

**THE ASSESSMENT OF THE UTILIZATION OF INFORMATION
AND COMMUNICATION TECHNOLOGY (ICT) FOR ADULT
LEARNERS IN BENIN METROPOLIS**

BY

Collins Osameuyi OBIYAN

EDU1902888

FACULTY OF EDUCATION

UNIVERSITY OF BENIN

BENIN CITY

MAY, 2024

**THE ASSESSMENT OF THE UTILIZATION OF INFORMATION
AND COMMUNICATION TECHNOLOGY (ICT) FOR ADULT
LEARNERS IN BENIN METROPOLIS**

BY

Collins Osameuyi OBIYAN

EDU1902888

**BEING A PROJECT SUBMITTED TO THE DEPARTMENT OF ADULT
AND NON-FORMAL EDUCATION, FACULTY OF EDUCATION,
UNIVERSITY OF BENIN, BENIN CITY IN PARTIAL FULFILMENT OF
THE REQUIREMENTS OF BACHELOR DEGREE (B.ED.) IN ADULT
EDUCATION/POLITICAL SCIENCE FACULTY OF EDUCATION,
UNIVERSITY OF BENIN, BENIN CITY.**

MAY, 2024

CERTIFICATE

We the undersigned, certify that this project was carried out by **Collins Osameuyi Obiyan** of the Department of Adult and Non-Formal Education, University of Benin, Benin City. It is adequate in scope and quality for the partial fulfillment of the requirements of the award of Bachelor of Education (B.Ed) Degree in Adult and Non-formal Education.

.....

Mr. M.O Egbadon

Project Supervisor

Date:.....

.....

Mr. M.O Egbadon

Project Co-ordinator

Date:.....

.....

Prof. (Mrs) L.A. Okukpon

HOD, Adult and Non-Formal Education

Date:.....

DEDICATION

This study is dedicated to the Almighty God for his divine guidance, mercy and love. It is also dedicated to my Parent and siblings for their support to the completion of this project.

ACKNOWLEDGEMENT

I wish to thank Almighty God who has guided me and protected me throughout the years of my admission in the prestigious University of Benin and for His unquantifiable graces, wisdom, and strength for making this research a success.

Special thanks to my supervisor Prof. (Mrs). L.A. Okukpon whose insights, time, encouragement and suggestions has helped me through this research work and broadened my knowledge in this field which has led to its successful completion.

I would also like to acknowledge my hardworking (HOD) Prof. (Mrs). L.A Okukpon, Project Coordinator Mr. Egbadon, and other lecturers in the department such as; Prof. F.E.O. Omoruyi, Prof. C.O. Oyitso, Prof. C.O Olumukoro, Dr. (Mrs). C.G. Abbey-Fashae, Dr. N.R. Erharuyi, Dr. S.S. Olawale, Dr. F. Aghedo and other lecturers from Adult and Non-formal Education, for their moral support and assistance.

I would also like to also use this medium to say a very big thank you to my mother; Mrs. Mabel Obiyan for the unending love, support and prayers for the completion of this project work. I would also acknowledge the best Father in the world in the person of Mr. Ambrose Obiyan for his immense support both financially, morally and otherwise, and his advice, guidance and encouragement all through my journey in the University of Benin.

Many thanks to my dearest siblings; Bridget Obiyan, Desmond Obiyan, Wisdom Ogbomon, Pascal Obiyan, Anita Obiyan, for their immense love, support, guidance and giving me the push I need to complete this project. And lastly, to my friends and coursemates to name a few; Victor Aluede, Sylvester Okolie, Miss. Amarachi Agbugba, I thank you all for the contribution and encouragement throughout my period of studies in the university. God Bless you all.

TABLE OF CONTENT

TABLE OF CONTENT

Concept of Adult education	-	-	-	-	-	-	-	15
Concept of Adult Learners	-	-	-	-	-	-	-	16
Concept of adult education	-	-	-	-	-	-	-	17
Characteristics of Adult Learners	-	-	-	-	-	-	-	18
Concept of Information and Communication Technology (ICT)	-	-	-	-	-	-	-	
	-	-	-	-	-	-	-	21
The Utilization of ICT in Adult Education	-	-	-	-	-	-	-	23
Challenges with the use of ICT	-	-	-	-	-	-	-	27
The impact of ICT on Adult education delivery	-	-	-	-	-	-	-	30
Summary of the Reviewed Literature	-	-	-	-	-	-	-	32

CHAPTER THREE: METHODOLOGY

Research Design	-	-	-	-	-	-	-	36
Population of the Study	-	-	-	-	-	-	-	36
Sample and Sampling Technique	-	-	-	-	-	-	-	37
Research Instrument	-	-	-	-	-	-	-	37
Validity of the Instrument	-	-	-	-	-	-	-	38

Reliability of the Instrument	-	-	-	-	-	-	-	38
Method of Data Collection	-	-	-	-	-	-	-	38
Method of Data Analysis	-	-	-	-	-	-	-	39

CHAPTER FOUR: PRESENTATION OF RESULTS AND DISCUSSION OF FINDINGS

Data Analysis	-	-	-	-	-	-	-	40
Discussion of Findings	-	-	-	-	-	-	-	56

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATION

Summary	-	-	-	-	-	-	-	58
Conclusion	-	-	-	-	-	-	-	59
Recommendations	-	-	-	-	-	-	-	60
Appendix	-	-	-	-	-	-	-	62
Reference	-	-	-	-	-	-	-	74

ABSTRACT

This study investigated the assessment of the utilization of information and communication technology (ICT) for adult learners in Benin metropolis. Four research questions were raised to guide the study.

A total of Four hundred and Sixty (460) participants were selected from four (4) Adult literacy centers in Benin. They were selected through Sampling technique . The major instrument used for this study was the questionnaire. The questionnaire was designed and validated by experts in the Department of Adult and Non-Formal Education, University of Benin, Benin City. Data was analyzed using descriptive statistical techniques such as tables, frequencies counts, and simple percentages.

Findings of the study revealed that the effective utilization of ICT increases the level of participation of adult learners in the literacy programmes and assists the learners to meet their outlined goals and interests. It was further revealed that the lack of efficient technological instruments is the major factor for the failure other than the success of adult literacy programmes due to their lack of effectiveness. It was recommended that the government can provide incentives and vocational training centers that would help in improving the skills of the adults. Also the government needs to fund adult literacy programmes adequately in order for it to be more effective to the adult learners and also introducing new and updated technological facilities to improve the teaching and learning process.

CHAPTER ONE

Introduction

Background of the study

Information and communication technologies (ICTs) have become increasingly integrated into our daily lives over the past ten years, and as a result, society has undergone rapid change. ICTs have fundamentally changed how people work, communicate, and access information, government services, education, and entertainment. A growing number of enterprises, administrative functions, services, and citizenship procedures are being moved online. Furthermore, it is believed that ICTs are essential to the reform initiatives required for the society of the twenty-first century.

ICTs are becoming more and more recognized as being essential to expanding learning and lifelong learning and, in doing so, creating the circumstances and opportunities necessary to create a "learning society" for everybody. However, it becomes very evident that the amount of public, social, and government services available online will only increase over time. ICT could provide solutions for older people's needs to be productive members of modern society, given the rapid demographic changes in our societies (e.g., an increase in the number of older people). These needs include easier access to social and healthcare services, contact with family and friends, opportunities to participate in political, civic, and social life, and avoid marginalization. Jimoyiannis (2015) said.

The speed at which society is changing to become information-based means that its members must be conversant in and comfortable using tools and techniques that

rely on information. A Nigerian student must learn how to use and apply the internet in order to stay up to date with global events. This learning process must begin at the foundation of education. As a result, technology is evolving in a way that has never been seen before, and if one is not prepared, they run the risk of falling behind. Adebola went on to say that since individuals can now access the internet at home, work, and cybercafé locations, they no longer need to visit libraries in order to get information or knowledge. This is due to the fact that technology is developing quickly and permeating social, intellectual, business, and personal spheres.

The computer revolution and information technology have changed systems for teaching, communication, data storage, and retrieval, according to Bakare (2012). For teaching and learning at every level, all contemporary technologies provide fresh avenues and a variety of options (Bakare, 2012). With more information and services being provided online by government programs, businesses, and educational institutions in Nigeria, technology has had a greater influence on adult education (AE) in recent years. These services, which were previously available only through phone calls or paper forms, have moved online and are now accessible only with the use of technology tools. To be independent and fully engage in today's society, citizens need access to technology as well as the knowledge and abilities needed to operate in digital environments. This study

looks at some of the new issues and opportunities surrounding adult education and adult technology literacy initiatives in Nigeria. Although many people now have limited free access to computers and the Internet because to ongoing technological infrastructure advancements over the past few years, these opportunities only partially address concerns about the digital divide.

Lastly, it has been noted that several of the created techniques mention using mobile multimedia devices (tablets, iPod Touch, and cell phones). It's also evident that there aren't many notable differences between the various nations: both Europeans and North Americans support the use of mobile phones in the classroom, believing that these devices enhance students' motivation by fostering the growth of their social skills, autonomy, and daily activities both inside and outside of the classroom. The utilization of information and communication technology (ICT) by individuals with disabilities fosters their social and personal competencies, hence improving their everyday inclusion. Furthermore, it is noteworthy that research conducted in both New Zealand and Spain suggests that students with disabilities can benefit from using other multimedia devices, like tablets or iPod Touches, to access leisure material and enhance their cognitive abilities, communication, and acquisition of new knowledge [30, 31]. Virtual reality is one of the tools that educators are using more and more with kids with disabilities these days. This is

especially true for students with autism, as the technology enhances social connections, skill development, and student participation in the classroom.

Nonetheless, this study demonstrates how the improper use of ICT might have unfavorable effects, particularly for educators (González Amarilla and Pérez Vargas, 2019).

Statement of the problem

The main focus of this research is the progressive and retrogressive effects of ICT on the performance of adult learners in comparison studies. Additionally, it is designed to look at the particular ICT tools that secondary school pupils utilize and how much of an impact these tools have on their academic performance.

Research Questions

1. To what extent do adult learners participate in the programs?
2. How do adult education programs affect the use of technology by their adult learners?
3. How can adult education initiatives support the development of digital literacy in their student body?
4. What difficulties did adult educators encounter when introducing adult learners to ICT use in adult literacy programs?

Purpose of the Study

This study focuses on evaluating adult learners' use of ICT (information and communication technology). Additional overarching goals of the research include:

1. Assessing adult learners' engagement in Benin City.
2. Analyze how information and communication technology affects adult learners' learning processes.
3. Analyze how adult education initiatives and the encouragement of ICT use among adult learners relate to one another.
4. To investigate the difficulties adult educators encountered when introducing adult learners with disabilities to the use of digital tools in programs for adult literacy.

Research Hypothesis

1. Ho: The use of ICT by adult learners in Benin Metropolis has not been adequately assessed. Ho: The use of ICT by adult learners in Benin Metropolis is not significantly correlated with adult education programs.
2. H1: The use of ICT by adult learners in Benin Metropolis has been evaluated significantly.

H1: The use of ICT by adult learners in Benin Metropolis is significantly correlated with adult education programs.

Significance of the Study

The following parties involved in adult education will find significance in the study's findings: Authorities, adult educators, curriculum developers, adult mentors, and learners/educational investigators in the field of adult education

The study's conclusions will give the government information about the quality of adult education across the nation's adult education centers, enabling them to better help adult education centers in providing the ICT infrastructure they require.

The study will provide curriculum planners for adult education the opportunity to assess the curriculum in pertinent areas where there are gaps and, if necessary, create new curricula to improve the use of various ICT in adult literacy programs for adult learners.

The findings of this study will act as a guide for researchers studying adult education, instructors, facilitators, students, and professionals in order to determine the best course of action for utilizing ICT to support the nation's adult education program delivery.

Scope of the Study

The study's foundation is an evaluation of how information and communication technology (ICT) is used in Benin City to support adult learners' digital literacy.

The city of Benin served as the study's location.

Limitation of Study

In relation to this study's shortcomings, we discovered the following: There was no comparison or contrast done on the efficiency of particular tech tools for adult learners. The constraint was caused in part by the dearth of research studies in this field and the slow distribution of empirical findings during the previous ten years. Financial constraint: A researcher working with little funds may find it difficult to locate pertinent materials, literature, or information, as well as to collect data through questionnaires, interviews, and the internet. Time constraint: The researcher will work on this study and other academic projects concurrently. As a result, less time will be spent on the research project.

Conceptual Definition of Terms

Adult Learner: The definition of an adult varies according on the nation. He or she can be characterized, for instance, based on their age, financial standing, cultural background, and social duties within their society. Thus, any mature person who

engages in a learning environment that will result in changes is considered an adult learner.

Literacy programs: These are organized, methodical activities designed to help participants develop the skills necessary to read, write, and compute at a significant level.

ICT: stands for information and communication technology, which also describes how computer networks, telephone networks, and audiovisual systems are combined via a single cable or connection system. The combination of computer networks and phone networks under a single, unified system of cabling, signal distribution, and management has significant financial benefits. Any communication device—radio, television, cell phones, computers, network infrastructure, satellite systems, and so forth—as well as the numerous services and tools that go along with them, including video conferencing and remote learning, are all included under the broad category of information and communication technology, or ICT. Analog technology, such as communication via paper, and any modality that transmits communication are also included in ICT.

Utilization: The ability to effectively and suitably employ any tool to achieve a specific goal.

CHAPTER TWO

LITERATURE REVIEW

This chapter reviews relevant literature relating to this research. The following subheadings will be used to discuss it:

Introduction

Concept of adult education

Characteristics of adult learners

The concept of information and communication technology (ICT)

The Utilization of ICT in adult education

Challenges with the use of information and communication technology

The impact of information and communication technology on adult education delivery.

Summary of the Reviewed literature.

Introduction

This chapter explains terms related to the assessment of adult learners with disabilities in Benin Metropolis who use information and communication technology, and it provides an overview of several studies carried out by distinguished scholars. The chapter also provides an overview of the problem's past and current state, as indicated by a succinct analysis of earlier research on issues that are closely related.

Concept of Adult Education

I believe it's crucial to start with a basic description of what adult education typically entails before attempting to analyze the idea of adult education. When asked to define adult education, students frequently struggle to recall the academic definitions and find it difficult to articulate the discipline's meaning in an intelligent and relatable way. However, given that youth and child education continues in every community, the students may just as easily assert that. Notably, adult education is a widespread practice in most civilizations since formal institutions of learning at all levels are closely related to the field. Regretfully, the methods used to carry out the education sector are varied, even diffuse, and less tangible than those used to carry out youth education, yet they are nevertheless there in this instance, just less obviously and fiercely (Okenimkpe, 2004).

The phrase "adult education" refers to the entirety of structured learning processes, regardless of their nature, scope, or delivery method. These processes can extend or substitute initial education in schools, colleges, and universities as well as apprenticeships, enabling people who are deemed adult by their community to enhance their skills, broaden their knowledge, advance their technical or professional credentials, take a different approach, and modify their attitudes or behaviors from the perspectives of complete personal development and active participation in independent, balanced social, economic, and cultural development.

For all intents and purposes, the phrase "life-long education and learning" refers to a comprehensive plan that aims to both improve education outside of the system and restructure the current one.

Characteristics of Adult Learners

Adult learners are already overburdened with responsibilities. They are more adept at multitasking than younger students and more time-selfish due to their juggling of careers, families, hobbies, health, and the home. Adults are more likely to retain training that is pertinent and meaningful if it recognizes that their time is valuable and that they have a plethora of prior knowledge and experience. Before you begin developing your program, bear in mind the following traits of adult learners:

They Have Autonomous

Children are accustomed to having almost complete control over their education, but as they become older, perhaps, they will be able to study more on their own. Adults sometimes feel disengaged from highly prescribed and forced learning events because they cherish their independence in determining what matters to them. Adult learners will appreciate you if you give them freedom to choose what, when, and how they learn.

2. They Have Motivation and a Purpose

Understanding one's personal drive is a particular benefit for adult learners. Adult learners possess greater context than children, who may not always appreciate the need for learning mathematics or knowing the names of all the countries in South America. They are more inspired to succeed when they understand the motivation behind the lessons they have learned. Additionally, adult learners are more likely to look for courses that suit their particular requirements. Should they see that receiving training can aid in resolving an urgent problem, they are likely to handle it on their own rather than waiting for guidance.

3. They Have More Experience

An adult learner doesn't approach chances blindly; rather, they continually draw on and contextualize their previous experiences. You're not always beginning from scratch when developing an eLearning program when experience serves as the cornerstone. In order to respect your learners' prior experiences and acknowledge them as unique individuals, you can use tools such as role acting, simulations, and even testing out of specific concepts.

4. They're Results- and Goal-Oriented

"Because I said so" will never cut it when it comes to adult learners. They want to know why they are participating in training, and they also want to see the fruits of their labor. Adult learners are far more tempent than younger learners when it

comes to time management; this is sometimes referred to as the "What's in it for me" principle. They are unlikely to participate significantly if they do not notice the advantages right away or have no means of gauging their level of skill and development.

5. They Value Community

Even though it appears like the days of congregating around the water cooler are over, adult learners still want for community. Selecting appropriate learning activities on one's own is valued, although going it alone can feel lonely. Including chances for them to interact with other students gives them the chance to talk, share, and even practice new abilities in a secure environment. When taken as a whole, it all makes for more beneficial learning experiences.

6. They Are in Charge of Their Own Proficiency

Here, report cards are not used: Adult learners shouldn't need to be coerced into learning a new skill or subject. That's because they have enough experience to know that there is no one to blame if they don't meet expectations because their input level directly affects their output. Use that sense of duty to design learning experiences where learners can demonstrate their expertise and receive positive feedback, even if it's only from themselves.

7. They Are Adaptable to Change Let's be honest:

Generally speaking, adults are not very receptive to new things. Introducing a new skill, policy, or convention might be difficult to sell to people once they've committed to their preferred method of doing things. However, there are ways to overcome that resistance, such as through the implementation of a fresh exercise regimen. The shift will be welcomed rather than concerning if it is made clear how it will benefit them (a new talent expedites work or increases sales, for example).

8. They Enjoy Solving Issues

Adult learners are problem solvers; they desire to get better when they recognize a need or a weakness. Most adult learners are prepared to go above and beyond to get over a challenge. Contextualizing training as a means of resolving issues they encounter on a daily basis can boost motivation and buy-in even further. Furthermore, in order to contribute to the solution, adult learners wish to comprehend issues from an organizational perspective.

Innovations in Adult Education Programmes in Nigeria

Adult and non-formal education is recognized as the gold standard for lifelong learning in the National Policy on Education (2004). The goals of adult and non-formal education are outlined in Section 6 of the Policy. These goals include giving adults and youths functional literacy and continuing education; educating various categories of formal education graduates to enhance their foundational

knowledge and skills; providing in-service, on-the-job, vocational, and professional training for various worker categories; and providing adult citizens of the nation with the necessary civic, cultural, and aesthetic education for public enlightenment.

According to Ugwuegbu (2003), adult education in Nigeria encompasses more than just remedial education or reading comprehension. because regardless of prior education, it is what everyone needs and wants as long as they are alive. This viewpoint is consistent with that of Nasir (1979), who stated that many of the courses taught in school were also taught in adult education for those who were never given the chance. Others had countered that the goal of adult education is to provide lifelong learning that develops a dynamic mindset and equips the individual for change. This is due to the fact that everything in the world, including industry, technology, and communication, is always evolving. So, in order to stay up with the changes, humans have a constant need to learn new things.

In order to address the obstacles posed by the aforementioned aspects of adult education in the nation, creative initiatives have been implemented, including:

1. Basic Literacy Program: In certain Federation states, certain Local Government Councils are in charge of organizing and funding this one-month program. The States' Ministries of Education oversee and coordinate its operations.

2. Post Literacy Program: In several States of the Federation, the Ministry of Education organizes this program to help dropouts from formal primary schools and participants in Basic Literacy Programs advance their knowledge to the level of first school leaving certificates.

3. The Women Adult Education Programme:

This programme is run by Local Government Councils and Christian Missionaries. To cut expenses, the Ministry of Education provides funding to nonprofits. The only goal of the course is to enhance the contributions that both literate and illiterate women may make to society.

4. Distance Education Programme: The States' Ministries of Education and a few of the nation's higher education institutions oversee the Distance Education Program. It is intended for everyone who is unable to enroll in the regular or official school system due to their age. Instruction is provided via television, radio, or letter.

5. The Sandwich Programme: This is a program offered by the nation's higher education institutions to adults who spend the majority of the year attending other commitments and move into their various schools when they can afford to.

6. Nomadic Education Programme: The majority of Nigerian nomads are cattle rearers who are forced to travel with their herds of cattle in quest of grazing land, hence they never really settle down. They are not taught in a formal setting. To address this regrettable circumstance, the Mobile Education Program was created.

In conclusion, Nigeria, like the majority of developing nations, appears to have neglected adult and non-formal education in favor of an excessive concentration on formal education. The current state of economic development in the African region is in stark contrast to the levels already reached by several developing nations in other regions as well as by industrialized nations. This is due to the fact that 65% of Africans lack literacy.

Even though adult education is viewed as a low-cost component of the educational system in Nigeria, it is actually the most instantly beneficial and profitable sector for the country's economy in terms of return on investment. A development-oriented non-formal education seems to be more important in Nigeria nowadays in order to guarantee the concept of self-reliance on both a national and personal level.

The quantity and quality of education provided by the formal system are significantly impacted by adult literacy, even if it is not strictly part of it. It ought

to be actively pursued. For there to be an informed government and populace—whose opinions, actions, and choices are crucial to the advancement of education and the accomplishment of national objectives—adult literacy and education are required. Therefore, it is good to see change in Nigerian adult education.

The Concept of Information and Communication Technology (ICT)

The abbreviation for information and communication technology is ICT. Information refers to specifics or facts about a subject. The principles of information transmission and the medium by which it is obtained—print, radio, television, or the internet—are referred to as communication. According to Ibukun (1997), communication serves as the foundation and means via which an organization's operations are started and carried out. Akiniyi and Abe (1998) proposed that ideas, facts, and emotions can be communicated using letters, words, or signs. Katz and Kahn (1987) describe communication as the flow of information from the sender to the receiver with the information being understood by the receiver. That is to say, there need to be two extremes for communication to occur. Akiniyi and Abe went on to clarify that the sender, who pursues the message, is at the first extreme, while the recipient of the message is at the other. At each of the two extremes, there are multiple people. Data

communications, often known as telecommunications, are defined by Adamu (2001) as the transfer of data and information between two or more computers using a communication channel, such as a regular phone line.

ICT, according to Meadowcroft (2006), is the technology used to create, disseminate, alter, and store information. It is also the instrument we use for communication, text storing and manipulation, and computations. ICTs are both traditional (like radio, television, dance, theater, folklore, print, and fax) and new (like the Internet, the World Wide Web, electronic mail, teleconferencing, and distance learning tools like CD-ROMS, hypertext, iPods, virtual classrooms, etc.), according to Marzelle, cited in UNDP (2002).

According to Mejiuni and Obilade (2006), information and communication technologies (ICTs) comprise infrastructure, systems, services, and electronic and non-electronic technologies that are used to publish, save, retrieve, and transmit information as well as to exchange ideas and create knowledge. ICTs, according to the World Bank (2002), are the combination of activities that make it easier to collect, process, transmit, and display information via digital electronics, telecommunication, the internet, the World Wide Web, virtual worlds, and

cyberspace. This school of thinking holds that everyone may agree that ICTs have the ability to provide fair access to education. Through open and online education, it has given rise to a feasible platform for knowledge development, acceptance, and exploitation. When viewed in this light, information and communication technologies, or ICTs, can improve the delivery of adult education.

According to Akinola (2005), communication serves as the means, catalyst, and component of many administrative tasks performed inside the educational system. It is believed that technology is the useful application of scientific knowledge to real-world issues. If Aboderin (2003) is right when he describes educational technology as a system where people, machines, media, and materials are interconnected and arranged so that they cooperate in a preplanned way to meet predetermined learning goals, then technology can be thought of as a system where people, machines, media, and materials are arranged so as to predispose to certain learning goals.

It was suggested by Akinniyi and Abe (1998), Adamu (2005), and Omirin (2006) that ICT is not just for use with computers. This is due to the fact that computers are only one part of ICT; other components include the internet, newspapers, phones, radios, near projectors, and so on. Human communication and

information have always existed. They are an essential component of civilization. In human history, speech, play, painting, music, and dance have all been used to record wisdom and history. However, innovation has improved communication speed and transformed it into digital technology. The management of the classroom has received this. According to Hawkins' (2000) research, you would be able to tell the difference between an ordinary classroom today and one from a century ago.

As the teacher scribbled vital details on the whiteboard behind the classroom door, students stood in rows with paper and pencils in hand, copying everything that was said and written in a frenzy as they attempted to memorize the information for the test. The advancements in science and technology have brought about significant changes, as he goes on to say. Very nothing has changed in terms of education, student learning, and teacher delivery. But a whole new set of abilities is needed in today's information- and technology-driven society.

It is a known truth that the purpose of adult education is to assist individuals, regardless of age, in becoming involved members of society. Every day, the necessities of society are expanding. Knowledge acquisition is necessary to enable man to meet his current needs. In order to acquire the necessary abilities to meet

future demands, facilitators must receive enough training and equipment. Additionally, this will make them more productive and competitive in the world of the future. Since teaching is viewed as a profession, Adu and Familugba (2003) state that a successful job "needs a highly specialized training that is not of general type," hence ICT expertise is necessary for adult education.

Sambo (1992) and Omirin (2006) concur that information that is relevant increases knowledge, decreases uncertainty, and can be used for its intended purpose. Then, he enumerated the qualities of quality information that are pertinent to its intended use. adequate completeness for the situation; accurate enough for its intended use. originate from a reliable source that the user can trust; be transmitted to the proper person through the right route; and be intelligible to the user.

It is required of a teacher in a learning environment to be up to date on the material they will be teaching the students. In addition, the need for education is growing daily, necessitating the discovery of new ways to acquire and disseminate knowledge. According to Flitzpatrick (1987), educators must create a great amount of material because new information is acquired online every day. Businesses have, for the most part, embraced the internet and its unparalleled

capacity to reduce communication barriers; nevertheless, a large number of teachers lack the ICT knowledge and training necessary to effectively understand this volume of information. Management information systems MIS, are utilized in many highly educational institutions to process student results. However, Flitzpartricks maintains that "MIS can often be an inadequate means of processing vital information because it can be effective in many situations." Other ICTs that can be utilized include the World Wide Web (www), email, the internet, near projection, and more. According to Agagu (2006), the internet provides quick, convenient, affordable access to an enormous amount of information and interpretive materials. Furthermore, with very little extra work, the user can effortlessly contribute to the body of knowledge that is available in the world.

Kozman (1999) asserts that the world thinks has concentrated its training efforts on assisting educators in utilizing technology as a tool and converting their classrooms into interactive, curious learning environments. Robert (2004) draws our attention to the fact that the SRI evaluation of world links reveals that, following training, 75% of participating teachers said that they were able to significantly increase their subject-matter knowledge. It is commonly known that motivated, enthusiastic teachers are essential for enhancing student outcomes, and more than 80% of the teachers reported that the World Links program had

significantly boosted their interest in and enthusiasm for teaching. In order to genuinely improve teaching and learning in the classroom, teachers require support, as agreed upon by Hawkins (2002), examples of effective practice, and leadership from their school. They also need to receive the appropriate time for professional development.

Challenges with the use of Information and Communication Technology

Significant investments in ICTs for education have been made throughout the last ten years. The following are a few of the major concerns that legislators and educators are currently dealing with:

Impact on Learning and Achievement

It is widely accepted that ICTs have the potential to greatly enhance learning and accomplishment by empowering educators and students. Nevertheless, there aren't many firm conclusions—pro or con—about the use of ICTs in education from the present research on how they affect students' academic performance. Research has indicated that, even in the most developed educational institutions in developed nations, ICTs are not typically viewed as essential to the process of teaching and learning. Furthermore, there seems to be a discrepancy between

the kinds of learning that are encouraged and the ways in which impacts are measured. For example, standardized testing frequently assesses outcomes from conventional teaching methods rather than newly acquired ICT-related knowledge and abilities. It is obvious that further study is required to fully comprehend the intricate connections among ICTs, learning, and achievement.

Monitoring and Evaluation

Policymakers, donor personnel, and educators are aware of many of the problems and difficulties related to ICTs in education efforts. Unfortunately, a lack of effective monitoring and assessment procedures and instruments means that information about the extent and complexity of these problems is still scarce. When assessment data is provided, a large portion of the work is thought to be seriously biased. The absence of a standardized set of indicators for ICTs in education is another issue in this field. Furthermore, when data is gathered, it is frequently quantitative information about infrastructure (the quantity of computers, for instance) rather than information that can assist policymakers in determining how ICT interventions affect student learning.

Monitoring and evaluation need to be a top priority if ICTs are to become useful and essential teaching tools and if donors and stakeholders are to see proof of responsibility.

Equity

It is obvious that using ICTs in education raises equality concerns. ICT use carries a genuine risk of further marginalizing those that are already marginalized or at the cutting edge of innovative teaching methods. However, ICTs promise to enable increased involvement of these groups with supportive policies and rigorous planning and monitoring.

The impact of ICTs and marginalized groups has been extensively studied in wealthy nations; however, research on these topics in developing nations is scarcer. However, it appears that there are few disputes about the fact that ICTs typically favor students and schools in urban regions and in locations with the finest infrastructure already in place. Up until now, the majority of research on ICT equity has been on granting access to specific technologies. The relationship between particular ICT kinds and uses and equality issues has received far less attention.

Costs

The exact costs of using ICTs in education are not well understood. Few thorough cost studies have been conducted, especially in poor nations. Most developing nations probably cannot afford to make a large-scale investment in ICTs for education given their current financial and resource restrictions. Therefore, in order to properly target limited resources, it is crucial to gain a deeper understanding of the costs and advantages associated with ICT kinds and usage in diverse educational scenarios. For example, there's some evidence that computers might be most economical to locate in public spaces like teacher training centers and libraries. ICTs' potential to increase organizational and systemic efficiencies—including the fight against corruption—may make them one of the most economical applications in education.

One common argument in favor of distance learning is its cost-effectiveness. In fact, distance learning can achieve economies of scale, even though these programs usually demand substantial upfront costs. It's possible that some of these expenses may be transferred from the public sector to the individual users, but this creates serious problems with access and equity. Once more, a careful analysis of the actual costs and advantages of remote learning is necessary.

There are several different ways that ICTs in education initiatives are financed. A wide range of funding and cost recovery techniques are usually used by nations and communities because of the high upfront and significant ongoing expenses. In many nations, user fees and public-private partnerships are significant sources of funding for ICTs in education; nevertheless, further study is required to fully understand the implications and efficacy of these approaches.

The Impact of Information and Communication Technology on Adult Education Delivery

The delivery of adult education has been greatly impacted by information and communication technology. The way adult education is delivered has changed with the development of ICT. With the use of information and communication technology, adult education is now widely accessible. Essentially, what we're attempting to convey here is that adult education programs that would not have been possible or feasible without ICT resources could now be implemented. We provide these kinds of programs, such as open universities and distance learning. Adult education programs are affected by modern technologies in every way. The fields of computing, communication, and live streaming all involve technology. Emails, for example, allow users to send assignments and work completed

between adult facilitators and learners. Search engines, on the other hand, allow users to look up specific terms on the basis of research projects and assignments. Live streaming is similar to live broadcasting in that it is captured in real-time and transmitted instantly without storing any files on the media server that is handling the task operation. This makes it easier to teach and learn when the teacher and the student are separated in space and time. Other areas of ongoing development that are changing the delivery of adult education programs include streaming video, which allows conversation partners to be viewed in real time.

By enabling the delivery of learning and cognitive activities anywhere, at any time, information and communication technology may improve the opportunities for educational innovation and the codification of knowledge. In addition, remote learning can be more problem-solving, self-paced, and learner-centered than in-person instruction. It is also true that not all learning activities may be arranged solely through virtual means. Emulation and spontaneity brought about by social groups and physical presence are frequently still vital. However, the influence of time and distance is becoming less significant now that the technological capacity is available for knowledge-sharing, remote access, teamwork, organizing and coordinating tasks over wide areas, and so on (OECD 2004). Similarly, face-to-face

exchanges are important when they serve to stimulate other forms of sensory perception aside from those used within the framework of electronic interaction.

The working class, both young and adult, will benefit from the effective and efficient acquisition of knowledge, skills, and essential trainings made possible by information and communication technology. This will enable them to become productive members of their community. You would therefore concur with me that the provision of functional literacy instruction to adults who have never had the opportunity to attend formal education is one of the purposes of adult education, and that ICT has assisted in helping to achieve this goal (NPE 2004 updated edition). It has contributed to shedding more light on a number of sectors, including worker education, in-service and on-the-job vocational and professional training, etc., in terms of how they are organized and delivered. Since information is now more widely available online and through social networking sites, streaming media, and other channels, the issue of raising awareness and successfully motivating people to participate in adult education programs is history. This has resulted in previously unheard-of changes to the adult education service delivery system.

Utilization of ICT in Adult Education

According to Kozma (2005), there are several advantages of using ICT in adult education. These include:

1. Creating chances for more adult-centered instruction. It is widely held that the use of ICT in adult education will promote more constructivist learning as well as an increase in the learner's activities and sense of responsibility (Volman, 2005).
2. Give adult educators access to fresh knowledge and information sources that will improve adult education procedures and processes. This is due to the fact that acquiring ICT knowledge and abilities can assist adult educators in gaining a foundational understanding of teaching and learning principles as well as the ability to use those principles in instructional settings.
3. Despite their busy schedules, adult learners should have access to online educational resources across the nation for distant learning.
4. Assist in giving adult learners access to extra resources, such as the internet, e-mail, fax machine, phone, computers, and www (World Wide Web), to support resource-based learning.
5. Increase adult learners' access to high-quality instructional resources at all adult education levels.

6. Assist in creating ICT-literate adults who can benefit themselves and make significant contributions to the society to which they belong.
7. Create adult workers and participants in the new economies and society that ICT and related development will bring about.
8. Assist those in charge of crafting and implementing inclusive educational policies that will close the achievement gap.
9. Increase the opportunities available to the underprivileged and marginalized elements of society by granting them access to information.
10. Promote self-directed learning since people can utilize their laptops or internet connections to learn on their own.
11. Facilitate the availability of tutorial software for adult learners.
12. Contribute to raising the overall efficacy and efficiency of Nigeria's adult education system. Adult learners can also utilize ICT for other human endeavors, such as economic transactions, where it is necessary for the attainment of various goals.

The Impact of ICT on adult education delivery

It is crucial to consider how information and communication technology (ICT) is affecting information services, how learners are taught and learned, and how major adult education programs like literacy, enlightenment, and community development are organized. Adult educators now play a new role in the delivery of education thanks to information and communication technology: facilitators of learning environments where students use data to solve real-world problems. This influence has changed the way we teach to emphasize collaborative learning. Its main goal is teaching students to solve problems cooperatively. It's common for students to take the initiative, exercise critical thought, and work through problems—both from the beginning to the end. These enable pupils to develop their creativity and imagination as well as their ability to reason more effectively. Learning outcomes and instructional strategies for adult learners will shift as soon as students are able to progress along this path.

In summary, information and communication technology (ICT) education has evolved into a tool for the modern era's diffusion and acquisition of knowledge. These resources are necessary for adult educators and trainers that deal with a variety of human development-related issues in order to prepare their students and provide guidance when they encounter the vast amount of data that is currently accessible. A new perspective and interest in adult education using

information and communication technology (ICT) have been further highlighted by globalization.

Summary of the Reviewed Literature

The review has been really insightful and illuminating. The review can be summed up as follows:

All learning that occurs outside of the official parameters of traditional schooling is referred to as adult education. It is intended for those who are accepted as adults both socially and biologically (at least fifteen years old) and who are able to assume responsibilities within their families and communities. Information and communication technology (ICT) is the process of acquiring, producing, analyzing, and storing data through the use of hardware, software, the internet, and global mobile communication systems (GSM). However, since communication is now more important than ever in ICT—which is the foundation of the new information-based global economy—it is now more appropriate to refer to ICT rather than just information technology.

Digital infrastructures like computers, laptops, desktops, data projectors, software, printers, scanners, and interactive teaching boxes are examples of information

communication technology equipment. All ICT tools can be divided into two categories: software and hardware. Software is made up of programs or instructions that specify what tasks should be carried out by the hardware and how, and hardware is made up of actual devices that are used to process information in different ways.

In the modern era, information and communication technology (ICT) education has evolved into a tool for knowledge acquisition and distribution. Adult learners in Benin's metropolis need these resources to maintain their enthusiasm in learning, as adult educators and trainers face numerous problems related to human development. The review also showed that low funding, power supply issues, inadequate facilities, high consumer and ownership costs, a lack of trained staff, and a dearth of sufficient data on ICT use in adult education programs are among the factors impeding the use of ICT in adult education delivery.

CHAPTER THREE

METHODOLOGY

The methods employed in the study are covered in this chapter. It will be covered under the ensuing subsections:

Research design

Population of the Study

Sample and Sampling Technique

Research Instrument

Validity of the Instrument

Reliability of the Research Instrument

Method of Data Collection

Method of Data Analysis

Research design

For this study, a survey research design will be used. This research approach offers a rapid, accurate, and efficient way to evaluate data regarding a population of interest. It aims to investigate how adult learners in Nigeria use information and communication technology. The research will take place in the capital city of Benin.

Population of the Study

Four hundred and sixty (460) respondents make up the population of this study, which is made up of facilitators and adult learners from four randomly chosen literacy centers in Benin Metropolis, Edo State, Nigeria.

S\N	Schools	Population	Sample size (50%)
1	Pioneer Education centre	120	60
2	Landmark lectures	95	48
3	Pioneer Adult centre for Continuing education	158	79

4	Quintessence Tutorials	87	44
Total		460	230

Sample and Sampling Technique

The organizers, teachers, and students chosen using the simple random sampling technique make up the study's sample. Four hundred and sixty (460) participants in all were chosen from a sample of four adult literacy centers located in the Benin capital.

Research Instrument

"The Assessment of the Utilization of Information and Communication Technology for Adult Learners in Benin Metropolis Questionnaire" (TAUIC TALBMQ), a self-constructed questionnaire, is the main data gathering tool utilized in this study. There are two sections to this questionnaire: A and B. The purpose of the items in Section A is to collect the respondents' biographical information, including age bracket, sex, marital status, and primary and secondary occupations. The Assessment of the Utilization of ICT for Adult Learners in Benin City is examined in detail in Section B's questions.

Each expected response from the respondents was coded on the questionnaire, and nominal values were assigned to each possible response. Based on a modified

Likert four-point scale, each item in Section B was given a score: Strongly Agree = 4. Agree = 3. Disagree = 2. Strongly Disagree = 1.

Validity of the Research Instrument

Before using the study tools for data collection, the researcher showed them to my supervisor and two other specialists in the Department of Adult Education, Faculty of Education, University of Benin, to check their validity. This was necessary to make sure the instruments measure the things they are supposed to measure. Before distributing the instrument to the respondents, their recommendations and remarks were taken into account.

Reliability of the Instrument

Two hundred and thirty (230) respondents, or 50% of the population, were given the questionnaire initially in order to establish the instrument's reliability. Two weeks later, the same respondents were given the questionnaire again to ascertain the instrument's reliability level. The Pearson's product Moment Correlation Coefficient formula was applied to the data; a reliability coefficient indicates that the instrument is appropriate and trustworthy for the investigation.

Method of Data Collection

A questionnaire was used as the method of data collection. With the help of instructors who covered the four chosen study centers located within Benin City, the instrument was personally administered.

Method of Data Analysis

In the presentation and analysis of the data created for the study, frequency counts and straightforward percentages were used. Every question on the questionnaire asked for a response that was unique to the study question.

CHAPTER FOUR

PRESENTATION OF RESULT AND DISCUSSION OF FINDINGS

This chapter deals with the presentation of the result from the data collected and evaluated. The results of the study findings through the use of the questionnaire from the respondents were carefully analyzed and given in a tabular form below.

Presentation of Results

SECTION A:

Table 1: Respondents by age range

Age Range	Frequency	Percentage(%)
20-25yrs	20	20%
26-30yrs	30	30%
31-35yrs	30	30%
36-40yrs	15	15%
40yrs and above	5	5%

Total	100	100%
--------------	------------	-------------

Table 1 presents the age distribution of the participants categorized by age range. Twenty to twenty-five percent of responders were in this age range, according to the table. Thirty percent of the respondents were between the ages of twenty and thirty. Thirty percent of the respondents were in the age range of 31–35. Those between the ages of 36 and 40 made up 15% of the responders, while those above 40 made up 5%. The majority of study participants are under the age range of 26–30 and 31–35, according to the distribution.

Table 2: Respondents according to gender

Variable	Frequency	Percentage
Male	32	32%
Female	68	68%
Total	100	100%

The chart indicates that, at 68% of participants, women made up the bulk of those attending literacy programs in the Benin city, with 32% of participants being men.

Table 3: Respondents according to marital status

Variable	Frequency	Percentage
Single	45	45%
Married	55	55%
Divorced	-	-
Widowed	-	-
Total	100	100%

Table 3 indicates that forty-five percent of the study participants were single. Fifty-five percent were married. It is evident from the study that married individuals made up the majority of respondents.

Table 4: Respondents by Religion

Variable	Frequency	Percentage
Christain	85	85%
Muslim	15	15%

Africa traditional religious	0	0%
Total	100	100%

It can be seen from table 4 above that 85% of the respondents identified as Christians and 15% as Muslims. As a result, Christianity predominated among the majority of responders.

Table 5: Respondents according to their duration of attendance at the literacy programme.

Variable	Frequency	Percentage
Less than 1 year	60	60%
1-2 years	30	30%
3-4 years	10	10%
Total	100	100%

Table 5 above indicates that the majority of adults were only recently admitted to literacy programs. The study also found that 60% of participants stayed in the program for less than a year, and that attendance dropped to 30% in the first 1-2 years and 10% in the third-4 years.

SECTION B:

Research Question 1: What are the level of participation of adult learners in the Programmes?

Research Question One

What are the level of participation of adult learners in the Programmes?

Table 1 : The level of participation of adult learners in the Programmes

S/N	Variables	SA (%)	A (%)	D (%)	SD (%)
1	Adult literacy programmes implemented by ICT caters for the diverse need of adult learners.	22	58	10	Nil
		22%	58%	10%	0%

2	Vocational skills and literacy programmes has successfully equipped adults with both literacy skills and practical knowledge.	67	31	2	Nil
		67%	31%	2%	0%
3	ICT has been the major provider of adult literacy in Benin metropolis.	30	50	20	Nil
		30%	50%	20%	0%
4	ICT has provided developmental innovations to improve adult literacy programmes in Benin metropolis.	40	25	30	5
		40%	25%	30%	5%
5	Community literacy centers offers readily available opportunities to improve adult literacy by the Utilization of ICT.	58	33	10	Nil
		58%	33%	10%	0%

Source: Field Survey (2023)

Based on the analysis of the table in Item 1, it can be observed that 22 (22%) of the respondents strongly agreed, 58 (58%) agreed, and 10 (10%) disagreed that government-implemented adult literacy programs meet the various demands of adult learners. Regarding item 2, 67%, 31%, and 2% of the participants expressed

strong agreement, agreement, and disagreement, respectively, that literacy and vocational skills programs have effectively furnished adults with practical knowledge and literacy abilities.

In response to question 3, respondents said they strongly agreed (30%), agreed (50%) and disagreed (20%) that adult literacy in Benin's city has largely been provided via ICT. As can be seen in item 4, the respondents' responses to the statement that ICT has brought developmental innovations to strengthen adult literacy programs in Benin's metropolis were, respectively, strongly agreed, agreed, disagreed, and 5%. The results of item 5 indicate that 58%, 33%, and 10% of the participants strongly agreed, agreed, and disagreed that community literacy centers provide easily accessible opportunities to enhance adult literacy through the use of ICT.

The conclusion drawn from the examination of all participants' responses to this study question is that ICT has had a significant impact on the degree of involvement in adult education initiatives put in place in Benin City to raise adult literacy.

Research Question 2: What is the influence of ICT in improving adult educational programmes?

Table 2: The influence of ICT in improving adult educational programmes?

S/N	Variables	SA	A	D	SD
		(%)	(%)	(%)	(%)
6	ICT driven programmes help with the attainment of objectives and goals of adult learners.	68 68%	30 30%	2 2%	Nil 0%
7	ICT programmes has been effective in overcoming practical challenges faced by both facilitators and adult learners.	23 23%	48 48%	19 19%	10 10%
8	Technological programmes has provided policymakers and programme implementers with the skill and knowledge to educate adult learners.	15 15%	23 23%	44 44%	18 18%
9	ICT has provided policymakers and programme implementers with the necessary resources and support to effectively assist adult learners.	Nil 0%	3 3%	57 57%	40 40%

10	ICT programmes provides opportunities for active learning and learner autonomy.	23 23%	46 46%	28 28%	3 3%
----	---	-----------	-----------	-----------	---------

Source: Field Survey (2023)

Based on the data presented in Table 2, it is evident from Item 6 that 68%, 30%, and 2% of the respondents strongly agreed, agreed, and disagreed, respectively, that ICT-driven programs are in line with adult learners' self-perceived objectives and goals. Regarding item 7, the percentage of respondents who strongly agreed, agreed, disagreed, and strongly disagreed, respectively, were 23%, 48%, 19%, and 10%. These respondents felt that ICT-driven programs had been successful in helping program planners and adult learners overcome practical problems.

Table 2 also demonstrates that, with regard to item 8, 15%, 23%, 44%, and 18% of the respondents strongly agreed, agreed, disagreed, and disagreed strongly, respectively, that policymakers and program implementers now have the tools and information necessary to instruct adult learners thanks to technologically focused

programs. Item 9 presents data showing that, respectively, 3%, 57%, and 40% of respondents agreed, disagreed, and strongly disagreed that adult educators, program planners, and implementators have the tools and assistance they need to successfully meet the needs of adult learners thanks to information and communication technology.

Regarding issue 10, the respondents were split as follows: 23%, 46%, 28%, and 3% strongly agreed, agreed, disagreed, and strongly disagreed that ICT programs offer opportunities for learner autonomy and active learning. It is evident from the data in Table 2 that ICT does not have enough sway to significantly enhance adult education programs. The success of adult education programs also depends on other elements, such as government initiatives.

Research Question 3: What is the relationship between adult education programmes and promotion of digital literacy among adult learners?

Table 3: The relationship between adult education Programmes and promotion of digital literacy among adult learners.

S/N	Variables	SA (%)	A (%)	D (%)	SD (%)
11	The success of adult literacy in Benin metropolis	3	18	24	55

	is attributed to the efficient utilization of ICT.	3%	18%	24%	55%
12	Adult literacy programmes are a means to promote the utilization of ICT not only amongst learners but amongst overaged citizens generally.	66	25	10	Nil
		66%	25%	10%	0%
13	ICT basically reduces the stress that most adult learners pass through to get educated.	14	49	21	16
		14%	49%	21%	16%
14	ICT helps the facilitator and programme planners to effectively develop the programme to meet the needs and interests of the adult learners.	Nil	7	59	34
		0%	7%	59%	34%
15	The technological facilities provided by the government are most times outdated, leading to the ineffectiveness of adult literacy programmes.	51	33	16	Nil
		51%	33%	16%	0%

Source: Field Survey (2023)

Table 3 presents data regarding the correlation between adult education programs and the advancement of digital literacy among adult learners. Table 3 above's critical analysis revealed that, respectively, 3%, 18%, 24%, and 55% of the respondents strongly agreed, agreed, disagreed, and disagreed strongly that the effective use of ICT is responsible for the achievement of adult literacy in Benin City. In order to determine if adult literacy programs encourage older residents in

general to use ICT, in addition to learners, resulting in its super impact position, 66%, 25%, and 10% of respondents strongly agreed, agreed, and disagreed, respectively. Similar to question 13, 14%, 49%, 21%, and 16% of respondents strongly agreed, agreed, disagreed, and disagreed strongly that ICT lessens the stress that most adult learners experience when obtaining training or education.

Additionally, it was discovered that ICT aids program planners and facilitators in efficiently creating a curriculum that caters to the requirements and interests of adult learners, with 7%, 59%, and 34% of respondents agreeing, disagreeing, and strongly disagreeing, respectively. Regarding item 15, 51%, 33%, and 16% of the participants strongly agreed, agreed, and disagreed, respectively, that the government's technology resources are frequently antiquated, resulting in the failure of adult literacy initiatives.

Because of their creative innovations in the programs in Benin City, the responses to the table therefore demonstrate that ICT is a key component for the success or enhancement of adult literacy programs.

Research question 4: What are the challenges that adult educators face in the course of exposing adult learners to the use of ICT in adult literacy programmes?

Table 4: The challenges that adult educators face in the course of exposing adult learners to the use of ICT in adult literacy programmes.

S/N	Variables	SA (%)	A (%)	D (%)	SD (%)
16	Adult learners tend to be more traditional and local thereby rejecting new means of learning.	15 15%	20 20%	52 52%	13 13%
17	The Technological facilities may be too demanding to the adult learners.	74 74%	26 26%	Nil 0%	Nil 0%
18	The technological facilities used to aid the learning process should be equipped and enhanced in order to meet the needs of adult learners in literacy programmes	68 68%	37 37%	5 5%	Nil 0%
19	Some Adult learners may be slow to adopt to this new method, thereby slowing down the teaching - learning processes.	45 45%	53 53%	2 2%	Nil 0%
20	Adult facilitators in Benin metropolis should be trained on how best to utilize ICT to meet the needs of adult learners.	36 36%	64 64%	Nil 0%	Nil 0%

Source: Field Survey (2023)

The answers to questions regarding the difficulties adult educators encounter while introducing adult learners to ICT use in adult literacy programs are shown in Table 4.

When Item 16 in Table 4 is critically examined, it becomes clear that 15%, 20%, 52%, and 13% of respondents, respectively, strongly agreed, agreed, disagreed, and strongly disagreed that adult learners typically reject new learning methods because they are more conventional and local. It is abundantly clear from the results that the majority of respondents did not agree with this assertion. It is clear from item 17 that 74% of respondents strongly agreed and 26% agreed that adult learners would find the technology amenities overly demanding.

Also, item 18 showed that 68%, 37% and 5%, strongly agreed, agreed and disagreed respectively that the technological facilities utilized to enhance the learning process should be equipped and enhanced in order to suit the needs of adult learners in literacy programmes. The predominant viewpoint expressed in item 19 is that certain adult learners might take longer to adjust to this new approach, which would slow down the teaching-learning process. 45%, 53%, and 2% of respondents, respectively, strongly agreed, agreed, and disagreed, with this statement.

Regarding the last variable in study question 4, adult facilitators in Benin's metropolitan ought to receive training on the most effective ways to use ICT to cater to the needs of adult learners. 36% and 64% of respondents strongly agreed and agreed, respectively, with 0% responding negatively. Therefore, it may be said that in order to increase the efficacy of adult literacy programs, the government or program designers should invest more in training facilitators in both lesson delivery and the use of instructional materials.

Discussion of Findings

This study's conclusion has been enlightening, instructive, and revealing. based on an examination of information gathered about respondents' opinions regarding the use of ICT (information and communication technology).

An evaluation of adult learners' use of ICT in Benin Metropolis.

Four (4) research topics were posed and looked at throughout the study. According to the first study question, adult learners' level of participation has increased as a result of the use of ICT in teaching and learning. The way in which adult learners participate in educational programs is primarily determined by how well they are able to understand the learning material thanks to information and communication technology.

The results of research question two showed that adult education programs have an impact on encouraging technology use among learners. ICT-driven programs have fulfilled learners' interests and resolved issues with teaching and learning that both learners and facilitators had to deal with. Additionally, technological programs have given policymakers and adult educators the skills and knowledge they need to effectively educate adult learners. Additionally, ICT programs offer chances for learner autonomy and active learning. This research supports the findings of Onah & Okoro (2010), who suggested that ICT makes teaching and learning between a facilitator and a learner easier despite distance, changing the way adult education programs are offered.

The results of study question three showed that while effective ICT use is certainly important for adult literacy programs to succeed, adult literacy programs also serve as a vehicle for encouraging ICT use among older adults in general and learners in particular. The government's IT resources are frequently antiquated, which makes adult literacy initiatives ineffectual.

The results of the fourth study question showed that one of the biggest obstacles to the successful implementation of adult literacy programs is a lack of money. The adult learners may find the technological facilities excessively demanding, or the learners' sluggish acceptance of ICT use could cause the teaching-learning process to go awry. Insufficient staffing can also impact the way adult education programs

are delivered. The learners' dejection of ICT use because of their traditional and conservative mentality, which rejects modern learning methods, was a great eye-opener regarding the obstacles. The results of this study are consistent with a study by Richmond (2002), which states that another issue related to power supply irregularities has severely damaged the nation's economy and impeded the advancement of research being conducted by educational institutions, groups, and private individuals on large-scale ICT projects within adult education centers.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

This chapter covers the study's overview, the inference reached from the data analysis, the interpretation of the results, and the suggestions made in light of those conclusions.

Summary

The purpose of the study was to find out how adult learners in Benin City used information and communication technologies. To help direct the investigation, four (4) research questions were posed. They are listed below:

1. To what extent do adult learners participate in the programs?
2. How do adult education programs affect the use of technology by their adult learners?
3. How can adult education initiatives support the development of digital literacy in their student body?
4. What difficulties did adult educators encounter when introducing adult learners to ICT use in adult literacy programs?

Four hundred and sixty (460) participants in all were chosen from the four adult literacy centers located in the capital city of Benin. Accordingly, the study's

sample consisted of fifty percent (50%) of the total population, or 240 people. Section 'A' of the questionnaire comprised the Respondents' demographic data, whereas Section 'B' provided additional information. Section 'B' was designed to extract information on the several research questions that were posed as well as other issues that were thought to be crucial to the success of this investigation. It was established whether the instrument was legitimate and reliable. The project manager and additional specialists from the Department of Adult and Non-Formal Education, Faculty of Education, University of Benin, Benin City, assessed the validity of the Instrument. Test-retest methodology was used to assess the instrument's dependability, and a reliability index of 0.75 for the Pearson Product Moment Correlation Coefficient was the result. Descriptive statistics, such as frequency counts and simple percentages, were used to examine the acquired data.

Conclusion

The following conclusions were reached when the data was analyzed and the findings were determined:

- ★ That the performance level of adult learners in Benin's metropolitan areas has improved thanks to the use of ICT in teaching and learning; that adult learners' interest has been maintained; that the attrition rate among adult

participants has decreased; that adult learners' records have been kept appropriately and that adult learners are better able to retain the material.

- ★ Technology-driven adult education programs have helped learners realize their interests and solved teaching and learning challenges for both facilitators and learners. They have also given policy makers and adult educators the skills and knowledge they need to properly educate adult learners.
- ★ The insufficiency of finance and power supply poses a significant obstacle to the efficient execution of adult education programs for adult learners. The adult learners may find the technological facilities excessively demanding, or the learners' sluggish acceptance of ICT use could cause the teaching-learning process to go awry. Insufficient staffing can also impact the implementation of adult literacy initiatives.
- ★ The usage of ICT in adult education programs can also be impacted by inadequate staff, and adult learners' attitudes regarding ICT have a significant impact on how adult education is delivered.

Recommendation

The conclusions from the research lead to the following recommendations, which are made here:

- ★ To ensure that the correct people who are knowledgeable about the efficient use of ICT are involved, the government should be more involved in the hiring and screening of facilitators.
- ★ The use of ICT to deliver the learning process requires ongoing training and retraining for the facilitators.
- ★ In order to ensure that there are sufficient ICT resources for the effective delivery of adult education in the community, adult education centers should have adequate funding.
- ★ The abundance of ICT in the teaching and learning process should be made available to both the facilitators and the students.
- ★ The various adult education centers should have a stand-by generator accessible as a temporary solution to the ongoing power supply problem.

APPENDIX

UNIVERSITY OF BENIN

FACULTY OF EDUCATION

DEPARTMENT OF ADULT AND NON FORMAL EDUCATION

**THE ASSESSMENT OF THE UTILIZATION OF INFORMATION AND
COMMUNICATION TECHNOLOGY (ICT) FOR ADULT LEARNERS IN BENIN
METROPOLIS**

Dear Respondent,

This questionnaire is solely for the purpose of a research. Please kindly help as much as possible to supply the needed information. Your response shall be treated with confidence.

Yours faithfully,

Obiyan Collins Osameuyi

SECTION A

Instruction: Please read the questions carefully and tick (√) appropriately

PERSONAL DATA

Age: 20-25 years [] 26-30 years [] 31-35 years [] 36-40years[] 40 years and above []

Gender: Male [] Female []

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

Religion: Christian [] Muslim [] African Traditional Religion[]

How long have you been attending the adult literacy programme: Less than 1 year [] 1-2 years [] 3 years and above []

SECTION B

Instruction: Please read the question carefully and tick [√] in the box provided that corresponds to the answer of your choice using the following keys:

Strongly Agree (SA)

Agree (A)

Disagree (D)

Strongly Disagree (SD)

S/N	ITEMS	SA	A	D	SD
RQ 1	What is the level of participation of adult learners in the programmes?				
1	Adult literacy programmes implemented by ICT caters for the diverse need of adult learners.				
2	Vocational skills and literacy programmes has successfully equipped adults with both literacy skills and practical knowledge.				
3	ICT has been a major influencer of active participation in adult literacy programmes by adult learners in Benin metropolis.				
4	ICT has provided developmental innovations to improve adult literacy programmes in Benin metropolis.				
5	Community literacy centers offers readily available opportunities to improve adult literacy by the Utilization				

	of ICT.				
RQ 2	What is the influence of ICT in improving adult educational programmes?				
6	ICT driven programmes help with the attainment of objectives and goals of adult learners.				
7	ICT programmes has been effective in overcoming practical challenges faced by both facilitators and adult learners.				
8	Technological programmes has provided both programme developers and programme implementers with the skill and knowledge to educate adult learners.				
9	ICT has provided policymakers and programme implementers with the necessary resources and support to effectively assist adult learners.				
10	ICT programmes provides opportunities for active learning and learner autonomy.				
RQ 3	What is the relationship between adult education programmes and promotion of digital literacy among adult learners?				
11	The success of adult literacy in Benin metropolis is attributed to the efficient utilization of ICT.				

12	Adult literacy programmes are a means to promote the utilization of ICT not only amongst learners but amongst overaged citizens generally.				
13	ICT basically reduces the stress that most adult learners pass through to get educated.				
14	ICT helps the facilitator and programme planners to effectively develop the programme to meet the needs and interests of the adult learners.				
15	The technological facilities provided by the government are most times outdated, leading to the ineffectiveness of adult literacy programmes.				
RQ 4	What are the challenges that adult educators faced in the course of exposing adult learners to the use of ICT in adult literacy programmes?				
16	Adult learners tend to be more traditional and local thereby rejecting new means of learning.				
17	The Technological facilities may be too demanding to the adult learners.				
18	The technological facilities used to aid the learning process should be equipped and enhanced in order to meet the needs of adult learners in literacy programmes				

19	Some Adult learners may be slow to adopt to this new method, thereby slowing down the teaching - learning processes.				
20	Adult facilitators in Benin metropolis should be trained on how best to utilize ICT to meet the needs of adult learners.				

REFERENCES

- Abe, T.O and Adu, E.T. (2007). "The impact of information and communication technology (ICT) on teacher education". *Ikere journal of education*, 170-174.
- Aboderin, Y. (2003). "Educational technology in the service of language teaching and learning" *The college reviews a multi-disciplinary journal*. published award by Osun State, College of education, Ila-Orangun V.10.
- Adamu, B. (2001). Introduction of computer application. Ibadan: Jok/Olay J.A.
- Adu, E.T. and Familugba, J.O (2003). Teacher and teaching in the millennium. *Ikere Journal of Education*, 7(1): 52-66.
- Agagu, A.A. (2006). Information technology and the field of social science. Ado Ekiti: UNAD.
- Ajagu, E.G. (2000). *Essential computer studies for secondary schools*. Ibadan: Longman (Nig) Plc.
- Akiniyi, J.A. and Abe, T.O. (1998). Effective communication: A panacea for school administration in Nigeria. *Ikere journal of education, Ikere-Ekiti*, 7(1), 110-116).

- Akinola, T.O (2005). Critique of what to do and how to do it in project writing. Akure: J.V Educational publishers.
- Ali, N. (2005). The use of electronic resources at IT Delhi Library; a study of search behaviours. *The Electronic Library*, 23(6): 691-700
- Bischof, L.J. (1969). *Adult psychology*. New York: Harper and Row. Bown, L. and Okedara, L.T. (1981). *An introduction to the study of adult education*. Ibadan: University Press Ltd.
- Bown, Lalage & Tomori, S.H.O. (1974). *A handbook of adult education for West Africa*. London: Hutchinson.
- Darkenwald, Gordon J. & Merriam, sharan B. (1982). *Adult education foundations of Practice*. New York: Harper and Row.
- Dave, R. (1973). *Lifelong education and alcohol*. Hamburg UNESCO, Institute Of Education.
- Dave, R.H. (Ed., 1976). *Foundations of life-long Education*. Oxford: Pergamon press.
- Elias, John L. & Merriam, Sharan (1980). *Philosophical foundations of adult education*. New York: Robert Krieger Publishing Co.
- Haddad, W. & Jurich, S. (2002). "ICT for education: potential and potency". In W. Haddad & D Drexler (Eds), *Technologies for education: Potential Parameters and Prospects*. Paris: UNESCO, 34-37. [02/11, 8:19 am] Barry: References.
- Hawkins, R.J. (2001). Ten lessons for ICT and education in the development world. In Heath Cote P.M A level ICT. North gates IPS Wich: Gallway publishers Ltd. 26-28.
- Kidd, J.R. (1973). *How adults learn*. New York: Association Press.
- Knowles, M.S. (1980). *The modern practice of adult education: Andragogy versus Pedagogy*. New York: Association Press.
- Meadowcroft, B. (2006). The impact of information and communication technology on work and Society, Retrieved from the internet. Retrieved from: www.m-w.com/cgi-bin/ne
- Nizener, IS. 19C Brothedbook on adult education (principles and practices. Onitsha: J.C Brother's Bookshop.

- Nyangulu, N. (1988). "The role of adult literacy and Non-formal education in Community development: the way forward for the 1980s and 1990s". *Journal of the African association for Literacy and adult education*, 3(2), 2-26.
- Obi, C. (2002). Information technology skills needed by business education teachers for effective instruction in the secondary schools in Enugu State. *The Journal of World Council for Curriculum and Instruction, Nigeria Chapter*, 4(2): 99-106.
- CD (2004). *Innovation in the knowledge economy-implications for education and learning*, Paris.
- Okenimkpe, M.N. (1989). "Typologizing adult education". *Lagos Education Review*, 5(1), 182-192.
- Okenimkpe, M.N. (2003). *Adult education teaching methods: principles, procedures and techniques*. Lagos: University of Lagos Press.
- Okenimkpe, M.N. (2004). *Educating adults for civic responsibility and communicative competence through language and literary studies*: University of Lagos Press.
- Olayemi, B. (2007). "The relevance of ICT in adult education". In *ikere Journal of Education*, 1(1), 131-134.
- Omirin, F.F. (2006). "Utilization of management in decision making process in South West Nigeria Universities". Unpublished PhD Thesis University of Ado-Ekiti.
- Omolewa, M.A. (1981). *Adult Education Practice in Nigeria*. Ibadan: Evans Brothers (Nigeria) Publishers Ltd.
- Tinio, V.L (2002). *ICT in education*, Available: <http://www.eprimes.org> Tugbiyele, E.A. (1993). *My reminiscences*. Lagos: Writers Fraternity Ltd.
- UNESCO (1997). *Adult Learning International Conference on Adult Education held at the congress centrum Hamburg from 14 to 18 July, 1997*.
- United Nations Development Program (UNDP (2002). *Information, communication, and Knowledge-sharing, Gender in Development, learning and information pack*, UNDP, New York. Retrieved from <http://www.undp.org/gender/infopack>.

UNESCO (2006). ICTs in Education for People with Special Needs. Moscow: UNESCO Institute for Information Technologies in Education

World Bank (2002). Monitoring and Evaluation: Some tools, methods and approaches. Washington D.C World Bank Group. Retrieved from <http://www.worldbank.org/oed/eed>.

World Bank (2006). The World Bank Information and Communication for development: Global trends and policies. Washington DC: The World Bank.