



## Challenges of Educational Technology and Adequacy of Trained Educator for the Implementation of Universal Basic Education (UBE) Program in Primary Schools: A Case of Ondo State, Nigeria

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### Abstract

The purpose of this study is to investigate the challenges of technology and trained educators in the implementation of UBE in primary schools in Ile-Oluji Ondo State. A descriptive survey was used to answer the following research questions; to what extent has the Universal Basic Education been able to cater for the children in Ile-Oluji primary schools?, does the Universal Basic Education Programme provide adequate technology facilities to enhance teaching and learning effectiveness in all the primary schools? Are the pupils exposed to modern technological equipment to improve teaching and learning? Do primary schools possess adequate technological equipment? And lastly, are there any challenges hindering the implementation of UBE programme? The investigation was carried out by randomly selecting forty (40) pupils in five (5) schools and ten (10) teachers in each of the five schools making a total of two hundred and fifty respondents. Questionnaires were designed to aid the investigation. The questionnaire was validated by the researcher's supervisor. Split-half method was used to test the reliability of the instrument. The findings of the research revealed that there are challenges of technology and adequacy of trained educators in the implementation of UBE programme in primary school level. Suggested solutions will help reduce the challenges of technology and adequacy of trained educators and these challenges will be a thing of the past.

**Keywords:** Educational technology, Trained educator, Teachers training program and UBE program.

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### Contents

|  |    |
|--|----|
| 1. Introduction.....                               | 13 |
| 2. Review of Related Literature .....              | 15 |
| 3. Theoretical Framework.....                      | 18 |
| 4. Methodology.....                                | 22 |
| 5. Results.....                                    | 22 |
| 6. Discussion, Conclusion and Recommendations..... | 24 |
| 7. Conclusion.....                                 | 24 |
| 8. Recommendations.....                            | 24 |
| References.....                                    | 24 |

### **Contribution of this paper to the literature**

The paper emphasized the important of basic educational technology on educational policy programmes as well as the adequacy of teachers training strategies to achieve any education goal for basic education.

## **1. Introduction**

Education is a process of acquiring skills obtaining relevant knowledge and aptitudes in order to survive in this world. It is the process whereby individuals are provided with the means, tools and knowledge for understanding their society and its structures (Omotere, 2011). Hence, education encompasses the social life that helps people create a meaningful environment as well as been able to influence their environment positively (Omotere, 2011). Education could be seen as an activity which goes on in the society in which it takes place. Such activities may include any purposeful human endeavor that is capable of providing learning experiences. Education in a broader sense could be seen as a process of socialization. It constitutes all the processes through which individuals are trained in the social norms and values of their immediate society, so as not to become a misfit of that society (Omotere, 2011).

Primary education serves as the foundation in the formal process of ensuring changes in the behaviour of the growing members of the society. The success of any subsequent level of education or training will surely depend on the great extent of effectiveness in such foundation. Hence, the primary formal education occupies a natural prime of place in any nation's educational systems. In light of this, Omotere (2011) described primary education as the keystone of the whole educational structure. As a foundation, it invariably determines what the outlook of subsequent higher levels of formal education will be. Primary education deals with young children coming fresh from their homes without any exposure at all to the outside world. This level exposes the child to become an integral part of the society. It exposes the child to adapt to situations out of the home environment. He/she begins to associate with peer groups out of the family setting.

The objectives of the primary education in Nigeria as spelt out in the National Policy on Education of Federal Republic of Nigeria (FRN) (2013) revised states:

1. The inculcation of permanent literacy and numeracy and ability to communicate effectively.
2. The laying of a sound basis for scientific and reflective thinking.
3. Citizenship education as a basis for effective participation in and contribution to the life of the society.
4. Character and moral training and the development of sound attitudes.
5. Developing in the child the ability to adapt to his changing Environment.
6. Providing opportunities for development of manipulative skills.
7. Providing basic tools for further educational advancement (14).

Utibe (2001) asserted that, 'the Universal Primary Education programme in the country was improperly planned and hurriedly executed' leading to a waste of millions of Naira. The relevance of primary education in national development cannot be over-emphasized. National development is a product of sartorial effectiveness. Thus, development is a multi-facet process, and no society can comfortably progress on the path of national development when the vast majority of its citizens lack at least the basic education. The objectives of primary education in Nigeria centered on producing literate and numerate citizen who will, apart from laying the ground work or foundation for further education, provide low-level manpower needed in the country in all the sectors of the economy. It was based on this reason that the Taiwo Commission was charged to investigate the crisis bedevilling the Universal Primary Education Scheme in Nigeria. He reported among other thing: a fall in the standard of education and a disparity in the educational opportunities of the young ones in the country. Most children roam the streets in our major cities during school hours, hawking fruits, pure water, snacks, oranges, sweets etc. others are also found at the motor parks doing their daily activities (hawking). This situation calls for much concern of all and sundry especially the stakeholders in the educational industry. The Dike Commission in year 2000 therefore, recommended the abolition of the Universal Primary Education Scheme and its subsequent modification. The general outcry in the falling standard of Universal primary education and a sharp depreciation in the morals of primary school children brought about the introduction of the Universal Basic Education.

Universal Basic Education is broader than Universal Primary Education, which focused on providing educational opportunities for primary school age children. Universal Basic Education stresses the inclusion of girls and women and a number of non-privilege groups: the poor, street and working children, rural and remote populations, nomads, migrant workers, indigenous people, minorities, refugees and the disabled, it also extends to the first year level of secondary education (JSS 3). The universal basic education is one the most revolutionary educational programmes ever launched by the federal government of Nigeria. The UBE was launched in January-1999 as a response to declining levels of educational development and low enrollment of Children in schools in Nigeria. Universal basic education is a reformed programme in Nigeria and is to reinforce the implementation of national policy on education (NPE) in order to provide greater access and ensure quality throughout the federation as it is free and compulsory. Universal Basic Education Statement: "At the end of 9 year of continuous education, every child through the system should have acquired appropriate level of literacy, numeracy, communication, manipulative and life skills and be employable, useful to himself and the society at large by possessing relevant ethical, normal and civic skills". It stated further that, Universal Basic Education shall: Serve as a prime energizer of a national movement for the actualization of the nation's Universal Basic Education vision working in contact with all stakeholders thus, mobilizing the nation's creative energies to ensure that, Education for All (EFA) becomes the responsibility for all.

Moreover, the objectives of the Universal Basic Education (UBE) stated in the implementation guidelines are as follows:

1. To develop in the citizenry, a strong consciousness for education and a strong commitment to its vigorous promotion.
2. To provide free, universal basic education for every Nigerian child of school age.
3. To reduce drastically the incidence of drop-out from formal school system, through improved relevance, quality and efficiency.

4. To cater for the learning needs of young persons who for one reason or another have had to interrupt their schooling, through appropriate forms of complementary approaches to the promotion of basic education.
5. To ensure the acquisition of the appropriate levels of literacy, numeracy, communicative and life skills as well as the ethical, moral and civic values needed for laying a solid foundation for lifelong learning (Universal Basic Education Act (UBE), 2004).

As it has been noted by many social scientists, education and advanced technology are important variables in the development of any society. They are equally essential in the survival of democracy in any nation. As we face the realities of the future, it is clear that "technological age is engulfing education," and Nigerian leaders and educators need to address this "paradigm shift" (Ariza, 2000). Thus, any society that wants its citizens to be competent with the use of modern technologies has to properly educate the people who are entrusted with the function of the education of the youths in the society. The traditional teacher education program in Nigeria, in my opinion, is obsolete. And their repressive wages is not anything to write home about. The government should change the system to reflect and meet the realities of modern teacher training institutions, where modern instructional technologies are utilized. If we expect our teachers to properly train our youths, who are expected to function effectively in today's modern economy, we should "empower faculty to achieve technology integration in their own classes" Blomeyer & Clemente in press. This, the society can achieve, by first integrating modern technology in the curriculum of teacher training program in Nigeria. The teachers, in turn, would then integrate technology into their classroom curricula. A teacher can only teach what he or she knows. Some people tend to blame teachers for the falling standard of education in the country. But critics missed to understand that teachers can become better teachers only when they are well trained and motivated. As it has nicely been said: "No educational system can rise above the level of its teachers..." (Obayan, 2000). And no society can ripe where it did no sow.

Currently, Nigeria schools lack any formal and serious plan for integrating computer technology into teacher training programs in the society. But this has been the system in many developed (and some developing) nations for some time now. It is proper to underscore the fact that for the laudable objectives of the UBE to be achieved, the training of teachers should involve integrating the use of modern instructional technologies, such as the computers, access to the Internet, audio-visual equipment, Video Conferencing, projectors, and traditional software used in today's business world - word processing, spreadsheets, databases, etc. Connecting our classrooms to the Internet is not enough. It is crystal clear that proper use of technology affects the way teachers teach, students learn, and administrators operate. The objective is not to make the would-be-teachers (and those already in the field) to become technical experts, but to enable them acquire the basic computer skills and terminologies most often used by teachers, such as CPU, memory, desktop, keyboard, file, drive, save, and input and output devices. The acquired skills would enable teachers to use modern classroom technologies, and impart the knowledge to students. In other words, when teachers become familiarized with computing environment, they would be able to effectively teach our youths. The use of computers and other instructional technologies have become common place in the classrooms in many civilized and technologically advanced nations. This is not to say that all teachers in these countries are computer wizards. From my experience in the classroom, some of them (for instance, in the United States), still do not know how to save a document on a floppy diskette. But there are an alarming number of people in Nigeria (university professors and high school teachers included) who do not know how to simply turn on a computer. This is shameful and an outrage! Granted that Nigeria, (a Third World nation) should not be compared with the developed world. But we cannot make any progress if we continue to pretend that everything is well in the society. If we do not change from our sordid past, we will not become active participants in the ever-changing world. Therefore, there is an urgent need for Nigeria to modernize her educational institutions, rehabilitate the creaky buildings, stock the libraries with the necessary books, computerized the schools, connect them to the Internet, and equip the laboratories). The simple fact is that our youths cannot become computer literate unless their teachers are computer literate. Those teachers who are already in the field (but lack the needed skills) should be encouraged to acquire the necessary skill through staff development (or in-service training). The staff development exercise should be a continuing process, as education is a continuing process. A priori, in Nigeria there are no setup programs to re-tool (re-train) teachers after graduation from college, so as to update their skills. Yet, the society expects them to perform wonders! As an instructor, I have noticed in many instances that 'old teachers' (those who have been in the field long before the advent of the computers in the classroom) are intimidated by the computers. Some would think that the computer would "break" if they "punched a wrong key" or pressed very hard on the keys (Wang, 2000). But teachers (and traditional students) in the US, for instance, are encouraged to acquire computer skills with moral and financial supports (they are provided with loans to enable those in need to upgrade their skills). Support is a major part in making any changes in life. I would like to recommend the same for our society. It is therefore essential to provide our teachers with moral and financial support in their quest to acquire computer skills. The educators who are entrusted with providing computer training to teachers should not pose as technical experts, to avoid intimidating the learners. They should try to make the business of acquiring computer skills a fun experience for them. Convention dictates that teachers need to feel comfortable with the computers in order to use them, and to incorporate them in the class-room. As Wang has rightly noted, "In order to get teachers hooked, training needs to stimulate teachers' curiosity and engage them cognitively" (Wang, 2000). Teachers would normally be motivated once they perceived the computers as useful teaching tool.

### *1.1. Statement of the Problem*

Nigeria's educational system has witnessed a catalogue of changes in educational policies and programmes. Some of the changes have appeared to a number of people desirable while others have not been able to meet the desired target. Many of the changes in educational policies in Nigeria have been a product of inadequate planning; inadequate technology infrastructure and lack of adequate trained educators for effective implementation. There is therefore, a high level of uncertainty which is bedeviling is the implementation of these programmes in Nigeria schools. This situation calls for much concern as the young ones is the future leaders of this country.



This study aims at carrying out a research on the challenges of technology and adequacy of trained educators in the implementation of universal basic education, in Ile Oluji primary schools in Nigeria. The important strategies which is going to be concentrated upon is the most important techniques or ways to improve the use of technology and well trained educators in the implementation of universal basic education in primary schools in Ile Oluji.

### *1.2. Purpose of the Study*

The purpose of this study is to examine the challenges of technology and adequacy of trained educators in the implementation of universal basic education in Ile Oluji primary schools in Ondo State in Nigeria. It is believed by the researcher that the use of technology and adequate trained educators in the implementation of universal basic education will go a long way in achieving its objectives for primary school children.

The aim of the research is to provide solutions to the challenges of technology in the implementation of universal basic education, to examine how the use of technology and adequate trained educators can effectively improve the academic performance of the pupils. Also, to investigate if the children are been exposed to the use of technology facilities and to determine whether the pupils are computer literate in which all this will be identified the teachers, other academic staffs and pupils with special reference to the primary schools in Ile Oluji, Ondo State, Nigeria.

### *1.3. Research Questions*

1. To what extent has the Universal Basic Education been able to cater for the children in Ile-Oluji primary schools?
2. Does the Universal Basic Education Programme provide adequate technology facilities to enhance teaching and learning effectiveness in all the primary schools?
3. Are the pupils exposed to modern technological equipment to improve teaching and learning?
4. Do primary schools possess adequate technological equipment?
5. Are there any challenges hindering the implementation of UBE programme?

### *1.4. Scope of Study*

This study is focused on the challenges of technology and adequacy of trained educators in the implementation of UBE in primary schools in Ile Oluji Ondo State. The study was carried out in Ile Oluji Ondo State. The study sample consists of five schools that included ten teachers each and forty students from each schools. Random sampling technique was used to select fifty teachers and two hundred students in primary schools in Ile Oluji.

### *1.5. Significance of the Study*

This study is of great importance because it examines the challenges of technology and adequacy of trained educators in the implementation of Universal Basic Education in primary schools and it also provides valuable strategies to curbing these problems.

### *1.6. Operational Definition of Key Terms*

Universal Basic Education commission: A 9-year old educational programme starting from primary to junior secondary level in Nigeria.

Technology: computers, access to the Internet, audio-visual equipment, Video Conferencing, projectors, and traditional software used in today's business world - word processing, spreadsheets, databases, etc.

Adequate Trained Educators: Qualified teachers and instructors.

Primary Education: Young children coming fresh from their homes without any exposure at all to the outside world.

Primary schools: institution where young children coming fresh from their homes begin to learn from outside world.

## **2. Review of Related Literature**

### *2.1. Conceptual Framework*

#### *2.1.1. The Evolution and Concept of Universal Basic Education in Nigeria*

In 1955, the concept of universalization of primary education began in the Western Region of Nigeria under the Premiership of Chief Obafemi Awolowo who introduced the free, universal and compulsory education, popularly referred to as Universal Primary Education (UPE). With the introduction of the UPE, there was an educational revolution, not only in the West but in Nigeria as a whole. In 1954, there were about 457,000 pupils attending fee-paying schools but by January 1955, the figure rose to 811,000 representing over 56% increase in the enrollment. The number of primary school teachers rose from 17,000 in 1954 to 27,000 in 1955. This was possible because the government had gone out to train teachers to meet the demands of the programme. The government of the Western Region had to increase the budget from £2.2 million in 1954 to £5.4 million in 1955, Oni (2006). Actually, 90% of the budget on education was spent on primary education alone. By 1957/58 the recurrent expenditure on education from the funds of the region was £7,884,110, which covered personal emoluments, other charges, special expenditure and grants-in-aids. The feat achieved by the Western Region in terms of the UPE led the Eastern Region to embark upon its own 8 years free education scheme. Thus, in February 1957, the universal primary education scheme was launched in the Eastern Region using the fire-brigade approach. The government started the programme without adequate planning; thus, the needed finances for thorough execution were grossly inadequate. Summarily put by Oni (2008) almost everything, except the pupils, was absent. Unfortunately, due to pressure and lack of time for proper preparation, the schools were staffed by untrained teachers, therefore of low quality. The programme failed in just 1 year of its implementation (Oni, 2008).

The free and universal education programme was not limited to the Eastern and Western regions of the country. The Lagos Colony, a Federal Territory also floated its own scheme in 1957. At its inception, there were 96 primary schools with 50,182 pupils. These pupils had 1,646 teachers. The Northern Region had been introduced to the Islamic form of education ever before the Christianity (Western) education came into the country. Islamic education came into Nigeria by over 300 years before the arrival of Christian education around the 1840s. Hence, the region did not bother itself to embark on providing the Western education for its citizens. It seemed to be comfortable with the Islamic education, so they opted out of the race for in the provision of free universal primary education (Oni, 2008). So, the Northern region education was some however retarded because the curriculum of education revolved round reading the New Testament, the catechism and the commandments in Yoruba. Classes were held in churches and teachers' salaries were paid from church funds. Then, Muslim parents did not wholly approve of such Western education because it was a Christian education in a Christian environment. Their fear was that their children would be converted to Christianity through such education. Since independence, a lot of education laws, policies and edicts have been put in place, depending on the type of government being experienced in the country. In 1979, the constitution puts education on the concurrent list, which implies that the responsibilities and authority in education would be shared among the three tiers of government, i.e., federal, state and local governments. Between 1983 and 1999, a military era, decrees such as decree No. 16 of 1985, decree 26 of 1988 and decree 36 of 1990 were promulgated in Nigeria to guide and regulate the conduct of education in the country. A major policy made by the federal government was put in place in 1977; this was tagged the National Policy on Education. This policy was the outcome of a seminar convened in 1973 after the National Curriculum Conference. The 1977 policy has been revised thrice, i.e., 1981, 1998 and 2004.

Since independence therefore, the general guiding principles of education in Nigeria is the equipping of every citizen with such knowledge, skills, attitudes and values, which will give him the opportunity to derive maximum benefits from his membership of the society. The origin of extending education to all in Nigeria dates back to the era when the Western Region government under the premiership of late Obafemi Awolowo launched the free Universal Education (UPE). As a political response to the UPE programme in the Western Region, the Premier of the Eastern Region launched his own UPE in the region. The general objective behind their respective educational programme was basically to increase primary education access to benefit children of school age. While, the UPE programme in the west was characterized by story of success, the same cannot be said of UPE programme in the Eastern region as it was characterized by a short period of planning resulting into numerous problems. As can be shown from the foregoing, the universalization of primary education in Nigeria initially was a regional project. That is each region including the northern region tried to develop its own programme of promoting education among its citizens. The process of making universalization of primary education a national project started with the Obasanjo's regime during the military rule. For the 1st time in the history of Nigeria, the UPE programme that originally started as regional project was redesigned by the national government to provide education for the Nigerian citizens by changing the content of UPE to encompass the following philosophy of education as articulated in National Policy on Education. This philosophy emphasizes: the development of the individual into a sound and effective citizen, the full integration of the individual into the community and the provision of equal access to educational opportunities for all citizens at all levels of education both inside and outside the formal school system. Since 1977 to 2016 therefore, the Federal Government of Nigeria through the National Policy on Education stipulates that every child has a right to equal educational opportunities, irrespective of any real or imagined disabilities. According to this policy, education is supposed to equalize opportunities so that any individual, regardless of background can achieve success. The schools are expected to provide vocational training and preparation for later professional specialization. The schools are also expected to introduce them to activities not related to work-appreciation of arts, the development of interest and hobbies, the inclination and skills to engage in recreational activities and the like. In essence, the thrust of education is manpower development, which is aimed at national growth and development. This is why the country made its policy on education to revolve round the philosophy and goals of the nation. The philosophy of education, as derived from the national goals are the development of the individual into a sound and effective citizens; the full integration of the individual into the community and the provision of equal access to educational opportunities for all citizens at all levels of education both inside and outside the formal school system.

The Concept of the Universal Basic Education may not be a new idea totally. From all indications, the Universal Education can be regarded as an offshoot of the Universal Primary Education (UPE) scheme. As usual with Nigeria, this scheme was abandoned mid-way (Aluede, 2006). The fact that the scheme, i.e., UPE had something to offer perhaps led to the re-introduction of the programme in another name and concept known as Universal Basic Education.

## *2.2. What is Universal Basic Education (UBE)?*

Basic Education means the type of education, in quality and content, that is given in the first level of education. This construct changes from country to country. In Nigeria, basic education was equated with six years of primary schooling in the past. Currently basic education is extended to include the three years of Junior Secondary School. Universal Basic Education (UBE) is conceived to embrace formal education up to age 15, as well as adult and non-formal education including education of the marginalized groups within the Nigerian society. It is a policy reform measure of the Federal Government of Nigeria, that is in line with the state objectives of the 1999 constitution which states in section 18 that Government shall eradicate illiteracy; to this end, government shall as and when practicable provide a free and compulsory. Universal Primary Education, free secondary education, and free adult literacy programmes.

## *2.3. Objectives of UBE*

The major objective of the programme is to wipe out illiteracy and ensure the acquisition of functional skills for alleviation of poverty. However, in order to correct the inadequacies of the UPE and lay a solid foundation for the

promotion of basic education in Nigeria, the Universal Basic Education (UBE) came up with the following specific objectives:

1. To develop in the entire citizenry a strong commitment to its vigorous promotion.
2. Provide free, compulsory universal basic education for all the Nigeria child of school going age.
3. To reduce drastically drop-out rate from the formal school system through improved relevance and efficiency.
4. To cater for drop-out and out-of-school children or adolescents through various forms of complementary approaches to the provisions and promotion of basic education.
5. To ensure the acquisition of the appropriate levels of literacy, numeracy manipulative and life skills as well as the ethical, moral and civics needed for laying the foundation for life-long learning (Nigeria, 2000).

In order to achieve the above mentioned objectives and indeed the UBE's vision and mission of the scheme, an Act tagged UBE Act was enacted on the 26th May, 2004. Following the enactment of the Act, the Universal Basic Education Commission (UBEC) was established.

The Act provides three sources of funding for the implementation of the UBE. These are the federal government grant of not less than 2% of its consolidated revenue fund; funds or contributions in the form of federal guaranteed credits and local or international donor grants.

Although this Act covers both the state and the local governments, the state government can only benefit from the federal government block grant meant for the implementation of the UBE if it can contribute at least 50% of the total cost of the project. This is to ensure the 'states' commitment towards the project. To ensure that the UBE project enjoys a wide coverage, the Act provides sanctions for parents who fail to send their children and wards to school. Also in order to ensure that poverty is not a hindrance to schooling, the project provides free textbooks in core subjects as well as abolishes tuition at the primary school and at the junior secondary school levels. The new scheme has therefore, changed the education system from 6-3-3-4 to 9-3-4. It is expected that there shall be a smooth transition from the primary school (6 years) to junior secondary school (3 years). This also translates to no entrance examination into the junior secondary school.

#### *2.4. The Implementation of Universal Basic Education by the Federal Government*

The Universal Basic Education (UBE) is a policy reform measure of the Federal Government of Nigeria, aimed at rectifying distortions in the basic education. UBE is conceived to embrace formal education up to age 15, as well as adult and non-formal education including education of the marginalized groups within the Nigerian society. The National Policy on Education, 2004 section 3 defines basic education as a type of education comprising 6 years of primary education and 3 years of junior secondary school. The policy stipulates that the education shall be free and compulsory. This scheme shall include adult and non-formal educational programmes at primary and junior secondary school levels for both adults and out-of school youths. The UBE has three main components-universal, basic and education. Universal here means the programme is for everyone irrespective of tribe, culture or race and class (Aluede, 2006). The term basic depicts that which is a fundamental or essential thing that must be given or had. It is on this factor that every other thing rests on. Without it, nothing may be achieved. It is the root for acquisition of any knowledge. Hence, UBE can be seen as that type of education that every individual must have. It should not be a privilege but a right and it should be the sum total of an individual's experience.

The Universal Basic Education's mission is to serve as a prime energizer of national movement for actualization of the nation's UBE's vision, working in concert with all stakeholders. This will mobilize the nation's creative energies to ensure that education for all becomes the responsibilities of all (UBEC Annual Report). The Universal Basic Education Commission in its annual report in 2005 listed the objectives of the Universal Basic Education to include: ensuring unfettered access to 9 years of formal basic education, the provision of free, universal basic education for every Nigerian child of school-going age, reducing drastically the incidence of drop out from the formal school system, through improved relevance, quality and efficiency and ensuring the acquisition of appropriate levels of literacy, numeracy, manipulative, communicative and life skills, as well as the ethical, moral and civic values needed for laying a solid foundation for lifelong learning. In order to achieve the above-mentioned objectives and indeed the UBE's vision and mission of the Scheme, an Act tagged UBE Act was enacted on the 26th May, 2004. It was titled Act to provide for compulsory, free, universal Basic Education and other related matters. Following the enactment of the Act, the Universal Basic Education Commission (UBEC) was established. The Act provides three sources of funding for the implementation of the UBE, which are Federal Government Grant of not greater than 2% of its consolidated revenue fund; funds or contributions in the form of federal guaranteed credits and local or international donor grants. Although, this Act covers both the State and the Local Governments, the state government can only benefit from the Federal Government block grant meant for the implementation of the UBE if it can contribute at least 50% of the total cost of the project. This is to ensure the state's commitment towards the project. To ensure that the UBE project enjoys a wide coverage, the Act provides sanctions for parents who fail to send their children and wards to school. Also in order to ensure that poverty is not a hindrance to schooling, the project provides free textbooks in core subjects as well as abolishes tuition at the primary school and at the junior secondary school levels. The enactment of the UBE Act has a legal implication, which makes it compulsory for provision of universal, free and compulsory 6 years of primary education and the first 3 years of secondary education. From the various objectives of the UBE stated above, the child should have a continuous, uninterrupted stretch of education for 9 years from primary school to the 3rd year of the junior secondary school. Apart from this, the UBE scheme plans catering for the adults who have been out of school before they acquired the basic skills needed for lifelong learning in form of non-formal programmes. So, the UBE programme is planned in such a way that it shall provide non-formal skills and training for youths who have not had the benefit of formal education (Dare *et al.*, 2008). The new scheme has therefore, changed the education system from 6-3-3-4 to 9-3-4. It is expected that there shall be a smooth transition from the primary school (6 years) to the junior secondary school (3 years). This also translates to no entrance examination into the junior secondary school. It is also expected that junior secondary schools shall be an autonomous body; not having much to do with the senior secondary school. In



order to achieve this, all states of the federation have given the junior schools their autonomy. Thus, the junior secondary schools operate as separate bodies, having their own principals, vice-principals and members of teaching and non-teaching staff.

From the foregoing, it can be seen that the UBE programme in Nigeria has its own unique features. First and foremost, the scheme makes it compulsory for every government in Nigeria to provide free, compulsory and universal basic education for every child of primary and junior secondary school age. Secondly, it enforces all parents to ensure that their children or wards attend and complete their primary education and junior secondary school as stated in section 2 of the Act, which provides some fines for any breach of the Act.

### **3. Theoretical Framework**

#### *3.1. What is Technology?*

The word technology is derived from the Greek work *'Technic'* which means art or skills and *logia* means science or study. Therefore, technology means the science or study of an art or skill (Sharma and Sharma, 2006). However, according to a prominent historian Paul Sattler, the term technology is derived from the Latin word *"Texere"* which means to weave or to construct. So it does not mean to use machines, as we think but it means any practical art applying scientific knowledge. Technology refers to the techniques as also the technical contrivances; it is a systematic way of applying the techniques to achieve an objective is as important as the use of technical equipment for the same. Techniques are reckoned as the software and the equipment as the hardware of technology. Technology results in new designs and devices as also new ideas and processes. Each new physical device is accompanied by a new set of procedures and techniques. Education is the act or process of acquiring and imparting knowledge and it is crucial to the development of a learner with a view to his or her participation in the transformation of the world for a better tomorrow. Education is very vital in the development of any society, as such no nation hope to develop without embracing technology. Technology means the systematic applications of scientific or other organization knowledge to practical task. From the education point of view, what can be understood in this definition is the application scientific or other organization knowledge practical task of providing quality education for all.

Therefore, this view endorses (Buseri, 2001) where he averred that technological development has made very tremendous progress in all facets of human Endeavour worldwide. Some of the areas so well touched are: education, information technology, transportation, health care delivery service, housing, agriculture, clothing and feeding habits to mention but a few. Technology is a process of practically applying knowledge and using the resources of matter, energy and natural phenomena to solve human problems and making life easier (Buseri, 2001).

#### *3.2. Importance of Technology in Primary Level*

Primary level is an important stage in the child's educational life. If a teacher succeeds in framing a sound base and making the entire concept clear to a child then in future the student will be able to grasp difficult thing easily (Suleman, 2008). It depends upon effective teaching learning process. Educational technology plays an important and crucial role in making teaching learning process more effective and successful. Educational Technologies are those materials, procedures, organizations, ideas, devices, instruments or machines which make the teaching learning process more effective, successful, and unforgettable.

#### *3.3. Educational Technology*

Educational technology is a systematic way of designing, implementing and evaluating the process of learning and teaching in terms of specific objectives, based on research in human learning and communication and employing a combination of human and non-human resources to bring about more effective instruction. The use technology in education results in increased effectiveness of educational process. The inclusion of technology in education is one of the important milestones toward achieving the objective of UBE.

The use of technology in education signifies the use of audio-visuals i.e., hardware and software visual aids. Audio visuals are products of technology alone, they are mechanical gadgets. Audio-visuals are materials or products which may be used or measure to improve the quality of the message. Audio-visual aids physical objects. Audio-visual is classified into Hardware and software.

#### *3.4. Hardware*

Hardware refers to all physical objects, tools and technologies are termed as hardware. Mechanical, electromechanical and other equipment such as machines projectors computers are hardware. A blank paper, a blank film, or video cassette, a cell phone and camera are also hardware items.

#### *3.5. Software*

A software is a message in any form or format, i.e., knowledge, subject matter in print, recordings or photographic, theories of learning, techniques of teaching. A certain hardware, with software installed in them are also known as software for example, a written paper, a typed memo, a book, a photograph, a recorded video cassette and a computer floppy diskette are all termed as software. Emails and documents in electronic format are called software or soft copies.

Teaching technology is a unification of academic systems which is designed to enhance the effective design of teaching-learning process, to solve the problems which are faced during teaching and learning process and to improve the quality and retention of the information which are presented (Isman, 2002). According to Sharma and Sharma (2006). The important functions of the educational technology are described as below:

1. It identifies educational goals and objectives of the community.
2. It develops and designs proper and accurate curriculum for the attainment of specific goals.
3. It analyzes and evaluates the teaching learning process.
4. It develops and organizes suitable instructional materials for teaching learning process.

5. It helps in selecting and developing appropriate instructional strategies in order to achieve fruitful results.
6. It also helps in utilizing hardware and software media effectively and successfully.
7. It also provides essential feedback and controls through evaluation.
8. It prepares teachers in the use of new teaching technology.

### *3.6. Challenges of Technology in the Implementation of Universal Basic Education*

#### *3.6.1. Factors Associated with Technology Uses in Schools*

Implementation of technology is a complex process that depends on characteristics of technology, workers, environment, and subtle interactions among these components. Below are the factors identified to affect technology uses in schools.

**Organization Factors:** Schools have been cast as directly at odds with new technologies. The goal of schools as organizations, according to, is “not to solve a defined problem but to relieve stress on the organization caused by pressure operating outside of or overwhelming the capacity of normal channels.” In other words, schools naturally and necessarily resist changes that will put pressure on the existing practices “What appears to outsiders as a straightforward improvement can, to an organization, is felt as undesirably disruptive if it means that culture must change its values and habits in order to implement it.” Consequently schools and teachers may be less impressed by the promises of the computer delivered than its advocates. Besides this inherent resistance to change, schools are also said to have a structure that prevents wide spread uses of computers. Collins in his reflective essay on his experience with the Apple Classroom of Tomorrow (ACOT) project cites limited classroom space and the bulky size of computers, teachers' unwillingness to take the students to the lab, and lack of access to computers at home as factors that limit the use of technology in schools. More serious problems, however, lie beyond technological or physical structures in the conceptual structure of schools. The structure and conception of school that evolved in the last century is quite incompatible with effective use of new technologies. The view of teaching as transmission of information from teachers to their students has little place for students using new technologies to accomplish meaningful tasks. The forty-five-minute period makes it difficult to accomplish anything substantial using technology.

Lack of convenient access to computers, inadequate infrastructure, and poor planning are other factors identified to account for the underutilization of computers (Smerdon *et al.*, 2000). Loveless blames computer labs for the lack of use of computers because “labs deny teachers the flexibility of deciding when technology should be incorporated into instruction, unwittingly conveying to students that computers are not central to learning and certainly not central to the activities of their classrooms.” Moreover, it was found that many schools lack a healthy human infrastructure that supports technology innovations in the classroom (Zhao *et al.*, 2002). Teachers who are interested in using technology in their teaching often feel that they need better support from the building and district than currently available. Such support includes both technical and social. Teachers need strong technical support so they can be sure that they have access to functional equipment and network. They also need social support in forms of professional development opportunities, software and hardware purchases, user policies, and a professional community of like-minded colleagues. Other aspects of teachers' working conditions not directly related to technology, such as busy schedules, crowded curricula, lack of access to a professional community and support, have also been identified as important factors affecting technology uses (Smerdon *et al.*, 2000). **Factors:** A more frequently cited set of factors affecting technology uses in schools is associated with the teacher. Teachers attitudes toward and expertise with technology has often been identified as key factors associated with their uses of technology (Smerdon *et al.*, 2000; Becker, 2000a). Unless a teacher holds a positive attitude toward technology, it is not likely that she will use it in her teaching. Teacher's pedagogical beliefs and their teaching practices are also factors that seem to influence their uses of technology (Becker, 2000a; Becker, 2000b; Zhao and Cziko, 2001). **Technology Factors:** Technology itself has also been named as the source of a set of factors that affect its uses by teachers. First, there are conflicting ideas about the value of technology and hence conflicting advice to teachers about how technology should be used in schools. This leads teachers to a state of confusion about the true educational values of technology. Second, the constant changing nature of technology makes it difficult for teachers to stay current with the latest technology. Everyday new software and hardware becomes available. Teachers, who are already struggling for time and energy, find it difficult and discouraging to keep chasing this elusive beast. Third, the inherent nature of unreliability makes technology less appealing for most teachers (Zhao *et al.*, 2002). Technology is inherently unreliable and can break down at any time but teachers, who have only a limited amount of time in front of students, cannot spend the time troubleshooting problems they may or may not be able to solve. Thus unless there is a strong need for the use of technology and reliable support, teachers may opt not to use it in their teaching.

The arguments given for putting computer technology into schools is to make tomorrow's work force competitive in an increasingly high-tech world. To achieve this, learning computer skills are claimed to be a priority. Another threat to primary schools is the continued implementation of technology without sufficient support and training. In summary, previous research has resulted in a long, almost exhaustive, list of factors that may affect the uses of technology in schools. However there lacks an organizing framework to sort out the relevant importance of these factors and identify the relationships among them. In other words, although we know these factors all in some way influence technology uses in schools, we have little idea about how they interact with each other or which ones have more influence over the adoption of technology by teachers. Consequently, research in this area is in desperate need of a framework that can help it move beyond simply verifying the correlation between teacher's technology competency and technology uses or identifying new factors to add to the “laundry list” of factors associated with technology uses. Finally, these factors are discussed in different terms; some cognitive, some social, some organizational, some technological, and still some psychological. To truly understand the process of technology adoption, we need one framework that allows us to talk about these factors in similar terms.



### *3.7. Challenges of Adequacy of Trained Educators in the Implementation of Universal Basic Education*

There are many problems facing primary school administration in Nigeria. It will not be possible to delve into all the problems due to obvious constraints. In effect, our focus shall be on the following problems:

1. **Inadequacy of Teachers and Quality Instruction:** Qualified teachers are necessary for teaching in the Primary schools. Unfortunately, there are not enough qualified teachers to handle the pupils. The government is ready to hire less-qualified teachers at the expense of the qualified ones. The teacher, pupils ratio prescribed in the National Policy on Education is 1:30. This however, has been jettisoned. There are cases where two classes are merged together, to be taught by a single teacher. According to [Ajayi \(2007\)](#). No nation can rise above the level of her teachers. Certainly therefore, the quality of teachers will affect the quality of instruction. However, teachers cannot be blamed totally for inadequate quality of instruction. The idea of a teacher handling 60 pupils or more has drastically affected the efficiency of many teachers.
2. **Poor Management of Primary Schools:** There used to be two patterns of primary school management. The Local Government Education Authorities took over the supervision and management of primary education and the Ministry of Education with different management organs supervised and managed primary school, thereby causing confusion and conflict of interest between the State Ministries of Education and the Ministries of Local Government, epitomized by diversion of education funds to other projects and irregularities in payment of teachers' salaries. This arrangement adversely affected the management of primary education in Nigeria.
3. **Poor Teacher Preparation:** Some institution, (for example, Colleges of Education, Faculties of Education in the Universities, and the Departments of Education in some Polytechnics) are saddled with the responsibility of teacher training. So many things go into the preparation of teachers. However, one of the very important elements in teacher's education is the Teaching Practice ([Ajayi, 2007](#)). Stated categorically that the internship given to teachers in training (i.e. teaching practice) for a maximum of twelve weeks in a 3-years course is grossly inadequate. If teaching is to be at par with other professions e.g. law or medicine the internship must be close to the number of weeks of internship in other professions. Lawyers and Medical doctors spend one year for practical training or internship. We in the education sector must look into this problem. Related to this is the attitude of most students on Teaching Practice, which is usually unimpressive. Some of the students' teachers do not show up in their practicing schools in time. Student teachers are known to have developed the habit of coming to school when supervisors are around and to disappear as soon as they have been supervised. In fact, there are many other problems concerning students' behaviour during teaching Practice, which are too numerous to discuss in this paper.
4. **Poor Implementation of Primary School Objectives:** The general objectives of Primary Education ([FRN, 2000](#)) has been well stated in the National Policy of Education. This includes:
  - i. The inculcation of permanent literacy and numeracy and the ability of communicate effectively.
  - ii. The laying of a sound basis for scientific and reflective thinking.
  - iii. Citizenship education as a basis for effective participation in and contribution to the life of the society.
  - iv. Character and moral training and the development of sound attitude.
  - v. Developing in the child the ability to adapt to his changing environment.
  - vi. Giving the child opportunity in the society within the limit of his capacity.
  - vii. Providing basic tools for further educational endeavour, including, including preparation for trades and crafts of the locality.

Looking at the various objectives, it is obvious that the government wants to provide sound education for its citizens. The objectives of primary education are laudable, but its implementation has been far below expectation. The governments play politics with education. Primary education in particular, needs a lot of finance for the objectives to be achieved. But the governments' priority at various tiers, most of the time, is not on education. It is not common to find out that the budget for defence is far more than the budget for education. Teachers' population does not increase; rather it decreases ([Adesina, 2004](#)). Many people leave teaching due to poor remuneration for teachers.

5. **Inadequacy of Inspection:** There are many problems facing inspection of Primary Schools in Nigeria. First and foremost, inspectors have problem in carrying out their job. Their problems include lack of vehicles to travel to schools, shortage of personnel (inspectors), lack of equipment, and politicization of education. Also, the inspectors are not motivated enough to be able to carry out their duties. The remuneration for school inspectors is always poor. Due to shortage of funds, the inspectors cannot carry out as many inspections as possible in a school year. Hardly do they inspect schools in rural areas due to the weather and road conditions of the rural areas. The attitude of teachers to inspectors and inspection is not encouraging at all. Teachers see inspectors as a threat. They are therefore very hostile to school inspectors.
6. **Facilities:** [Agwu \(2005\)](#) The state of the nation's primary schools is very bad. It is common to find primary school with dilapidated walls. Pupils sit on the floor or on cement. Many schools are without adequate playground and recreational facilities, and teachers and pupils hardly get the necessary text books.
7. **Defective Preparation of School Curriculum:** Curriculum for primary education is handed down by the federal government. Curriculum preparation is defected in that some important individuals who should be consulted in curriculum issues are hardly consulted, Involvement of school administrators and teachers in the formulation or preparation of school curriculum cannot be over-emphasized. Also parents and the school community are along in matters of Curriculum preparation.

### *3.8. Solutions to the Challenges of Technology in the Implementation of Universal Basic Education*

1. Government should provide adequate fund and apart from funding the scheme, should ensure that credible persons are involved in the implementation process. Probity, transparency and accountability should be ensured.
2. Professional teachers should be made use of in teaching, and use of technology materials.
3. As a result of the increasing demand for qualified teachers, colleges of education should be adequately funded and staffed to produce enough competent science and technology education teachers and other teachers of the UBE programme to cater for the manpower needs of the curriculum.
4. UBE teachers especially technology teachers should be exposed and retrained on some new innovations in teaching and learning to enhance their productivity in the classroom. This can be done by organizing workshops, seminars and symposia for teachers by the federal and state ministries of Education and other professional bodies.
5. Recruitment of teachers and other personnel should be based on merit and not on any sectarian consideration. This will enhance the presence of qualified and effective personnel for the programme.
6. Job remuneration and working conditions of UBE personnel especially the Basic science and Technology teachers should be improved in order to enhance the professional image of the teaching profession and other professions, thereby attracting intellectually more endowed persons to train as UBE teachers. UBE personnel should be regularly promoted as at when due just like other civil servants.
7. Adequate planning should be made to enable the procurement of adequate human and material resources for the programme.

### *3.9. Solutions to the Challenges of Adequacy of Trained Educators in the Implementation of Universal Basic Education*

1. **Development and Motivation of Teachers:** No educational system can rise above the level of its teachers. Many laudable educational initiatives have failed mainly because they did not take into account the "teacher factor". If the government is committed to ensuring the success and realization of UBE's vision statement, which can only be realized by a functional STM education, it is worthy of note that the teachers will always be a major part of the process. Efforts to raise the level of general education of teachers (as well as efforts to raise the level of their professional preparation) should be pursued, broadened, and intensified with all vigour. Added to these is the very crucial issue of career-long professional development of serving teachers. This should no longer be a makeshift affair. Teachers associations, universities, colleges of education and the National Teachers Institute (NTI) should be fully mobilized to develop more systematic, career improvement-oriented, and hands-on-skills targeted continuing education programmes for all categories of teachers.
2. Teachers should also be fully involved in curriculum development, in school management, in social mobilization, in the overall educational decision making process. Their professional preparation for this form of full involvement will therefore be an integral part of the future systematic educational personnel development programmes.
3. Teacher allowances should be paid regularly and should be kept at a level that is commensurate with the professional nature of teaching, while other incentive and welfare packages are to be negotiated. Steps should be taken to make the school environment learner-friendly as well as teacher-friendly. This involves the provision of appropriate forms of infrastructures and facilities, and a full recognition of the professional autonomy of teachers and school administrators.
4. The problem of shortage of qualified teachers should be addressed through a wide variety of innovative and creative approaches, adapted to the peculiar needs of different parts of the country. Such programmes will have to be carefully monitored to minimize the risk of their crashing as was the case in the past.
5. The state government should recruit professional teachers into the primary and junior secondary schools in the state in order to enable the pupils to achieve permanent literacy and numeracy and the ability to communicate effectively.
6. Teachers should be allowed to attend seminars and workshop to acquaint themselves of new ideas and methods of teaching for the UBE programme.
7. Teachers should be sent for in-service training to enable them acquire more skills and competence in their job performances.
8. The state ministry of education should intensify more efforts in the effective supervision, monitoring and evaluation of the UBE programme in the state.
9. Attention should be focused on the supply of quality teachers for primary school education who will be able to teach and equip our children with the opportunities they need to optimize their potentials and contribute to the growth and development of the society and humanity.
10. The federal government should make provisions for training and retraining of teachers, in order to equip them with new ideas and methods in the profession.
11. Teachers should be provided with adequate instructional materials for effective teaching and learning process.

### *3.10. Strategies for Curbing the Challenges Affecting the Implementation of Universal Basic Education in Primary Schools*

1. **Adequate funding:** UBE scheme, judging from its provisions is obviously capital intensive and so requires adequate funding for the programme to succeed. Government should therefore strive to make funds available for the proper implementation of the programme.
2. **Provision of Infrastructure and other facilities in schools:** Educational facilities are imperative to qualitative UBE programme in Nigeria. Facilities such as textbooks, libraries, classrooms, seats and tables, laboratories, computers, technical/vocational equipment, electricity, etc. are all very important for the

effective implementation of the UBE scheme. There is therefore the need for adequate supply of these facilities and such facilities when provided should not be diverted.

3. **Recruitment of enough competent teachers:** There is also need for recruitment of enough trained teachers for the effective implementation of the UBE programme. There should also be re-training of teachers already on the job to ensure that they update their knowledge base.
4. **Better motivation for teachers:** Teachers should be properly motivated to render quality service by regular payment of their salaries and improvement in what they are paid. With adequate motivation and remuneration, the teachers can then work with renewed spirit and commitment to the UBE scheme.
5. **Effective monitoring and evaluation:** The program should be monitored and evaluated regularly to ensure that the system does not deviate from the set goals.

## 4. Methodology

The methodology explains how the data were collected, analyzed and processed. This chapter also covers the research design, sample and sampling technique, research instrument, reliability and validity of instrument and method of data analysis.

### 4.1. Research Design

The research was carried out by using descriptive survey design with the various methods of collecting information and data from teachers, and pupils through the use of questionnaire. This was done to examine the challenges of technology and adequacy of trained educators in the implementation of Universal Basic Education in primary schools in Ile-Oluji.

### 4.2. Sample and Sampling Technique

Random sampling technique will be used to select fifty teachers and two hundred pupils in Ile-Oluji local government in Ondo State. Five primary schools were selected in which ten teachers were selected in each primary schools In Ile-Oluji local government and forty pupils from each school which will make a total of two hundred and fifty respondents.

### 4.3. Research Instrument

The main instrument that was used in this research is questionnaire. Direct observation and visits were made to some of the primary schools in Ile-Oluji, to witness one of their teachings so as to discover the use of technologies such as computers, visual aids, projectors, spreadsheet and well-trained educators if they were used or not been used in the teaching and learning process for the implementation of the universal basic education.

The questionnaire was developed with well stated instructions clearly typed on the top of the questionnaire to the selected teachers and the pupils. The questionnaire consists of two sections, the section A shows the demographic data of the respondent, while the section B shows the questions the respondents need to answer with two columns each showing yes or no.

### 4.4. Validity of Instruments

It was ensured that the instrument was checked and scrutinized by the researcher's supervisor and another educational assessment specialist, who both adjudged the instruments as valid.

### 4.5. Reliability of Instruments

In order to test the reliability of the instrument, split half method was used. With the aid of the research supervisor, split half method was employed. In order to determine the true estimate of the reliability value, Spearman-Brown was used. A value of 0.822111 was obtained.

### 4.6. Procedure for Data Collection

The questionnaire was administered by the researcher who after explaining the format to them, waited and collected the same for analysis. The researcher waited to collect the questionnaire forms as soon as they were filled. Adequate care was taken to make sure that the respondents did not exchange ideas or influence one another.

### 4.7. Method of Data Analysis

The data collected was analyzed or gathered on a frequency distribution table to describe the challenges of technology and adequacy of trained educators in the implementation of universal basic education and the suggested solutions to the challenges.

## 5. Results

This chapter presents the analysis of data and interpretation of result. The first part presents the demographic distribution of respondents using descriptive statistics (frequency count and simple percentages) while the second part gives the analysis of research question using descriptive statistics (mean and standard deviation).

### 5.1. Demographic Distribution of Respondents

**Table-1. Gender cross-tabulation.**

| Gender | Teacher |       | Primary school |       | Total |      |
|--------|---------|-------|----------------|-------|-------|------|
|        | N       | %     | N              | %     | N     | %    |
| Male   | 22      | 44.0  | 104            | 52.0  | 126   | 50.4 |
| Female | 28      | 56.0  | 96             | 48.0  | 124   | 49.6 |
| Total  | 50      | 100.0 | 200            | 100.0 | 250   | 100  |



Table 1 reveals the gender distribution of the respondent. It shows that 126 male (primary school student and Teacher) participated in the study which represent 50.4.0% while 124(49.6.0%) female primary school students and Teacher took part in the study.

5.2. Analysis of Research Questions

Research Question 1: To what extent has Universal Basic Education been able to cater for the children in Ile-Oluji primary school?

Table-2. Analysis to know the extent of universal basic education been able to cater for the children in Ile-Oluji primary school.

| S/N | Item   | No |       | Yes |       |
|-----|--|----|-------|-----|-------|
|     |  | F  | %     | F   | %     |
| 1.  | Are you a computer literate?                                   | 40 | 80.0% | 10  | 20.0% |
| 2.  | Are there technology laboratory in your school?                | 45 | 90.0% | 5   | 10.0% |
| 3.  | Does the UBE reinforce your school with technology facilities? | 46 | 92.0% | 4   | 8.0%  |
| 4.  | Are enough computer teachers been employed in your school?     | 44 | 88.0% | 7   | 14.0% |

Table 2 provides the analysis to know the extent of Universal Basic Education been able to cater for the children in Ile-Oluji primary school. The items in the teachers' questionnaire provide answer to this research question. It shows that 80.0% of the respondents are not computer literate, 90.0% reported there is no technology laboratory in your school, 92.0% reported that UBE did not reinforce their school with technology facilities while 88.0% shows that the school did not employed enough computer teachers.

Research Question 2: Does the universal basic education programmed provide adequate technology facilities to enhance teaching and learning effectiveness in all the primary schools?

Table-3. Analysis to know if universal basic education programmed provide adequate technology facilities to enhance teaching and learning effectiveness in all the primary schools.

| S/N | Item   | Responses |       |     |       |
|-----|--|-----------|-------|-----|-------|
|     |  | No        |       | Yes |       |
|     |  | F         | %     | F   | %     |
| 1.  | Does universal basic education provide adequate infrastructure for teaching? | 43        | 86.0% | 7   | 14.0% |

Table 3 provides the analysis to know if universal basic education programmed provide adequate technology facilities to enhance teaching and learning effectiveness in all the primary schools. The items in the teachers' questionnaire provide answer to this research question. It shows that 86.0% reported that universal basic education does not provide adequate infrastructure for teaching.

Research Question 3: Are the Pupils exposed to modern technological equipment to improved teaching and learning?

Table-4. Analysis to know if Pupils exposed to modern technological equipment to improved teaching and learning.

| S/N | Item   | Responses |       |     |      |
|-----|--|-----------|-------|-----|------|
|     |  | No        |       | Yes |      |
|     |  | F         | %     | F   | %    |
| 1.  | Do you make you of technology e.g computers, projectors, laptop etc. in your school? | 158       | 76.0% | 42  | 21.0 |
| 2.  | Do you like using computers, laptop to learn?  | 176       | 88.0  | 24  | 12.0 |

Table 4 provides the analysis to know if the Pupils are exposed to modern technological equipment to improved teaching and learning. The items in the student questionnaire reported that they don't make use of technology e.g computers, projectors, laptop etc in your school (76.0%), they don't like using computers, laptop to learn (88.0%).

Research Question 4: Do primary schools possess adequate technological equipment

Table-5. Analysis to know if primary schools possess adequate technological equipment.

| S/N | Item   | No  |      | Yes |      |
|-----|--|-----|------|-----|------|
|     |  | F   | %    | F   | %    |
| 1.  | Do you have computer laboratory for practical? | 178 | 89.0 | 22  | 11.0 |
| 2.  | Does your teacher come to class to teach?      | 144 | 72.0 | 56  | 28.0 |

Table 5 provides the analysis to know if primary schools possess adequate technological equipment. The items in the student question show that they do not have computer laboratory for practical (89.0%), there teacher do not come to class to teach (72.0%).

Research Question 5: Are there any challenges hindering the implementation of UBE programme?

Table-6. Analysis of the challenges hindering the implementation of UBE programme.

| S/N | Item   | No |      | Yes |    |
|-----|--|----|------|-----|----|
|     |  | F  | %    | F   | %  |
| 1.  | Does the UBE reinforce your school with technology facility? | 38 | 76.0 | 12  | 24 |
| 2.  | Does UBE provide adequate infrastructure for teaching?       | 35 | 70.0 | 15  | 30 |
| 3.  | Does UBE employ qualified teachers in your school?           | 33 | 66.0 | 17  | 34 |

Table 6 provides the analysis of the challenges hindering the implementation of UBE programme. The challenges hindering the implementation of UBE programme are; UBE do not reinforce your school with technology facility (76.0%), UBE do not provide adequate infrastructure for teaching (70.0%), UBE do not employ qualified teachers in your school (66.0%).

## 6. Discussion, Conclusion and Recommendations

From the results of the analysis of data in chapter four, result of the analysis is discussed fully in this chapter. The research questions are discussed in sequential order. This chapter also discusses the conclusion and the recommendation of the study.

### 6.1. Discussion of Major Findings

Research Question 1 shows the analysis to know the extent of Universal Basic Education been able to cater for the children in Ile-Oluji primary school. The items in the teachers' questionnaire provide answer to this research question. It shows that 80.0% of the respondents are not computer literate, 90.0% reported there is no technology laboratory in your school, 92.0% reported that UBE did not reinforce their school with technology facilities while 88.0% shows that the school did not employed enough computer teachers.

Research Question 2 shows the analysis to know if universal basic education programme provide adequate technology facilities to enhance teaching and learning effectiveness in all the primary schools. The items in the teachers' questionnaire provide answer to this research question. It shows that 86.0% reported that universal basic education does not provide adequate infrastructure for teaching.

Research Question 3 shows the analysis to know if the Pupils are exposed to modern technological equipment to improved teaching and learning. The items in the student questionnaire reported that they don't make use of technology e.g. computers, projectors, laptop etc. in your school (76.0%), they don't like using computers, laptop to learn (88.0%).

Research Question 4 shows the analysis to know if primary schools possess adequate technological equipment. The items in the student question show that they do not have computer laboratory for practical (89.0%), there teacher do not come to class to teach (72.0%) as (Smerdon *et al.*, 2000; Cuban, 2001) says that lack of convenient access to computers, inadequate infrastructures, and poor planning are other factors identified to account for the underutilization of computers.

Research Question 5 shows the analysis of the challenges hindering the implementation of UBE programme. The challenges hindering the implementation of UBE programme are; UBE do not reinforce your school with technology facility (76.0%), UBE do not provide adequate infrastructure for teaching (70.0%), UBE do not employ qualified teachers in your school (66.0%) as stated by the National Policy on Education that there are not enough qualified teachers to handle the pupils.

## 7. Conclusion

In conclusion, from the analysis of used, the study has shown that there are some challenges facing technology and educators in the implementation of universal basic education in primary schools. Education is the cornerstone on which a nation's technological progress is based. In the light of this Universal Basic Education Board should provide and ensure the practical use of technology in primary schools, also adequate trained educators should be employed at primary school in order to ensure the implementation and achievement of the objectives of UBE. In making UBE a success, if Nigerians can be effective in the various suggestions discussed in this paper, the challenges of technology and educators will be a thing of the past.

## 8. Recommendations

This research work has revealed the challenges of technology and adequate trained educators in the implementation of Universal Basic Education. The researcher hereby recommends that:

1. Technology should not be taught in abstract, pupils should be made to see and learn with technological tools.
2. A special training programme should be introduced for the effective use of technology.
3. The teachers should also be provided opportunities for refresher courses.
4. There should be availability of educational technology equipment such as Computer, educational television, radio, film strips, V.C.R, overhead projector, flip charts etc.
5. Teachers should be provided with sound and facilitated atmosphere for the effective utilization of education technology.
6. A compulsory subject regarding the preparation or utilization or educational technology should be included in teacher.
7. Teachers should be allowed to attend seminars and workshop to acquaint themselves of new ideas and methods of teaching for the UBE programme.
8. Teachers should be sent for in-service training to enable them acquire more skills and competence in their job performances.
9. The state ministry of education should intensify more efforts in the effective supervision, monitoring and evaluation of the UBE programme in the state.
10. The state government should recruit professional teachers into the primary and junior secondary schools in the state in other to enable the pupils to achieve permanent literacy and numeracy and the ability to communicate effectively.

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