a. There should be an attempt to make maximum use of existing resources, personnel and facilities wherever they are to be found.

b. It is expected that the production, delivery and assessment of the programmes will be anchored at designated local institutions with adequate infrastructures for offices, classrooms, laboratories, libraries, printing and reprographic facilities, communication and computer hardware and software.

c. The host government should be prepared to provide an adequate subsidy to the project in terms of communication and computing equipment, local delivery costs, and other items such as paper, transport and salaries.

d. The Organisation should attempt to maximise its cost-recovery potential by charging realistic and affordable fees to its student's or/and by seeking sponsorship for students by employers, local authorities and the private sector. It should also be noted that teachers have to bear a number of "hidden costs" associated with their training such as travel, books and other learning materials as well as the "opportunity cost" of their training.

e. The host government should seek outside donor assistance to supplement its own input into the initial capital and institutional capacity to support the project. This assistance could be in cash or in kind and targeted to specific major items of expenditure.

f. The host government and designated local institutions should strive to establish and maintain both the quantity and quality of the services as well as the efficiency of the operations related to the programme.

Why operational effectiveness of distance education has been below expectation

1. At the policy level where the introduction of distance education strategies has not been properly coordinated with other efforts such as the provision of adequate resources, the development of adequate supporting infrastructures, education and training of users of distance education.
2. At the organisational level where distance education and associated technologies have been introduced without adequate understanding of the organisational culture and context, including political, physical, economic, social, technological and trade environment.
3. Interaction between the two levels is equally important in order to understand policy formulation and the effectiveness of the processes involved in a well-functioning distance education system. Policy needs to show greater sensitivity to the contextual issues at the organisational level.

Too often, distance education has been introduced rather hastily or arbitrarily in a top-down manner. Policy makers tend to assume that the mere introduction of distance education will bring about the desired changes in organisational work ethics, environment and productivity. We should perceive distance education and associated technologies as a set of useful tools for solving specific problems, and NOT a universal remedy for all the educational ills that plague the developing world.

Distance education demands careful planning and coordination, even prior to its implementation and use. It requires careful design and development, a reliable information and communications infrastructures, human resource development, including orientation, induction and training, and the relevant organisational mechanisms to coordinate the various elements. Supporting legislation may be required to facilitate meaningful coordination of efforts by all players and stakeholders.

Establishing a general framework for a national policy on distance education

There is a has three-tier pattern in relation to information and technology (IT) policies and which could be applied equally to distance education policies, Such as:

1. Strategic Planning, including goal setting and policy formulation

   1.1 A proactive intervention - where a government has an explicit distance education policy and has set up an inter-governmental committee on distance education, or its equivalence.

   1.2 A reactive intervention - where a government has an implicit distance education policy and opts to be responsive, in the informal sense, to the recommendations of an ad hoc committee or professional body. This situation is prevalent in many Commonwealth developing countries.

   1.3 A passive intervention - where a government has no distance education policy, implicit or otherwise, but opts to let distance education utilisation follow market forces of supply and demand.

2. Coordination, Promotion and Control, including resource allocation, control and monitoring.

3. Operational/Implementation Level, including execution of specific tasks and activities, as well as interventions by distance education institutions, professional associations, regional and international organisations with special interest in distance education, user ministries and departments. (Okou-Uma ,1991)

Ideally, the development and implementation of distance education policy should be postulated to comprise all the three successive phases outlined above. The purpose of having an appropriate national distance education policy is to create an enabling environment in which:

- economic and social benefits may be achieved
- utilisation of resources may be optimised
- domestic technological capabilities may be encouraged
- procurement decisions can be taken rationally.

The distance education policy itself should aim to:

- promote, encourage and support the orderly development of distance education and associated technologies in the country
- enhance the effectiveness of distance education at minimal economic and social costs
- outline means of improving education and training facilities to overcome the scarcity of skilled personnel
- outline the application priorities in consonance with national development plans
- ensure the development of an infrastructure for efficient communication, the establishment of mechanisms for the coordination and effective management of information and communications technologies in the country.

In summary, the typical components of a sound national policy on open learning and distance education should include the following:

1. ***At the government level***, explicit recognition of distance learning as a viable education approach; and granting of equivalency to degrees, diplomas and certificates obtained through distance learning; funding policies for distance education institutions, the establishment of special funding mechanisms for launching or upgrading distance learning systems as appropriate, expanded capital and operating budgets for appropriate learning technologies, and so on.
2. ***At the institutional level***, recognition of excellence in the design, development and delivery of distance education courses, systematic and aggressive staff training and reward systems, development of appropriate learner support systems including study skills development and acquisition of appropriate learning technologies.
3. It is important to ensure that the national policy on distance education is integrated within the general educational policy framework for the country.

The critical issue here is **NOT** to marginalize distance education and open learning.

Research and evaluation in distance education

What many Governments or education providers have forgotten is to involve in Researches and evaluations on the ongoing processes in the Distance education provision.

Research is needed so as to facilitate the Distance Learning in Africa. One such agency is the International Research foundation for open Learning otherwise called IRFOL.

This is a specialist research agency, with a charitable status, and is based in East Anglia Regional Centre of the UK Open University. It has already worked with COL in, for example, providing one of the background papers for the Asian Development Bank seminar on distance education for teacher training in 1996. It is hoped that African tertiary institutions will be involved more actively as practitioners and partners in research as well as consumers of research findings.

The role of professional associations in distance education

Another development, which has greatly benefited distance education systems, has been the establishment of professional associations in the field. A number of regional and national associations in distance education have been created within Africa over the past ten years or so and have been instrumental in bringing together distance education learners and practitioners for a common purpose..

The role of governments

For Education to improve and develop the nations in the African continent, it is but important for Governments to continue to play a major role in the planning and development of education in their countries.

Distance Education is far too important to be left in the hands of the private sector and market forces. Open learning and distance education strategies will increasingly be applied to provide more opportunities for education and training at the tertiary level for the unreached and underserved populations. In this regard, Africa cannot afford to lag behind the developments taking place elsewhere in the world.

In particular, the African tertiary institutions should be at the forefront of educational and technological developments. They should be well positioned to operate efficiently and effectively in creating and sustaining the appropriate learning environment for all groups of learners.

Furthermore, they should start restructuring and retooling themselves for the educational challenges of the next decades in, for instance, preparing and retraining their teachers, tutors, mentors and the technical support staff for their new and expanded roles.

Governments should re-examine how best to utilise the present facilities and resources, including the classrooms, laboratories, workshops, dormitories and physical plants. They should also determine the appropriate proportions of full-time, part-time and piece-work staff that would be required to conduct the programmes, including the opportunities for outsourcing certain services from outside the institutions.

The issues of quality, quality assurance and enhancement systems, assessment, accreditation and credit transfer are of great concern to many governments and will need to be addressed through the appropriate mechanisms such as the national commissions (or councils) on higher education that have already been established in several countries.

Above all, African tertiary institutions must also keep up with the vast amount of knowledge and information on new technological initiatives and ensure that their staff is equipped with the necessary skills and attitudes to operate effectively in the changing learning environment.

5.7 RESEARCH ISSUES OR OPPORTUNITIES HIGHLIGHTED BY THE STUDY.

The experience in compiling this piece of study was a dauntless challenge in a situation where |Distance Education issues are only beginning to gain some glimpses of hope for a country which has over the centuries been caught in the formal and traditional pedagogical classroom syndrome. It was through courage and the desire to contribute to development, coupled with my intention to continue with the promotion of Distance Education in pragmatic terms that gave me the courage and commitment to take up the challenge.

When the cost of maintaining a student at the formal education level, and the absence of the commitment from tutors due to demands for better pay and conditions of service, there is much to be desired, since Distance Education issues are on the other side.

The drudgery of the formal school and influences of bad company, are among the causes for the high dropout rate, thus is directing its attention towards employing alternatives to get the underserved to review their talents for a more relaxed and self-controlling situation. But if this innovation spreads within Sierra Leone and beyond, through this research, Distance Education can be considered to present challenges worth emulating, and a key approach to alleviating educational worries and promoting optimal development.

The intervention itself has started to influence many academics and professionals within Africa and beyond, and the concept of Distance Education will continue to reveal that even the weakest of the weak students, if exposed to the world of learning with his time at his disposal, can work to bring about their own development.

Through this research, especially the exposure of some 1,000 respondents into the concept itself, the respondents can serve as evangelists in spreading good news relating to the advantages and disadvantages of Distance Education. From all indications, the number of academies and professional who have gone through

courses and more showing interest, the future of Distance Education has glimpses of hope for the present and the future of continuing education in Sierra Leone.

Although the history of Distance Education can be stated far back as the 40s and 50s through Cambridge and Oxford University Correspondence learning, to name a few, yet the current scenario, according to the research findings, will serve as a flash point for Distance Education developers and stakeholders for the designing of programmes that will improve on the status of Distance Educational strategies – the bottom line being, education for optimal and sustainable development.

5.8 SHORT, MEDIUM AND LONG TERM CONSIDERATIONS.

Charting the ways forward and making any recommendations would require some focus at issues of grave concern. This study was undertaken and mainly designed to attract international attention with an emphasis placed on areas to be employed in propagating the concept of Distance Education in general.

The direction for the research is to view the advantages for people who would have otherwise been found wanting in terms of academic and professional capacities. This would mean leaving their jobs and official assignments and opt for personal capacity-building for better performance through leaves-of-absence, scholarships and or resignations. Such a situation could create a panicky situation in organizations because of gaps to be created in the organizations, leading to the training of replacements, and in some cases, loosing such staff who might be part of the brain-drain, in search of greener pastures. Then comes the attendant problem of cost benefit analysis – who looses, the employer or the employee?

Against this backdrop, it is necessary to also note that an important factor which has been established in the recent past in Sierra Leone is the cultural and societal stereotype thinking and interpretations about distance education without being able to understand the concept itself, let alone its merits.

The attitude and ignorance demonstrated by such detractors and negative agents of change and development, leaves much to be desired. There has been an absence of communication to affect both the Distance Education initiators and promoters, and the general public. This also goes for the lack of knowledge about the curriculum, entry requirements, subjects' combination (modules), and career counseling. The financial implications and other resources relevant for the exercise are among the areas to be noted during the recommendations.

Following the results of the findings, the following strategies have been proposed for desired change in sustainable educational development, with special focus to the area of distance education and learning. The considerations have been categorized into three parts:

(a) Short Term considerations
(b) Medium Term considerations, and
(c) Long Term considerations

However, the periods to determine the end of any term can be determined by the aims and objectives for the intervention, backed by the plan of implementation. Therefore these considerations are operational considerations requiring modifications for the convenience of any country or organization which requires these as guidelines for educational development.

(a) SHORT TERM CONSIDERATIONS

1. As key stakeholders in the development of education, the government's role in this direction should be seen to be extricating itself away from the shackles of the traditional and formal classroom situation, for want of broad and equal opportunities educational systems. This is against the background that education is a fundamental right in itself and a catalyst for human development.
2. Networking, building coalitions, inter-agency forums and other relationships between government; line ministries, NGOs and the

business sector, must be encouraged in the form of national alliances to promote Distance Education to encourage staff retention and avoid attrition.

3. These should exist transparent links between tertiary institutions and secondary schools, so that when at a point in time students cannot conform to the normal classroom situation, alternative structures could be provided for correspondence courses as it operates currently in a series of professional courses today, which deal with institutions abroad – Cambridge, Oxford universities etc. This is meant to influence the candidates' ability to be involved in time management and also controlling their learning skills while at work.
4. Government and development agencies should encourage their staff to pursue courses through Distance Education for capacity building. This can also enhance staff retention and quality work.
5. Because of the tendency for Distance Education to groom much needed manpower resource, the Distance Education centers should be provided with appropriate equipments and materials as resource materials – computer services, libraries, and spaces where feasible, to encourage focal points where candidates can converge at scheduled times with their supervisors to assist learners in areas of need.
6. Curriculums should be developed to suit the work environments. This could mean diversifying the curriculum to meet different organizational needs for both the public and private sectors.
7. Capacity development should be designed for supervisors of Distance Education to ensure that they are well equipped, academically and professionally to lead the candidates to success in their different modules. This means training a pool of expertise in curriculum development to help candidates understand and interprete different concepts to meet the required standards.
8. The public needs to know about the concept of Distance Education, and to be able to understand its role in overall national development. This

could be done through radio/TV discussions, advocacy, IEC, KAP, BCC, and the development of skits to explain the Distance Education concept, vis-à-vis its merits and its general contribution in the development paradigm.

(b) MID-TERM CONSIDERATION

1. A regular review of Distance Education modules to provide relevance, quality and sustainability of staff and to be able to meet the requirements of employers and employees alike.
2. The employment of the best international practices in Distance Education to ensure that this type of education forms part of all national tertiary/university educational institutions for comparative advantage, and accreditation.
3. At the national and international levels, Distance Education strategies should present a common position for their development for wider reforms which could be included budget analysis and budget tracking for free supportive education with a focus on quality.
4. Support an agenda which should focus on Education for All (EFA) and the Global Campaign for Education, and see how government and other stakeholders can collaborate to support intending candidates (financially) who have for one reason or the other lost grip with the formal classroom learning method, but wish to proceed through Distance Education.
5. Encourage secondary schooling, which has the potential to produce the academic and professionals of tomorrow. This is to prevent future bottlenecks which will undermine future demands. This brings the need to have a balanced investment approach, since it will not be cost-effective to invest in primary education at the expense of secondary education, because it is from the secondary schools that the Distance Education factor begins to emerge.
6. The Ministry of Education, in consonance with the aim of developing a sustainable middle manpower base for national development, should, as a

matter of necessity, provide institutional and financial framework within the Policy Review Phases to enhance the country with a continuous flow of personnel that can see their country grow without opting to go abroad.

(c) LONG TERM CONSTRAINTS

1. Government and other stakeholders to integrate their efforts to promote dialogue between the Tertiary Institution/Universities on strategies for promoting this form of education. These institutions have the capacity to influence the provision of the human resource base in the form of supervisors and candidates in the future.

2. Distance Education Institutions need to galvanize their efforts by arranging public lectures, radio/TV discussions on the following topics:
   (i) The concept of Distance Education and Learning.
   (ii) Advantages of the innovation
   (iii) Credibility of the degrees, according to the accepted educational standards and for acceptance by own universities – (Accreditation).
   (iv) Methods of Application, recruitment procedures etc.

3. Government and stakeholders to constantly conduct seminars and workshops for the development of modules which could be recommended to the parent universities abroad for concurrence, since the modules should be structured according to the country's needs.

4. The different media, print and electronic, to be fully involved in advertising the role and merits of Distance Education and Learning.

5. The establishment of a commission for the development of Distance Education with its own secretariat, and forming as part of the Ministry of Education's focal points and "Think Tanks" for improving alternative or continuing education in Sierra Leone.

The research has posed a series of challenges for the future of Distance Education in Sierra Leone and for interested countries. The old structures need to be revamped for want of quality and effective out-comes through integrated approaches with the public and private sectors.

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