ASSESSMENT OF THE ROLE OF ICT IN THE EFFECTIVE TEACHING AND LEARNING OF ADULTS IN ADULT LITERACY CENTERS IN BENIN METROPOLIS.

BY

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CERTIFICATION

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DEDICATION

This study is dedicated to Almighty God for his divine grace and mercy throughout my academic year and my parents Mr. John Abiodun and Mrs. Florence Folusho Owoade.

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The researcher sincerely appreciate Almighty God for seeing her through from 100 level till now, may his name alone be praised.

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TABLE OF CONTENTS

Scope and Delimitation of the Study

Definition of Terms

CHAPTER TWO: REVIEW OF RELATED LITERATURE

Concept of Adult Education

Characteristics of Adult learners

Concept of Information and Communication Technology (ICT)

Usefulness of Information and Communication Technology in Teaching and learning of Adult.

Effective and Efficient use of Ianformation and Communication Technology in the Teaching and learning of Adult.

The Extent to Information and Communication Technology Utilization in the delivery of Adult Literacy Education.

The Challenges of Information and Communication Technology

CHAPTER THREE: RESEARCH METHODOLOGY

Research Design

Population of the Study

Sample Size and Sampling Technique

Research Instrument

Validity of the Instrument

Reliability of the instrument

Method of Data Collection

Method of Data Analysis

CHAPTER FOUR: PRESENTATION OF RESULTS AND DISCUSSION OF FINDINGS

Presentation of Results

Discussion of Findings

CHAPTER Five: SUMMARY, CONCLUSION AND RECOMMENDATION

Summary

Conclusion

Recommendations

References

Appendix

ABSTRACT

The purpose of this study was to investigate the Assessment of the role of ICT in the effective teaching and learning of adults in adult literacy centers in Benin Metropolis.its specific objectives where to determine the usefulness of information and communication technology in the teaching and learning of adults in adult literacy center in Benin Metropolis,To examine how effective and efficient the use of Information and communication technology resources in the teaching and learning of adult in literacy centers in Benin metropolis,To assess the extent of information and communication technology utilized in the delivery of adult literacy educational in that area, and determine the challenges milltating against the application of information and communication technology in adult literacy education delivered in that area, if available, in assisting the facilitators in integrating ICT into teaching. Structured questionnaire were administered to 79 selected stakeholders in adult literacy centers. The study identified a clear infrastructural gap in ICT in the three local government areas which has hampered the effective teaching and learning of adults. The study also discovered that only a limited proportion of the facilitators are very proficient in ICT use. Conclusively, the study discovered that lack of inadequate funding was the major challenge faced by the facilitators across board. The study recommends that intervention be made in the area of ICT in adult literacy centers to enhance the level of teaching and learning and improve adults performance in Adult literacy centers.

CHAPTER ONE

INTRODUCTION

Background to the Study

In many nations, adult education is still not considered a separate field of study. In contrast, adult education is defined differently in different nations and may refer to a variety of programmes, including but not limited to: literacy, community building, vocational training, social work, and citizenship classes.

The term "adult education" encompasses any kind of learning that does not occur within the confines of a traditional school setting. Individuals are considered adults when they meet both the biological and social criteria, which include being at least fifteen years old and being able to take on duties within their family or society. There are a variety of reasons why some people may not have had the chance to get an education when they were younger; this could be because they are in need of financial assistance, because they want to improve their employability, because they want to broaden their horizons, or because they simply want to know more (Indabawa & Mpofu 2006).

When it comes to computers and the processing, management, storage, and transmission of data, the term "information and communication technology" (ICT) comes to mind. A proper definition is often lacking for this phrase. The

all-encompassing nature of the phrase is a major contributing factor. It encompasses the computer's hardware and software components. More students than ever before are learning with the help of computers. The tremendous shift in the nature of work has contributed to this. Evidently, in order to match the need in every industry, individuals must have abilities in information and communication technology. In response, schools are making computers available to pupils and teaching them how to use them.

The workplace is one factor, but it is far from the sole one, driving educational reform. The advantages this technology offers for leaving institutions also affect them. Students find that utilising the computer makes completing assignments and activities much easier. They get a lot out of software that allows them to drill and practise skills and knowledge in a variety of subjects. Specialised software and hardware also cater to the requirements of students with a wide variety of physical and learning impairments.

Furthermore, facilitators may accomplish or finish job-related activities with the help of computers, which are fantastic instruments. Software programmes, for instance, make it simpler to give lectures, keep track of students' grades, and create report cards. As more and more people take classes online from reputable

universities, the limitations of CDs and other electronic media are becoming less of an issue. Students and instructors can stay in constant contact through tools like e-mail, video conferencing, and inter-relay charts. When it comes to adult education in Nigeria, ICT is seen as a driver since it allows for more people to have access to education and offers new methods of instruction and learning.

Teaching and educating people who are 65 and older is known as adult education. This often occurs in the business world, as part of "extension" or "continuing education" programmes at postsecondary institutions. Community colleges, lifelong learning centres, and folk high schools are among the other sites where people may study. The term "training and development" may describe the process as well. To differentiate it from pedagogy, it has also been called andragogy. Adults engage in non-formal learning, such as skill development or learning for personal growth, as opposed to official vocational education, which is often done in the job and is often associated with upskilling.

Another clear definition of adult education is presented in the fifth UNESCO international conference on the topic in 1997. According to the statement: "adult education denotes the entire body of ongoing learning process, formal or otherwise," which means that it encompasses all forms of learning that help

individuals who are considered adults by their society improve their skills, knowledge, and technical or professional qualifications, or find a new path in order to meet their own and society's needs. In a multicultural learning culture that values both theory and practice, adult learning includes both structured and unstructured learning, as well as a wide range of informal and accidental learning opportunities.

Adult education in Nigeria has undergone a paradigm change with this new concept. From an exclusively adult-focused field that prioritised reading and writing, it has evolved. Providing limitless educational options to both latecomers and early completers, adult education is seen as a problem-solving profession that covers a wide academic field and helps individuals realise their potential via literacy, remedial, and continuing education courses.

Adult education has adapted its methods of operation, activities, and programme delivery to the new age of information and communication technologies. A wide range of technological tools are used to enhance the services provided by adult education programmes. New technology developments impact the management of data in adult education centres (i.e., centres for continuing education via online learning) on a daily basis. In every facet of adult education, new technology has an

influence. The methods by which adult educators get access to, retrieve, save, alter, and distribute knowledge to their students or customers are constantly evolving due to developments in fields such as computing, communication, and mass storage technologies. Colleges and universities provide adult education programmes that provide students the tools they need to become productive members of society who can improve their own lives and the country as a whole. Things have changed significantly in Nigeria regarding the delivery of adult education. We have implemented innovative projects like:

Local government authorities in a few federating states have organised and funded basic literacy programmes. The US Departments of Education and Health oversee and coordinate the one-month initiative. For those who have completed basic literacy training but didn't make it through formal elementary education, the states of the federation provide a post-literacy curriculum to help them improve their skills and get a better mark on their first SLC. In addition, some national universities and state departments of education provide distant learning programmes. Everyone who, due to their age, cannot participate in the conventional school system is the target audience. The information and communication technologies used for education include electronic learning

systems, radio, television, and correspondence. There is a sandwich programme that several universities throughout the nation have set up for working people who are financially able to attend college. Additionally, we provide a course for nomadic women's education and adult education.

Nomadic education is the only one that Edo state's adult education system has been unable to handle. The University of Benin's adult education department is a prime example of a school that offers such courses. Thanks to advancements in information and communication technology, the execution of some of these initiatives has become more feasible and efficient. The government has taken action to reduce illiteracy in the Benin Metropolis region via the delivery of adult education programmes under the state's Agency for Mass Literacy, Adult and Non Formal Education.

Statement of the Problem

Incorporating ICT into adult literacy programmes has the potential to bring about several positive outcomes. The political, social, and economic spheres may all benefit greatly from investing in adult education programmes. It is also possible to evaluate the efficacy of a school curriculum by making use of the

newly developed AI tools. Thus, the primary objective of this research is to examine how adult literacy education centres in Benin City use AI-related ICT for instruction and learning.

Research Question

Through the formulation of these research questions, the study was able to accomplish its stated goal:

- When it comes to adult education in Benin Metropolis, how helpful is information and communication technology?
- To what extent do literacy centres in the Benin Metropolis make good use of ICT resources for teaching and learning adults?
- How often does the area's adult literacy programme make use of various forms of information and communication technology?
- Concerning the delivery of adult literacy education in the region, what are the obstacles to the use of ICT?

Purpose of the Study

Finding out how adult literacy education centres in Benin Metropolis use information and communication technologies to teach and learn is the main goal of this project. The primary objectives of the research were as follows:

1. to ascertain whether or not adult literacy centres in Benin Metropolis make good use of ICT for instruction and learning.

2. Analyse the efficacy and efficiency of adult literacy centres in Benin Metropolis in using ICT resources for instruction and learning.

3. Find out how much the area's adult literacy programmes use information and communication technologies.

4. Determine what obstacles exist in the way of using ICT to provide adult literacy instruction in the region**.**

Significance of the Study

There are a lot of reasons why the results of this research are important. Primarily, the results should provide the groundwork for detailed data on the acquisition and implementation of ICT in the provision of adult education.The study's results will show where adult education practices are falling short when it comes to using ICT for operations and activities.

The findings of this study will help professionals, students, lecturers, and adult educators in Nigeria to better understand how to utilise ICT to improve adult education delivery and to implement effective strategies for doing so.

Scope/Delimitation of the Study

Using literacy education facilities in Benin Metropolis as a case study, this research will examine how adults learn and use information and communication technologies. The purpose of this study is to evaluate the impact of ICT on adult literacy programmes in the Benin Metropolis LGAs of Edo State, namely in the Oredo, Egor, and Ikpoba-Okha districts**.**

Definition of Terms

The following definitions should help readers understand the study:

Adult education: The goal of adult education is to help individuals acquire new information, attitudes, values, and abilities via planned and ongoing educational experiences. A "school of continuing education" or "extension school" may provide adults with educational opportunities. Schools, libraries, and centres for lifelong learning are common venues for adult education.

Information and Communication Technology: The term "information and communication technology" (ICT) describes a wide range of tools that facilitate the exchange of data via various forms of electronic communication.

Adult Education: This is the field that deals with instructing and training people who are already in their adult years. People who are officially considered grownups in a given culture get this kind of schooling.

CHAPTER TWO

REVIEW TO LITERATURE

This chapter deals with the review of relevant and related literature on this study. It shall be discussed under the following sub-headings:

- Concept of Adult Education
- Characteristics Adult Learners
- Concept of Information and Communication Technology (ICT)
- Usefulness of Information and Communication Technology in Teaching and Learning of Adult.
- Effective and Efficient use of Information and Communication Technology in the Teaching and Learning of Adult.
- The Extent to Information and Communication Technology Utilization in the delivery of Adult Literacy Education.
- The challenges of information and communication technology
- Summary to Reviewed Literature

Concept of Adult Education

A universally accepted definition does not yet exist for many ideas, including adult education. The rationale behind this is straightforward: there is no end to the potential, and new forms emerge every day.

The term "adult education" encompasses any kind of learning that does not occur inside the traditional framework of a school. Whoever is socially and physiologically recognised as an adult (i.e., able to take on duties within the family or society) and who is at least fifteen years old is eligible to participate. People in this situation may have missed out on elementary school and are now seeking restitution, further education, training in a new skill, or simply more information for the sake of it all (Indabawa and Mpofu 2006 : 82).Education provided to those who are considered adults in their communities is known as adult education. Although there is much debate over what constitutes adulthood, Akinpelu et al. (1988) states that in order to be considered an adult, a person must meet both quantitative and qualitative standards. According to Akinpelu's quantitative explanation, in order to be considered an adult, one must have reached the physical, mental, legal, and chronological maturity levels associated with

adulthood. Regarding adult education, Darkenwald and Merriam (1982), as cited in Oni (2005:11), further stated:

Individuals whose primary social responsibilities are those of an adult engage in adult education when they want to improve their knowledge, attitudes, values, or abilities via structured and ongoing learning opportunities. (Merriam and Darkenwald, 1982) In 1976, the United Nations Educational, Scientific, and Cultural Organisation General Conference proposed the most all-encompassing definition of adult education as an organisation or activity. The following is the definition of adult education provided by UNESCO: "The education which denotes the entire body of organised educational processes, whatever the content, level, and method, whether formal or otherwise. It includes apprenticeship as well as continuing education in schools, colleges, and universities. Through these processes, individuals regarded as adults by their society can develop their abilities, knowledge, technical or professional qualifications, attitudes, and behaviours in two ways: fully for themselves and to participate in balanced and independent social, economic, and cultural development" (UNESCO, 2010).

Community and national development were the primary foci of the aforementioned comments on adult education, and rightfully so; they are vital

social concerns that may be greatly advanced by adult education. In contrast, non-formal education is characterised by more leeway for the student in terms of course selection, delivery method, and physical location. Akinpelu (2011) cites functional literacy, continuing education, and vocational training as examples of this sort of education that is provided to adults and adolescents outside of the official school system in the National Policy on Education.

Thanks to this new definition, adult education is no longer seen as a niche field that only deals with teaching adults how to read and write. Through literacy, remedial, and continuing education courses, adult education is a problem-solving field that offers limitless educational chances to both early and late completers, allowing them to realise their potentials. It is worth mentioning that according to UNESCO's (1997) definition, adult education has expanded to include several other types of educational programmes, such as women's education, industrial and labour education, peace education, and so on. The work of Omolewa (2006:7) confirms that the study of adult education is dynamic. As a field, it develops over time, supports research, and brings people back to their rightful place in society.

Part of the function of defining Adult Education is concerned with clarifying the relationship between Adult Education and its numerous related concepts, such

as Continuing Education, Non-formal Education, out-of-school Education and several others. This task has been carried out by many writers, such as Okedara (1981:17-20), Bown and Tomori (1974:16-18), Dave (1976:35-36), Omolewa (1981:3-12), the institute of Education, University of Ibadan (1981:10-34), the National Policy on Education (NPE, 1981:12-35; first published, 1977, rev., 1998), Prosser (1967:9-15), the International Council for Adult Education (ICAE, as reported by Liveright and Haygood, 1969:9; also Lowe, 1970:4 and 1975:55), Nyangulu (1988:20 & 24) and others

Characteristics of Adult Learners

Several authors have defined an adult based on different positions and with consideration for different backgrounds (Rodgers 2002, Jarvis 1992, Knowles, 1980). UNESCO makes use of the benchmark of fifteen years and above for identifying non-literate adults. However, the adult is more technically defined by what are referred to as his/her identity and characteristics. (Okenimkpe, 2004

Identity

Differentiating between identity and characteristics is quite strenuous. However, through critical analysis there will still be such difference. Identity is more general or universal to adulthood, while characteristics show greater

uniqueness in their manifestation in individuals. Therefore, one could say that while the identity of adult ask the question "who is an adult?" the characteristics ask the question "what signs and symptoms does the adult display?" then one could say that identity is a more ontological philosophical question while characteristics are psychological issue subject to scientific observation. The Nigerian doyen of Adult Education, Professor E.A Tugbiyele (1993:70-78) gives a clear perspectives of identity saying "adulthood refers to neither chronological nor biological age; it is a social conception".

Bischof (1969:4-12) give example and perceive the adult in terms of the six parameters of History, Chronology, Biology, Social situation, Politics and Psychology.

In a nutshell, History demands that a person regarded as adult should have lived for quite a while and gathered a considerable amount of experience. Chronology simply refers to age in years, a factor which is recognize to vary from society to society for various purposes, such as employment, marriage, political franchise and others. Biology describes changes, generally of depreciation in and on the body, while social situation postulates that the adults plays certain roles in society and that such roles determine his/her status in that society. For its own part,

politics claims that every adult undertakes some sort of leadership role in one sector of society or the other, a role for which he/she qualifies by appropriate age, requisite knowledge and personal integrity. It signifies the political maturity of individual in a social system.

Regarding Psychology (which deals with what we refers to as irritational elements of personality); the adult is expected to demonstrate emotional or temperamental maturity and stability and to evince courage and self confidence in his overall personality disposition. The six parameters just explained are used to describing the adult by scholars who do not recognize a dichotomy between identity and characteristics

Okenimkpe (2004) stated and I quote “Persons who recognize the concept of identity (among whom this speaker is one) define it by seven parameters i.e.:-

Characteristics

The characteristics of adult are some of the crucial factors from which Adult Education principles directly emerge. These characteristics can be combined or synthesized into four large categories:-

a. Intellect
b. Physiology
c. Psychology
d. Socio-cultural traits

The adult's intellectual characteristics refer to his plain ability to learn, as opposed to his field of learning or any other attributes of his learning performance. Research on these intellectual characteristics confirm that adults can (have the ability to) learn, up to the age of forty-five as proven by E.L Thorndike (published in his adult learning, 1928). Further researches such as those by Irving Lorge, Rose Kushner and W.R. Miles have extended the age up to seventy-five and concluded that any deterioration in learning ability after the age is as a result of the general obsolescence to which all faculties of the adult become subject. However, adults speed of learning is recognize to be lower than that of the youth.

The physiological characteristics may consist of;

1. What is called stigma (“tell-tale” or “sing-song”) features of ageing, such as graying hair, wrinkling skin, diminishing physical strength (bringing about easy thing), showing locomotion arising from stiffening joints and drying bones, declining potency, virility and others.
2. Decreasing speed of reaction to stimuli on account of the fact that the threshold of awareness (the minimum stimulus require to evoke reaction) is pushed forward in the adult by biological and physiological decline.
3. Decreasing vision
4. Decreasing hearing

The psychological traits are associated with the irrigational aspects of a person's personality, which are more closely linked to their emotions and feelings than their rationality and so more difficult to manage rationally. Factors such as acceptance, rejection, interests, attitudes, beliefs, values, and dispositions are all part of this category. Their manifestations in the adult are complex and manifold, but from the standpoint of Adult Education, the elements of interest are those which may negatively impact on the adult’s motivation to learn, such as the stereotype belief that adult cannot learn, past experiences of failure in efforts to learn and therefore, of disgust with learning inevitable radical changes in their

interests overtime resulting from changes in ability and energy; modification of the personality, variations in attitudes as age advances and changes in needs, wants and drives, the last of which are determined by varying situation of life, so that adults may not be able to see continued learning as capable of meeting their needs, wants and drives.

For their own parts, the socio-cultural traits are displayed in the following ways;

1. The adult achieves a social and/ or occupational position of responsibility.
2. The adult assumes the responsibility of independent thought and action.
3. The adult acquires a social status bestowing on him/her a corresponding level of prestige.
4. The adult is possessed of a considerable experience of life.
5. The adult is involved in a social situation which embraces his social class and in relation to education, the climate of adult learning which itself embraces an emotional climate and social environment.

Concept f Information and Communication Technology (ICT)

ICT is an acronym that stands for information and communication technologies. The word information is facts or details about something.

Communication means the principles of transmitting information and the methods by which it is derived as print, radio, television, or internet. To Ibukun (1997), communication is the basis and medium by which the activities of an organization are initiated and operated. Katz and Kahn (1987) "Communication" is defined as the act of conveying ideas or information from one person or entity to another in a way that the recipient can comprehend. while Akiniyi and Abe (1998) posited that ideas, facts and emotions by means of letters, words or signals. That is to say that for communication to take place, there must be two extremes. Akiniyi and Abe explained further that at the first extreme is the sender who pursues out the message and at the other extreme is the receiver of the message so sent. There is more than one person at each of any of the two extremes. Adamu (2001) described communication as data communications or telecommunications, It means sending information and data from one computer to another over a communication channel, like a regular phone line.

Communications and information technology (ICT) is defined by Meadowcroft (2006) as tools for collecting, organising, displaying, and distributing data. Additionally, we rely on it for communicating, storing and manipulating text, and doing computations. According to Marzelle, cited in UNDP

(2002), information and communication technologies encompass both established mediums like radio and television as well as more modern ones like the Internet, email, teleconferencing, and tools for distant learning like CD-ROMs, hypertext, the iPod, virtual classrooms, etc.

The term "information and communication technologies" (ICTs) refers to a wide range of resources, including hardware, software, networks, and services, that facilitate the sharing of ideas and information, as well as the publication, storage, retrieval, and transmission of data (Mejiuni and Obilade, 2006). According to the World Bank (2002), information and communication technologies (ICTs) are activities that enable the collection, processing, transmission, and presentation of data via digital electronic devices, telephony, the internet, virtual reality, cyber space, and the World Wide Web. Everyone knows that information and communication technologies have the ability to make education more accessible, at least according to this school of thinking. Because of it, open and online education have a solid foundation upon which to build, disseminate, and capitalise on new information. When seen in this light, information and communication technologies (ICTs) have the potential to improve the accessibility of adult education.

According to Akinola (2005), the majority of administrative tasks in the school system rely on communication as the medium, medium of heat, and component. One definition of technology is the practical use of theoretical understanding to address real-world issues. To extend Aboderin's (2003) definition of educational technology to include machines, media, and materials as interdependent components that are structured to achieve predetermined goals, we can say that technology is a system in which humans, machines, and media all work together to achieve these ends.

Akinniyi and Abe (1998), Adamu (2005) and Omirin (2006) urged that ICT is not limited to computer applications. This is because computer is just a component of ICT, it also includes internet, newsprint, telephone, radio, and close projector etc. information and communication are as old as man. They are integral part of human society. In man's way of life, the past recording of wisdom and history were done with the use of speech, drama, painting, song and dance. But innovation as brought about enriching the speed of communication mutates into digital technology. This has gone to the classroom management. Hawkins (2000) demonstrates that the difference between a typical classroom now and one a century ago would be instantly apparent.

pupils sat in neat rows, pencils and paper in hand, while the instructor scribbled notes on the whiteboard. The pupils were hoping to memorise the material and then divide it up on the test. He elaborates by saying that scientific and technological progress have altered a great deal. Much has not altered in the realm of education or in the ways in which both students and educators acquire knowledge. A different set of abilities is necessary, however, in the modern, tech-driven society.

The purpose of adult education is, without a doubt, to equip individuals of all ages to take part in society's activities. Every day, the demands placed on society expand. Man must continue to learn new things in order to meet his ever-evolving demands. Facilitators need to have the proper training and resources to acquire the abilities that will enable them to meet the challenges of the future. In the world of future, this will also make people more productive and competitive. Teachers, as a vocation, "need a highly specialised training that is not of general type" (Adu and Familugba, 2003), hence it stands to reason that adult education programmes should prioritise educating teachers in information and communication technology.

Sambo (1992) and Omirin (2006) both believe that relevant information is that which does three things: enhances knowledge, lowers uncertainty, and is usable for the intended purpose. Good knowledge, he said, is thorough enough to solve the issue at hand, accurate enough to do its job, and relevant enough to its intended use. Originate from a trustworthy source; reach the intended recipient; use a suitable means of communication; and be easily understood by the listener.

In a learning situation, teacher is expected to be current with the information to be transmitted to the students. Apart from this, the educational demand keeps on increasing every day, which calls for identification of various means of getting and passing information. Flitzpatricks (1987) viewed that with the new information being accessed daily via the internet; educators need to develop such vast amount of information. For the most part business have readily embraced the internet and its unprecedented ability to break communication barriers, but many teachers are neither aware of ICT nor have appropriate training to interpret such amount of information effectively. In many highly educational institutions, management information system MIS are used to process student's result. Yet Flitzpartricks holds the belief lot "MIS can often be effective and therefore can sometimes be an inadequate means of processing vital information".

There are other ICT to be used like the web, email, electronic mail, near projection, etc. According to Agagu (2006), the internet provides easy, quick, and cheap access to theoretically enormous data sets and interpretive resources. Additionally, with little extra work, the user may quickly become an active contributor to the world's existing body of knowledge.

The training programmes at World Thinkers have reportedly focused on assisting educators in making effective use of technology in the classroom and fostering an atmosphere of active inquiry and collaboration among students (kozman, 1999). The findings of the SRI review of global linkages, as brought to our attention by Robert (2004), reveal that training led to three quarters of participating instructors stating that computers and the internet allow them to significantly increase their subject area knowledge. It is well-known that a motivated and passionate teacher may significantly improve student performance, and more than 80% of instructors questioned reported a significant boost in their interest and excitement for teaching as a result of the World Links programme. If they want to make a real difference in their students' learning and teaching, teachers need their schools to provide them with professional development opportunities and provide a solid example of effective practice (Hawkins, 2002).

Usefulness of Information and Communication Technology

It is impossible to overstate the value of information and communication technology, particularly in the field of education. In general, information and communication technology affects every facet of many fields. According to the National Policy on Education (2004;4-5), this revision was required due to policy innovations and changes since the third edition (1998). These modifications and innovations include:-the integration of ICT into the educational system. Therefore, it is indubitably explicit that the Federal Government of Nigeria is not leaving any work on touched in ensuring that Nigeria citizens are computer literate in order to compete favourably with other citizens world-wide in all field of human endeavour. The distinct areas where computer literacy has made serious impact include: scientific research medicine, space technology, business application, banking, industrial applications, communication and education.

Scientific Research

In science, computer literacy has empowered man to carry out calculations, which were previously beyond contemplation because of the time span and difficulties in carrying them out. The speed, reliability and precious of computers

in carrying out complex scientific and engineering calculations have empower man to transform his theoretical investigations in nuclear physics, chemistry and astronomy to better his living standards. The place of the computer in national development has made it a standard feature of life in university laboratories world-wide (Odili, 1994).

In agreeing with Odili above, the computers serves as useful tools for scientist in areas such as space exploration, weather forecasting, laboratory investigations, under-water experiments and radio carbon dating. This too has greatly enhanced our national development.

Medicine

Doctors who before now have strained themselves in routine work connected with clinical diagnoses now carry out investigations using computers to explain laboratory tests, computer; literacy has empower doctors to detect laboratory tests of blood and urine that shows some abnormalities. By storing the information from the tests in the computer memory, the changing biological situation of each patient can be recorded for effect and efficient medical attention, computer; literacy has empower researchers in the medical field to produce contour maps of the human body.

Banking

Banking is now almost totally dependent on the computer. The huge labour force that would have been needed in today's massive volume of book keeping (if it was handed manually) has been taken care of by the computer. Electronic money transfer, a common practice by most banks today, is a system where bank customers in one part of the country can ask a computer located thousands of kilometers away for a report on their account and have the statement displayed instantly on a computer screen at their local branches of the bank. Information on such things as current balances, deposits, overdrafts, interest charges and sharing are all controlled by the computer system.

Industrial Application

In the industrial sector computer literacy has empowered man to plan, control and coordinate his production. Chemical plants that are toxic in nature are now controlled by computers thereby reducing their hazards to mankind.

According to Tinio (2002), information and communication technologies have the ability to greatly expand access to formal and non-formal education for underrepresented groups; this includes geographically dispersed and rural populations, as well as ethnic minorities, women, people with disabilities, the

elderly, and anyone else who is unable to attend classes on campus due to financial or time restrictions. Tinio went on to say that there are a number of ways in which ICT may increase educational opportunity:

Whenever, wherever: Transcendence of physical space and time is a hallmark of information and communication technologies. With the use of ICTs, asynchronous learning—in which there is a delay between the transmission of information and its receipt by students—is feasible. One example is the accessibility of online course materials, which are available at all times. There is no longer any need for the teacher and all students to be present in the same physical place when educational programming is delivered via ICT (e.g., educational radio or television). Furthermore, synchronous learning is made possible by certain forms of ICTs, including teleconferencing technology, which allow for several learners to receive instruction at the same time, regardless of their physical location.

In this era of rapidly expanding educational opportunities, it is more important than ever to raise the bar on educational and training standards: Increased student enthusiasm and engagement, easier basic skill learning, and better teacher training are three ways in which information and communication technologies might improve the quality of education (Haddad & Jurich, 2002). Information and

communication technologies (ICTs) are game-changing resources that, when used correctly, may hasten the transition to an atmosphere focused on the student.

Using ICTs to enhance teacher training has also increased both the quantity and quality of such programmes. For instance, several RTVUs in China, including the China Central Radio and TV University and the Shanghai Radio and TV University, have been providing extensive teacher education programmes based on radio and television for quite some time (Carnoy, et al, 2002).

There is little doubt that the advent of ICT into colleges alters the nature of instruction. With the help of ICT, not only is it feasible to implement a selected partnership between institutions and work with distant learning, but a new educational style is emerging, one that expects students to be more involved than in the past. As a result of learning using ICT, students should be able to do things like communicate, make presentations in PowerPoint, and use technology to collaborate with classmates and instructors. A cadre of professionals well-versed in information and communication technology (ICT) and proficient in a variety of computer platforms and software environments is essential if nations are to reap the benefits of technological growth**.**

Effective And Efficient Use of Information and Communication Technology (ICT) in the Teaching and learning of Adult.

Aboderin (2003) revealed that with the invention of ICT some programmes were able to be mounted under adult education which could not have being easy to come by or run effectively and efficiently without ICTs resources. Tinio (2002) also began to realise that ICTs had the ability to greatly expand the range of official and informal educational programmes available to underserved communities in rural areas and other geographically dispersed areas. We have such programmes like distance education, open university etc. Adult education has several key concepts:

1. Assessment Requirements: Understanding the specific needs and goals of adult learners to adapt ICT tools and resources.
2. Accessible technologies: ensure ICT tools are accessible to all students, including those with disabilities, through features such as screen readers and other access devices.
3. Training and support: Provide ongoing training and support for students and teachers to use ICT tools and platforms effectively.

4. Interactive Learning: Provide interactive content such as online discussions, virtual simulations, and multimedia content to engage adult learners and enhance understanding.
5. Flexible learning options: There are many types of learning in ICT, including online courses, blended learning models and mobile learning applications to suit different times and interests.
6. Feedback: Implementing a system to collect feedback from students to continually improve the usability and effectiveness of ICT tools and resources.
7. Digital Literacy: Provide adults with the digital skills they need to explore online resources, evaluate information, and protect themselves and their safety.
8. Collaboration and Networking: Provides older students with opportunities to collaborate with peers, access networks, and participate in online communities to support educational goals.

   By integrating these strategies, adult education can use the full potential of ICT to improve learning outcomes and help students succeed in the digital age.

Extent to Information and Communication Technology in the Utilization and Delivery of Adult Literacy Education

The Extent of Utilization of ICT (Information and Communication Technology) is used in adult education can vary widely depending on factors such as infrastructure, resources and the programmes goals/aim. ICT can be used in online courses, interactive sessions, digital libraries and even mobile applications to suit the needs of older people. These can range from simple computer literacy courses to a variety of e-learning methods including multimedia resources and virtual classrooms. Also Wosowie (2014) emphasize on the development of adult literates where ICT enrich, accelerate the interactive sessions such as reading, writing and arithmetic. Hawkins (2000) who believed that if you were to compare the classroom of a hundred years ago with average classroom today, you will recognize it immediately. The implication of this is that with the emergence of information and communication technology, it has given teaching and learning environment a tremendous new looks suitable for acquisition of knowledge, skills, and ideas e.t.c to take place.

Challenges with the Use of Information and Communication Technology

Technology in education has received a lot of funding during the last 10 years. Here are a few of the most pressing problems that lawmakers and teachers are dealing with right now: We won't be looking at many of these obstacles. Here are some key points discussed at a conference of Nigerian stakeholders on non-formal education project execution at the Sharon Ultimate Hotel in Abuja on March 11, 2010**:**

Poor funding:

This serve as a major challenge to effective and efficient adult education delivery system. Government of this country has failed to fund adult education programmes as a result of less attention given towards adult education program. Inappropriate funding hinders the maximum use of ICT facilities for assessment in schools;

Lack of adequate training and personnel development:

One of the main problems with adult education courses is that its staff members aren't well-trained or developed. The trainings provided to adult educators were insufficient, preventing them from being effective in their roles. To maintain quality in their delivery system and operations and to stay up with the rapidly evolving technological landscape, educators must undergo ongoing professional development and re-education.

Educators working with adults often lack the necessary skills to effectively address challenges associated with adult learning and information and communication technology (ICT) because of a lack of chances for professional development. Due to the short-term nature of the government subsidies that support most of the jobs in this sector, most of them are part-time and do not provide benefits or job security. The modern era is the one that will see the most interest in adult education programmes.

Network and power outages: Adomi, Omodeko, and Otolo backed this argument by saying that power outages have been an ongoing issue hindering the usage and implementation of ICT in Nigeria, which is a developing nation like any other. This makes it such that the few schools that do have access to technology aren't using it very often. When power outages occur, it becomes next to impossible to send and receive data, much alone process, analyse, interpret, and provide meaning to that data. The movement of information from one entity to another is not feasible, and neither is the attainment of a more civilised and prosperous way of life.

Summary of Literature Reviewed

The review has been quite revealing and instructive. The review can be summarized as follows;

Education provided to those who are considered adults in their communities is known as adult education. The term "adult education" encompasses any kind of learning that does not occur inside the traditional framework of a school. Whoever is socially and physiologically recognised as an adult (i.e., able to take on duties within the family or society) and who is at least fifteen years old is eligible to participate.

Information and communication technology, or ICT, is an abbreviation. The definition of information is data or specifics on a topic. The term "communication" refers to both the techniques and the concepts of information transmission via various media such as the internet, radio, and print.

The term "information and communication technology" (ICT) refers to the tools that are used to generate, distribute, store, or alter data. We also utilise it to communicate, store and alter text, and do computations.

Information and communication technology has had a tremendous role in adult education delivery. The invention of ICT brought about changes in the delivery operation of adult education. Information and communication technology

makes adult education a far reached field for the people. In essence, we are trying to say here that, with the invention of ICT some programmes were able to be mounted under adult education which could not have being easy to come by or run effectively and efficiently without ICTs resources. We have such programmes like distance education, open university etc. The impacts of new technologies are felt by adult education programmes in every aspect. Computing technology, communication technology (where e-mails allows the exchange of messages between two computers by telecommunication which are used to send assignment, work done between adult facilitators and learners),

CHAPTER THREE

METHODOLOGY

This chapter contains the procedures the researcher adopted for gathering and analyzing data for the study it was treated under the following sub-headings:

- Design of the study
- Population of the Study
- Sample and Sampling Technique
- Research instrument
- Validity of the Instrument
- Reliability of the Instrument
- Method of Data Collection
- Method of Data Analysis

Research Design

This investigation made use of a descriptive survey methodology. We chose this design because it is a tried and true method of gathering social facts and views to describe and understand the current state of affairs, and because it is effective at uncovering the truth. According to Nworgu (2006). This particular research strategy allows the researcher to generalise about his study population and is

particularly well-suited for gathering people's views, attitudes, and perceptions in their natural environment.

Population of the Study

The target population of the study will include all the major stakeholders who are into Adult education Programmes in Benin metropolis. Specifically, they will include pioneer/members of Adult education Programmes in Benin Metropolis, facilitators, those involve in the training of personnel for Adult education Programmes. The target population figure was found to be 79**.**

Sample and Sampling procedure

In all, 79 people will be a part of the study's sample. Their selection will be based on a census. The tiny size of the target population led to the use of the census technique. Here we may see the study's population and sample broken down:

Table 1: Breakdown of population and sample of the study.

S/N	LGA	Stakeholders	Population	Sample (100%)
1	Oredo	Pioneer Edu center	2	2
		Pioneer Gwa Amu	3	3
		Pioneer Sparta Lane	3	3
		Benin Baptist Church	3	3
		Panacea Ekenwan	3	3
		Cwfi Oko center	3	3
2	Egor	Lecturer Dept of Adult	15	15
		PG	39	39
3	Ikopoba-Okha	Pioneer Oka ii	3	3
		Pioneer Idogbo	2	2
		Cwfi Idogbo Center	3	3
	Total		79	79

Source: Compiled from Omoregie (2020) and Researchers field survey (2024).

Research Instrument

An online survey served as the primary data gathering tool for the research. Assessment of the Role of Information and Communication Technology Questionnaire (ARICTQ). Parts "A" and "B" make up the survey. Part A of the survey asks for basic demographic information from participants, including their age, sex, profession, level of education, and marital status. In Section B, we ask for details on the topics covered by the research questions. It took twenty(20) things into account for the instrument. For each item, we gave a modified version of the likert scale with four possible responses: strongly agree (SA), agree (A), disagree (D), and strongly disagree (SD). We also asked if the item was very highly effective (VHE) or very effective (HE). Decreased efficiency Minimal efficacy (VLE)

Validity of the Instrument

The expert judgement method is used to verify the study instrument. From this point of view, my project manager and I were each given a copy of the preliminary instrument.

Two other professors from the University of Benin's Faculty of Education's Adult Education Department were responsible for the selection and phrasing of the items. Their feedback will then be considered prior to the creation and implementation of the final instrument version.

Reliability of the Instrument

By analysing the instrument's internal consistency reliability, we can ascertain its dependability. This will include conducting a pilot test of the instrument with twenty respondents who will not be included in the study's final sample. Using Cronbach's Alpha, we can calculate the instrument's reliability coefficient from the data acquired from their answers.

Method of Data Collection

The researcher individually gave the survey to each responder. She provides the responses with explanations and clarifications. After, responding to the questionnaire by the respondents, it was collected the same day.

Method of Data Analysis

The Data collected will be analyzed using descriptive statistics, this will involve the use of frequency counts, mean score and simple percentage. A criterion mean of 2.50 will be used for decisions.

CHAPTER FOUR

PRESENTATION OF RESULTS AND DISCUSSION OF FINDINGS

This study investigated the assessment of the roles of ICT for the effective teaching and learning of adults in Adult literacy centers in Benin metropolis. However, this chapter contained the presentation of the data analysed including the discussion of findings.

Research Question 1.

What is the usefulness of information and communication technology in the teaching and learning of Adults in Benin Metropolis?

In proffering answers to the above questions, the researcher gathered and analysed the relevant data in the instrument precisely those of items 1-4 using descriptive statistics and the result is as presented in Table 2

Table 2: Data on the Usefulness of ICT in the Teaching and Learning of Adults

S/N	Variables	N	Mean score	Decisions
1	ICTs resources are useful in scientific research and investigation	59	3.91	Accepted
2	With the help of ICT storage of laboratory test and medical reports are achieved	59	3.76	Accepted
3	E-banking has been made easier through the use of ICT.	59	3.76	Accepted
4	ICT encourages and coordinate mass production in industry.	59	3.61	Accepted
	Grand mean		***3.76***	***Accepted***

Source: Field Survey, 2024.

Table 2 revealed the mean response of the participants on the usefulness of ICT in the teaching and learning of Adults. It was found that the respondent agreed that ICT resources are useful in scientific research and investigation with a mean score of 3.91. They also agreed that ICT helps in storage of laboratory test and medical reports with a mean score of 3.76. Furthermore the respondent also agreed that ICT has made E-banking much easier with a mean score of 3.76.

Finally the respondent also agreed that ICT encourages and coordinate mass production in industry with the mean score of 3.61.

On the basis of the analysis, it was therefore concluded that ICTs resources are useful in delivering adult education programmes, it make adult education accessible to the learners, mobilizing, disseminating information to the people for adult education programme.

Research Question 2

What is the level of efficiency and effectiveness in using ICT resources for adult literacy instruction in Benin Metropolis literacy centres?

To address these problems, the researcher used descriptive statistics to compile and analyse data from the instrument, namely from items 5-8. The resulting table is as follows.

Table 3: Data on the Efficiency and Effectiveness in the use of ICT Resources in the Teaching and Learning of Adult

S/N	Variables	N	Mean score	Decisions
5	ICT enables collaboration between adults learners during programmes and activities.	59	3.52	Accepted
6	Easy access and adaptation to ICT in adult education delivery.	59	3.23	Accepted

7	If not for ICT, learning process will not be flexible.	59	3.35	Accepted
8	With the use of ICT, information of the adult learners are kept to date.	59	3.59	Accepted
	Grand Mean		***3.42***	***Accepted***

Source: Field Survey, (2024)

Table 3 revealed the mean responses of the participants on the efficiency and effectiveness in the use of ICT resources in the teaching and learning of Adults. It was found that the respondent agreed that ICT enables collaboration between the adult learners during Programmes and activities with a mean score of 3.52. Also they agreed that ICT ease the access and adaptation in adult education delivery with the mean score of 3.23. Again the respondent agreed that if it were not for ICT, learning process will not be flexible with the mean score of 3.35. Lastly they also agreed that with the use of ICT, information of the adult learners are kept to date with the mean score of 3.59.

On the basis of the analysis, it can therefore be deduced that ICT enables most resource sharing on adult education programmes and activities, delivery of teaching and learning, enhance distance learning and is valuable to effective and efficient adult education delivery.

Research Question 3

How often does the area's adult literacy programme make use of various forms of information and communication technology?

As shown in Table 4, the researcher used descriptive statistics to compile and analyse the pertinent data from the instrument, namely items 9–12, in order to provide responses to the issues posed above.

Table 4: Extent of ICT and Utilization in the Delivery of Adult Literacy Education

S/N	Variables	N	Mean score	Decisions
9	Inadequate funding is a major challenge affecting the effective delivery of adult education programmes.	59	3.61	Accepted
10	Lack of technical-know-how impedes the smooth delivery of adult education programmes.	59	3.56	Accepted
11	Network/power supply breakdown does not affect adult education delivery.	59	3.56	Accepted
12	Inadequate personnel can also affect the delivery of adult education programmes.	59	3.23	Accepted
	Grand Mean		***3.49***	***Accepted***

Source: Field Survey, (2024)

Table 4 examined the mean responses of the participants on the extent of ICT and Utilization in the delivery of adult literacy education. It was found that the respondents agreed that the use of video helps improve attention span during

online courses with a mean score of 3.61. Similarly, the respondent also agreed that interactive session has been made easier through the use of audio and format. With the mean score of 3.56. Furthermore, positive responses were gotten from the respondents that document and journal are preserved through the use of digital library's. With the mean score of 3.56. Finally the respondent agreed that mobile application has been made to suit the disabled and non-disabled adult with the mean score of 3.23. Based on the analyses above, it can be concluded that ICT are averagely used in teaching and learning in their centre.

Research Question 4

In this region, how can we best use information and communication technologies to help adults learn to read and write?

Table 5 displays the results of the researcher's descriptive statistics analysis of the items 13–16 of the instrument, which were important to answering the questions posed above.

Table 5: Data on the challenges militating against the application of Information and communication technology in adult literacy education delivery

S/N	Variables	N	Mean score	Decisions

13	Inadequate funding is a major challenge affecting the effective delivery of adult education programmes.	59	3.59	Accepted
14	Lack of technical-know-how impedes the smooth delivery of adult education programmes.	59	3.47	Accepted
15	Network/power supply breakdown does not affect adult education delivery.	59	3.34	Accepted
16	Inadequate personnel can also affect the delivery of adult education programmes.	59	3.49	Accepted
	Grand Mean		***3.47***	***Accepted***

Source: Field Survey, (2024)

*T*able 5 concluded the research, revealed to the participants with the mean responses on the challenge milltating against application of ICT in adult litercy delivery. It was said that the respondent agreed that inadequate funding is a major challenge affecting the effective delivery of adult education Programmes. With the mean score of 3.59. Also, the respondents agreed that lack of technical- know -how impedes the smooth delivery of adult education Programmes with the mean score of 3.47. Furthermore the respondent also agreed that network/power supply breakdown does affect adult education delivery with the mean score of 3.34. Finally the respondent agreed that inadequate personnel can also affect the delivery of adult education Programmes with the mean score of 3.49. On the basis

of the analysis, it was therefore concluded that the challenges militating against the application of Information and communication technology in adult literacy education delivery are; lack of funding, Lack of technical-know, network breakdown and inadequate personnel skilled in the use of ICT.

Discussion of Findings

Assessment of Information and Communication Technology (ICT) in Effective Teaching and Learning of Adults in Adult Literacy Centres in Benin Metropolis has produced results that are instructive, informative, and illuminating, based on the opinions of the respondents. Findings from research question one revealed that ICTs resources are useful in delivering adult education programmes,ICT has an impact that covers all aspect of disciplines. It was stated in the National Policy on Education (2004;4-5) that the edition was necessitated by some policy innovations and the 3rd edition (1998) Therefore, it is indubitably explicit that the Federal Government of Nigeria is not leaving any work on touched in ensuring that Nigeria citizens are computer literate in order to compete favourably with other citizens world-wide in all field of human endeavour.

Findings from research question two revealed that ICT enables most resource sharing on adult education programmes and activities, delivery of teaching and learning, enhance distance learning and is valuable to effective and efficient adult education delivery. This finding corroborate the findings by Aboderin (2003) where he revealed that with the invention of ICT some programmes were able to be mounted under adult education which could not have being easy to come by or run effectively and efficiently without ICTs resources. Also Tinio (2002) we can all agree that the internet and other forms of electronic communication hold great promise as a medium through which hitherto underserved rural and dispersed communities might get access to formal and non-formal education.

Findings from research question three revealed that ICT can be used in online courses, interactive sessions, digital libraries and even mobile applications to suit the needs of older people. These can range from simple computer literacy courses to a variety of e-learning methods. Wosowie (2014) emphasize on the development of adult literates where ICT enrich, accelerate the interactive sessions such as reading, writing and arithmetic. According to Hawkins (2000), it would be easy to tell a classroom from a century ago from a typical school today. Learning and teaching have taken on a whole new face with the advent of ICT, which is

ideal for the dissemination and acquisition of information, skills, and ideas, among other things.

According to the results of the fourth study question, there are many obstacles to using ICT for adult literacy instruction. These include insufficient resources, a lack of technical knowledge, broken networks, and an absence of qualified staff members.Held at the Sharon Ultimate Hotel in Abuja on March 11, 2010, these remarks were given at a meeting of the stakeholders about the efficient execution of informal education projects in Nigeria. According to Adomi, Omodeko, and Otolo, Nigeria is a developing nation where power outages have long been an obstacle to the widespread adoption of information and communication technologies.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

This chapter deals with the summary of the study, the conclusion drawn from the analysis and interpretation of findings and recommendations offered based on findings made.

Summary

Adult literacy centres in Benin Metropolis were the sites of the research, which aimed to evaluate the use of ICT for the benefit of adult education. The investigation prompted the formulation of four (4) research topics. Here they are:

To what extent can adults in Benin Metropolis benefit from the use of ICT in the classroom?

2. How effectively and efficiently are adult literacy centres in Benin Metropolis making use of information and communication technology resources for teaching and learning?

3. What is the level of use of information and communication technologies in the area's adult literacy education programmes?

4. How can we overcome the obstacles that prevent the use of ICT in adult literacy programmes in this region?

The research design adopted was the descriptive survey, the choice for this design was to obtain individuals opinions and perception in their natural settings, and enable the researcher to generalize her population of the study. The population of the study where majorly the stakeholders who are into Adult education Programmes in Benin metropolis. Specifically they were the pioneer/members, lecturer and PG. The Sample and Sampling total numbers were 79, and a census simple method was adopted due to the size of the population. The research instrument that was adopted for the data collection for the study was the Assessment of the Role of ICT Questionnaire (ARICTQ). Parts "A" and "B" comprised the survey. Section 'B' aimed to elicit data on the numerous research topics and other issues deemed crucial to the outcome of this study, whereas Section 'A' included the respondents' bio-data. The project manager and two additional professors from the University of Benin's Faculty of Education in Benin City checked the instrument's validity. Using the internal consistency reliability, we were able to assess the instrument's dependability. Using Cronbach's Alpha as a whole, the score was 0.672. The researcher gathered data the same day after physically administering the methods to the responder and resolving any concerns that arose. Frequency counts, mean scores, and basic percentages are the tools

used for data analysis. Following this examination, the research concluded with the following results:

The participants in the study ranged in age from twenty-five and above. Nonetheless,

1. The majority of respondents were young adults (aged 20–25).

2 The vast majority of respondents were not married.

3. A significant disparity existed between the male and female respondents.

4. The most common qualifications held by the respondents were OND and NCE.

Conclusion

The results of this study clearly show that ICT has been a game-changer when it comes to adult education programme delivery.

Recommendations

Here are some suggestions derived from the results and overall analysis.

1. The government should allocate more funding to build the necessary fundamental ICT infrastructure.

2. Adults who work as facilitators, educators, Extension Agents, etc. who lack computer knowledge and abilities should periodically participate in short training

and retraining courses. More people will be aware of the possibilities and capabilities of computers because of this.

3. In order to mitigate the risk of frequent power outages, it is important to have a reliable power source. Additionally, it is crucial to maintain the functionality of electrical devices to prevent network interruptions. Also, the government should put more effort into researching and developing solutions to the issue of unpredictable electricity supply, rather than using military force.

4. Proactively seek the support of various donor organisations, including the Education Trust Fund (ETF), UNESCO, UNICEF, and others.

5. All new employees should be required to complete an orientation course that covers basic computer skills as well as information and communication technology (ICT) as they pertain to adult education courses. Facilities.

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APPENDIX

DEPARTMENT OF ADULT AND NON- FORMAL EDUCATION
FACULTY OF EDUCATION
UNIVERSITY OF BENIN
Assessment of the Role of ICT QUESTIONNAIRE (ARICTQ)

Dear Respondent,

This questionnaire is solely for the purpose of a research. The researcher is carrying out a study on: the Assessment of the role of Information and Communication Technology (ICT) in Effective Teaching and Learning of Adults in Adult Literacy Centres in Benin Metropolis You are therefore requested to kindly help as much as possible to supply the needed information. Your response shall be treated with outmost confidence.

Please read the questions carefully and tick (√) in the box provided that corresponds to the answer of your choice. At the right hand column there are numbers representing how much you rate the statements. Indicate your response to the statements by ticking the appropriate number.

SECTION A
PERSONAL DATA

Sex: Male [ ] Female [ ]

Age: 20-25 [ ] **26**-30 [ ] **35-40** [ ] 45-49 [ ]50 and above[ ]

Educational Qualification: OND/NCE [ ] BSC/HND [ ] MSC [ ]

Marital Status: Single [ ] Married [ ] Widowed [ ] Divorced [ ]

SECTION B

They are: SA - Strongly Agree, A-Agree D –Disagree, SD- Strongly Disagree, VHE-Very highly effective, HE- Highly effective, LE- Less effective, VLE- Very less effective

SECTION B

S/N	ITEMS	SA	A	D	SD
		4	3	2	1
	Usefulness of ICT in the Teaching and Learning of Adults in				
1	ICTs resources are useful in scientific research and investigation.				
2	With the help of ICT storage of laboratory test and medical reports are achieved				
3	E-banking has been made easier through the use of ICT.				
4	ICT encourages and coordinate mass production in industry.				
	Efficiency and Effectiveness in the use of ICT resources in the Teaching and Learning of Adult.	SA	A	D	SD
5	ICT enables collaboration between adults learners during programmes and activities.				
6	Easy access and adaptation to ICT in adult education delivery.				
7	If not for ICT, learning process will not be flexible.				

8	With the use of ICT information of the adult learners are kept to date.				
	Extent of ICT and Utilization in the delivery of Adult Literacy Education.	VHE	HE	LE	VLE
9	Use of video help improve attention span during online courses				
10	Interactive sections have been made easier through the use of audio and video format.				
11	Documents and journal are preserved through the use of digital library.				
12	Mobile application has been made to suit the disabled and non-disabled adult learners.				
	Challenge Militating Against Application of ICT in Adult Literacy Delivery.	SA	A	D	SD
13	Inadequate funding is a major challenge affecting the effective delivery of adult education Programmes.				
14	Lack of technical- know -how impedes the smooth delivery of adult education Programmes.				
15	Network/ power supply breakdown does affect adult education delivery.				
16	Inadequate personnel can also affect the delivery of adult education Programmes.				