

CHAPTER ONE

INTRODUCTION

Background of the Study

Education is an empowering instrument for the continuous development of a society. Several definitions and descriptions have emerged concerning the role of education in the progress and advancement of every nation. The Federal Government of Nigeria (FGN, 2013) in the National Policy on Education (NPE), has described education as a backbone for the achievement of national goals and aims. Sequel to this, many fields of study have been highlighted by the Federal Government of Nigeria to be of importance. These include the Arts, the Sciences and the Social Sciences. Under the Arts are the languages, which include Nigerian languages (Hausa, Igbo and Yoruba), foreign languages (Arabic and French) and the official language (English language). The curriculum for each of these fields was designed in line with the three domains of educational taxonomy (Ughamadu, 1998 & Omoniyi, 2012).

Based on Bloom's taxonomy of education, human beings are expected to demonstrate abilities in the three domains of education, namely cognitive, affective and psychomotor domains. Each of the three domains of education is essential to learning. To assist learners in acquiring knowledge, values, concepts and skills, it is necessary to integrate required information and communication technology (ICT) tools into the process of instructional delivery in Arabic classes. ICT tools, in the modern concept, are all electronic devices used for instruction. Any of the ICT tools employed for content delivery is, therefore, referred to as educational technology. Educational Technology, according to Mangal and Mangal (2014), is any device or tool used during instructional preparation, delivery and evaluation to bring about the set educational objectives. This study would discuss the ICT tools that are available and usable for Arabic education in Nigeria.

The Arabic language predates the teaching of the English language for not less than seven centuries in Nigeria (Fafunwa, 1974; Galadanci, 1996; Sanni, 2011). It is one of the formal school subjects taught from the basic to the tertiary levels of education as indicated in the National Policy on Education (NPE) of the Federal Republic of Nigeria (FRN) (2013). The NPE considers Arabic as an optional subject at the basic school level and as a field of study under the humanities at the senior secondary education level. Moreover, at the tertiary level, Arabic can be studied as one of the Arts subjects leading to the award of a degree of Bachelor of Arts, or in combination with Islamic Studies as double honours. It can also be studied with education to attain the Bachelor of Arts Education in Arabic. It can further be studied to the level of Masters' degree as either Master of Arts (M.A.) in Arabic Language or Arabic Literature at Faculty of Arts or Master of Education (M.Ed.) in Arabic at Faculty Education. The Doctor of Philosophy (Ph.D.) degrees in Arabic Language or Arabic Literature at Faculty of Arts or Arabic Education at Faculty of Education are also attainable in various postgraduate schools of Nigerian Universities (Ishaq 2009; Sanni, 2011 & JAMB Brochure, 2016/2017).

At the informal settings, Arabic education is widely offered in many Private Arabic and Islamic Studies Schools (PAISS) across Nigeria. It is the main medium of instruction in this type of school settings. Arabic education has been in existence for many centuries before the advent of western education in Nigeria. It is on record that the spread of Islam, with the quest for knowledge of Islamic tenets which were originally Arabic-based, has aided the development of the Arabic curriculum in Nigeria since the late eleventh century (Galadanci, 1996; Al-kali, 2005; Ishaq, 2009 & Sanni, 2011). Arabic is also one of the languages used in computer operation worldwide as shown in Table 1.

Table 1 displays some computer terms with their corresponding Arabic translation. The following questions arise from the information given above:

(a)

Are the ICT tools available, usable and accessible functionally for the teaching and learning of Arabic language in colleges of education in the North-Central Nigeria?

(b) What are the teachers' levels of operating skills in ICT tools?

Questions (a) and (b) are parts of the concerns of this study as would be indicated in the statement of the problem. It is expected that ICT should be made available for use in the teaching and learning processes in all Nigeria schools from the basic education to the tertiary levels.

Technology is the study of devising specific tools to enhance the performance and production of knowledge, skills and values, as a way of boosting human efficiency (Ayuba, 2017). Information and Communication Technology encourages various technologies that are used for facilitating communication such as cellular phone, radio, video, television, computer and satellite system, among others.

ICT is made up of several technical tools in accordance with specific area of knowledge, skills and values of enhancement interests (Mangal & Mangal, 2014). Toro and Joshi (2016) define Information and Communication Technology (ICT) as sets of technological tools and resources used to communicate, create, disseminate, store and manage information. This definition covers technologies such as radio, television, video, telephone, satellite system, computer and network hardware and software as well as the equipment and services associated with these technologies, these include video-conferencing and electronic mail (UNESCO, 2012). According to Tella (2011), ICT can be referred to as a general term for technologies used for collecting, storing, editing and passing on information in different forms. Since ICT tools enhance teaching and learning activities, their availability for use in colleges of education should be made very crucial so as to enable effective goal attainment. Their levels of

availability can be measured by the degree of affordability, adequacy, accessibility, functionality and usability among other measuring factors of a conducive ICT laboratory.

Availability is a concept that connotes such meanings as presence and readiness of something or somebody for an action. It also implies the level of accessibility of an object or a body (Houghton, 2016). Availability of an object can, therefore, be determined by its quality and quantity. As regards quantitative assessment, an object can be reviewed on the basis of its adequacy or capacity to serve a pre-determined purpose. In terms of quality, its effectiveness on a particular purpose for which it is used shall be the focus of review. It is one thing to have an instrument, it is another for it to be usable. A usable object must be functional and accessible to its users. In other words, an object can be usable, while the users may not be skilful in using it.

By affordability, there should be enough funds to provide the necessary ICT tools to be used as educational technology. Its adequacy would also depend on the level of availability of funds to purchase necessary tools. Usability means that the teacher ought to be competent in the application of ICT knowledge, skills and values, to his/her area of specialisation. For instance, an Arabic teacher is expected to be able to apply his/her acquired skills of ICT to promote the teaching and learning of the Arabic language. This study would examine the availability and usability of ICT tools by Arabic teachers based on the following factors: teachers' qualification; teachers' gender; teachers' experience; college ownership; affordability, adequacy, accessibility, functionality of the ICT tools; effectiveness and teachers' attitudes (Ishaq, 2016).

Teachers' gender is another significant factor for an effective use of ICT tools. This is because performance is often characterised by gender ability in various human endeavours. For instance, Mustafa, (2014) discoursed that female teachers showed lower concern for the use of ICT tools for teaching

than their male counterparts. Apart from gender difference, teachers' attitude can also influence their use of ICT tools for instructional delivery (Buabeng-andoh, 2012).

The teaching profession is a work of both male and female persons. This, therefore, requires the study of the variable of gender with respect to individual differences, which are noted through the characteristic behaviours exhibited by the two categories of gender. Ishaq (2016) has observed that female teachers' relationship with learners is more productive due to their tolerance while with them. The attitude of both male and female teachers towards the use of ICT can also be a determinant of their efficiency as well as effectiveness of instructional delivery (Olafare, Lawrence & Fakorede, 2017). Meanwhile, the qualifications of both genders may influence their attitude to the use of ICT tools for instructional delivery.

Teachers' qualification is a determinant of an effective pedagogical preparation and implementation. A well-qualified teacher is expected to master the subject matter of his specialisation field of study. He also is expected to be skilful in the delivery of instruction. In essence, a qualified teacher must combine knowledge and skills of imparting instruction to the learners based on their respective characteristics. This implies that a teacher should possess fundamental knowledge of philosophy, psychology and sociology in order to successfully transfer relevant information to learners (Ishaq 2014; Ishaq 2016; Yusuf & Dada, 2016). Teachers' qualification is, therefore, an important variable worth being reviewed in this study.

As regards the National Policy on Education (NPE), teachers' qualifications have been categorised into the National Certificate of Education (NCE), Bachelor of either Arts Education (B.A. Ed) or Social Sciences Education (B. Sc Ed) or Science Education (B. Sc Ed) or Bachelor of Education (B. Ed). Any teacher holding any of these qualifications is regarded as a professional. He is also entitled to obtain

ain the teaching licence by the Teachers Registration Council of Nigeria (TRCN). The NPE further states the jurisdiction of the holders of each among the aforementioned qualification.

Experience of teacher has a great influence on their delivery of instruction to learners. It cannot be gained except by continuous practice. As a result of this, a teacher of 10 years in service may perform better than other teachers of lower service years. Ishaq (2016) described experience as knowledge and skill gained through practice over a period of time. It involves a conversant practice of something over a period of time (Hornby, 2006 in Ishaq, 2016). Experience is required for effective implementation of an educational programme in order to achieve the set objective. Ogbonna (1998) and Ishaq (2009) have indicated that highly experienced teachers perform better than the less experienced ones in the delivery of instruction. Muhammed (2015) has referred to experience as perception and participation of someone in a programme or an activity. According to Johnson (2009) and Salman (2013), to gain experience requires dedication and determination towards a development.

Statement of the Problem

This study is informed by the roles Information and Communication Technology (ICT) tools play in the teaching and learning processes. Previous studies have revealed the inadequate availability and lackadaisical attitude of some teachers to the use of ICT tools in some educational institutions. This, perhaps, might have been one of the factors responsible for the low enrolment and poor performance of students in Arabic at the basic and secondary schools levels of education. As a result, the enrolment for furthering studies in Arabic at the higher institutions would be affected.

Several studies have been carried out on ICT in relation to education at various locations in the world. Farell (2007) surveyed the ICT in education in Uganda and found that there is no differentiation in the factors affecting adoption and diffusion in every country, except with developmental degree of each country. Furthermore, Toro and Joshi's (2012) review on the ICT tools used in higher education i

n India from 2004-

2011 revealed that before ICT tools could be used to enable meaningful delivery, the following major areas need to be emphasised: content/digital resources, monitoring and evaluation framework, implementation plans, financial allocations, political and administrative support, community demand for ICT, adoption and change in learning processes and staff development and training programmes.

Opati (2013) researched into the use of ICT in teaching and learning at Makerere University, Uganda. He found that the use of ICT tools made the system of educational delivery to change as it enhanced teaching and learning in higher educational institutions.

Tella (2011) studied the availability and use of ICT in South-western Nigeria. His finding revealed that teacher education in Nigeria has a low usage of ICT gadgets. He observed that the non availability of ICT equipment was responsible for the lack of integration of ICT tools into instructional delivery.

Issa, Ayodele, Abubakar and Aliyu (2011) conducted a study on the application of Information Technology to library services at the Federal University of Technology, Akure, Ondo State, Nigeria. Their outcome revealed several problems that affect the application of IT to service delivery at the Federal University of Technology Akure, such as inadequate funding, insufficient facilities and poor power supply, among others. Olokoba, Abdullahi and Omosidi (2014) studied the impact of Information Communication Technology on the management and performance of secondary school teachers in Kwara State, Nigeria. They found that there were no ICT facilities in some secondary schools, and some teachers were not even ready to use the available ICT tools for instructional delivery.

Furthermore, Apagu and Wakili (2015) worked on the availability and utilisation of ICT facilities for the teaching and learning of vocational and technical education in Yobe State Technical Colleges. Their findings revealed that some problems affecting the usability of ICT tools include: constant po

wer failure, insufficient availability of ICT facilities, low number of manpower resources, inadequate qualified teachers, and poor students' exposure to the use of ICT tools. Toit (2015) investigated into teachers' training and usage of ICT in Education and found out that the use of ICT tools in classrooms would enhance teaching and learning and make teachers to be exposed. Almekhlafi's (2016) research on pre-service and in-service teachers' perceptions of the utility of e-learning digital collaboration tools for teaching and learning revealed that the in-service teachers showed more readiness than the pre-service teachers in the use of e-Learning digital platform. Moreover, Ishaq (2016) reported that the level of acquisition of ICT knowledge and skills by some senior secondary school Arabic teachers was high.

Nevertheless, the present study is deferent from aforementioned works in terms of locations, levels and subject's areas. For instance, Farell's (2007) survey of the ICT in education in Uganda is similar to this study in finding the availability level of the ICT tools; however, it differs from this work by locale and specific discipline, which is Arabic at the colleges of education in North-Central Nigeria. Toro and Joshi's (2012) review of the literature on the ICT in higher education focused on India and not Nigeria, which is the locale for this study. Opati's (2013) research on the use of ICT in teaching and learning at Makerere University, Uganda is similar to a unit of the purposes of this work, which intends to find out the usability level of the ICT; it is however, different from this work by location. Tella's (2011) research on availability and use of ICT is on South-Western Nigeria, making it different from the present work which would cut across North-Central region of the country. Issa, Ayodele, Abubakar and Aliyu's (2011) study on the application of Information Technology to library services at the Federal University of Technology, Akure, is different from the present study by scope, type of tertiary institution and subject area.

UNESCO's (2014) comparative analysis of ICT integrated and e-readiness in schools across Asia is different from this study because of its wider scope, being a continent, while the scope of this study is part of a country. Olokoba, Abdullahi and Omosidi's (2014) study focused on the impact of ICT on the management and performance of secondary school teachers in Kwara State. This study focuses on the availability and use of ICT tools in colleges of education in the North-Central Nigerian.

The work of Apagu and Wakili (2015) on availability and utilisation of ICT facilities for teaching and learning is similar to this study but it is limited to vocational and technical education in Yobe State Technical Colleges, whereas, this study is on Arabic education in colleges of education in the North-Central Nigeria. This study is similar to Toit's (2015) research on teachers' training and usage of ICT in education because of its purpose of finding out the attitudes of lecturers of Arabic towards the use of ICT tools in the colleges of education. Almekhlafi's (2016) research was on pre-service and in-service teacher's perceptions of the utility of e-learning digital collaboration tools for teaching and learning in the United Arab Emirates, which is different from the present study by focus and location. This study is similar to Ishaq's (2016) report in the area of finding the teachers' levels of acquisition of ICT knowledge and skills but different in the target population for this study, which are the lecturers in colleges of education in the North-Central Nigeria and not senior secondary school Arabic teachers.

Even though some of the works cited above have focused on the availability and utilisation of ICT in instructional delivery, none of them examined its availability and use in Arabic education. This is the gap the present study filled. The problem of this study is, therefore, to identify the levels of availability and use of ICT in the instructional delivery on Arabic education in North-Central Nigeria.

Purpose of the Study

The general purpose of this study was to investigate the level of availability and use of information and communication technology tools for teaching Arabic in colleges of education in North-Central Nigeria.

Specifically, this study was to find out the:

- a) ICT tools available for teaching Arabic in colleges of education in North-Central Nigeria.
- b) adequacy of the ICT tools for teaching Arabic in colleges of education in North-Central Nigeria;
- c) affordability of the ICT tools for teaching Arabic in colleges of education in North-Central Nigeria;
- d) functionality of the ICT tools for teaching Arabic in colleges of education in North-Central Nigeria;
- e) accessibility of the ICT tools for teaching Arabic in colleges of education in North-Central Nigeria;
- f) usability of the ICT tools for teaching Arabic in colleges of education in North-Central Nigeria;
- g) difference in teachers' attitude towards the use of ICT tools for teaching Arabic based on gender;
- h) difference in teachers' attitude towards the use of ICT tools for teaching Arabic based on qualification;
- i) difference in teachers' attitude towards the use of ICT tools for teaching Arabic based on experience; and
- j) difference in teachers' attitude towards the use of ICT tools for teaching Arabic based on college ownership.

Research Questions

The following research questions were answered in the course of this research.

- a) What ICT tools are available for teaching Arabic in colleges of education in North-Central Nigerian?
- b) Are the Arabic education ICT tools affordable?
- c) Are the Arabic education ICT tools adequately provided?
- d) Are the Arabic education ICT tools accessible to the teachers/learners?
- e) Are the Arabic education ICT tools functional?
- f) To what extent are the Arabic education ICT tools used?
- g) Is there any difference among the lecturers in the use of ICT tools, based on gender?
- h) Is there any difference among the lecturers in the use of ICT tools, based on qualification?
- i) Is there any difference among the lecturers in the use of ICT tools, based on experience?
- j) Is there any difference among the lecturers in the use of ICT tools for teaching Arabic based on school ownership?
- k) Is there any difference in the teachers' attitudes towards the use of ICT tools for Teaching Arabic, based on gender?
- l) Is there any difference in the attitudes of teachers towards the use of ICT tools for teaching Arabic, based on college ownership?

Research Hypotheses

The following null hypotheses were tested; both the t-test and the One-way Analysis of Variance (ANOVA) were used to test all the null hypotheses.

H₀₁:

There is no significant difference in the attitudes of the male and female teachers towards the use of ICT tools for teaching Arabic language.

H₀₂:

There is no significant difference among teachers in the use of ICT tools for teaching Arabic language, based on qualification.

H₀₃:

There is no significant difference in the attitudes of the teachers in the Federal, State and Private Colleges of Education in the use of ICT tools for teaching Arabic language.

H₀₄:

There is no significant difference among teachers in the use of ICT tools for teaching Arabic language based on experience.

Scope of the Study

The geographical scope of this study comprised all the Colleges of Education that offer Arabic language across the North-Central zone of Nigeria in addition to the Federal Capital Territory (FCT). All the lecturers of Arabic language were involved in the study. A questionnaire tagged “Availability and Use of ICT Tools for teaching Arabic in Colleges of Education in the North-Central Nigeria (QAUITTACENCN)” was used to gather data. Percentage indices were employed to analyse the level of availability and use of ICT tools for Teaching Arabic in Colleges of Education in the North-Central Nigeria. Moreover, both the t-test and the One-way Analysis of Variance (ANOVA) were used to test all the hypotheses.

Operational Definition of Terms

Accessibility: Level of teachers' freedom to approach the ICT tools for Arabic education.

Adequacy: Availability level of the ICT tools in Colleges of Education in the North-Central Nigeria.

Affordability: Purchasing/procuring level in the provision of ICT tools for Arabic education.

Arabic education: Teaching and learning activities of Arabic in colleges of education in the North-Central Nigeria.

Availability: Level of obtainability of the ICT tools for Arabic education in colleges of education in the North-Central Nigeria.

Functionality: Workability level of the available ICT tools for Arabic education in Colleges of Education in the North-Central Nigeria.

ICT tools: Traditional and modern technologies used for enhancing educational process/delivery.

Teachers' attitude: Behaviours of the teachers in relation to their readiness to the use of ICT tools for Teaching Arabic language.

Teachers' qualification: Level of training acquired by the teachers for effective use of ICT tools for Teaching Arabic language.

Teachers' experience: Number of years spent as lecturers of Arabic; less-experienced 1-5 years; experienced 6-10 years and more experienced 11 years, and above.

Usability:

Teachers' ability to make effective use and manipulate of the available ICT tools for Arabic education.

Significance of the Study

The study is significant to both lecturers and students of Arabic in the colleges of education because it is expected to assist the lecturers in selecting appropriate tools for instructions in Arabic education classes. The study would be of benefit to the students (the-teacher-to-be) by helping them to have access to modern and current ICT tools required for the teaching and learning of Arabic.

This study would produce information about the actual statistics of ICT tools available for teaching Arabic in colleges of education in North-Central Nigeria. The outcome of the study would enable the National Commission for Colleges of Education (NCCE) proffer necessary solutions to various problems associated with the availability and use of the ICT tools for Arabic in the colleges of education in Nigeria.

The curriculum planners and developers would be guided by the results of this study in their efforts to provide relevant resources that could facilitate effective implementation of the NCE Arabic curriculum. Proprietors of the colleges would be intimated with the reality of the ICT tools, and thereafter take appropriate steps to tackle any emerging problems.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

Review of related literature in respect of this study was discussed under the following subheadings:

- a) Theoretical Framework

- b) The Concept of Education and Nigeria Education
- c) Arabic Education in Nigeria Colleges of Education
- d) Concept, Nature and Forms of Information and Communication Technology (ICT) Tools in Education
- e) Influence of ICT Tools on Instructional Delivery of Arabic Education
- f) Availability and Use of ICT Tools for Instructional Delivery of Arabic Education
- g) Empirical Studies on Availability and Use of ICT Tools in Educational Programmes
- h)

The influence of Attitude of the Teachers by Gender, Qualification, Experience and College Ownership on the use of ICT in Education

- i) Appraisal of the Literature Reviewed
- j) Conceptual Framework for the Study

Theoretical Framework

Theoretical framework is a fundamental aspect of an academic research. The terms “theoretical and framework”, according to Grant and Osanloo in Girigisu (2019), can be explained as “belief, construct, concept or views possessed through systematic investigations to interpret or predict a natural circumstance about phenomena”. He further refers to Muhibbuddin’s (2018) definition that theoretical framework comprises “the views, ideas, concepts and definitions put up by scholars as a result of observations, findings and facts recorded from researches conducted in varied fields of academic disciplines”. Theories vary from one discipline to another, although some are applicable to many fields, while there are peculiarities somehow in respect of differences in some disciplines. In areas such as availability related matters and usability, theories in varied field of study can be applied to solve any emerging/existing problems. Grant and Osanloo in Girigisu (2019) have ide

ntified some strata such as behavioural, gender, diffusion of innovation, psychological perspectives, relational, among other theories.

This study is informed by the diffusion of innovation theory which was introduced by Everett Rogers (1962). The theory stresses how new ideas are adopted in the society. In the education setting, the incorporation of ICT in teaching and learning is relatively an innovation and a new development. According to the diffusion of innovation theory, desirable innovations should be widely adopted in order to attain development and sustainability. In line with this, it is believed that ICT is among the innovations that when adopted would bring positive development in the teaching-learning process.

This is also in line with the psychological perspectives that is stressed by Bekele (2004) that there is the need to provide and adopt facilitating media in instruction. The media, according to Bekele (2004), would promote students' motivation, attitudes, interest, problem solving and decision making. Therefore, ICT constitutes an instance of those media for the realization of the points given above. As such, Sellinger (2003) was of the view that the application of ICT in teaching guarantees enthusiasm, interest and involvement in student learning.

Further still, this study is also informed by the theory of liberal education proposed by Frère and other educationists such as Newman, Maurice and Sir Wilfred. They spearheaded the rebirth of liberal education within the purview of ideology of liberal education. The products are expected to be open-minded and free from dogma, perceptions and ideology. The students are supposedly conscious of their opinions and judgment and are reflective of their place in the social and national worlds (Opati, 2013). However, the freedom that is canvassed for by liberal education theorist can be guaranteed with the incorporation of ICT in education. Through ICT, students are given the room to progress on their own pace. They are free to choose the content, free to use the appropriate media and are able to study anywhere, any time (Keller, 2012)

Moreover, this study is also in agreement with the constructive theory which believes in the transmission of experiences into authentic tasks. Using ICT in teaching and learning would afford learners the opportunity to perform tasks which simulate real life experiences (Opati, 2013). Selwyn (2007) noted that the element of constructivism with regards to adoption of ICT involves interactions and connections in online environment. This leads to the creation of a virtual learning environment with a marked shift from brick and mortar to click and mortar. The interactions and connections in online environment facilitate interpersonal exchange between the students and teachers, thereby enabling a learning environment which is not limited by time and space (Opati, 2013).

Relevant to the theory of pragmatism that is promoted by John Dewey (1859-1952), this theory emphasizes the need to facilitate learning through promoting various activities rather than by using traditional teacher-focused method. In pragmatism, it is believed that learners learn more from guided experiences than from authoritative instruction. It is believed that learning is life, not just a preparation for life. Pragmatists therefore recommend that using different delivery approaches, combined with practical activities, would help reach the different learning preferences of the individuals that are involved in the teaching-learning process (Gravels & Simpson, 2014). In addition, the study relies on problem solving ideology. As observed by Olive (2002), ICT guarantees problem solving and is based on inquiry and construction of meanings. With reference to the foregoing, the theory of innovation of media diffusion would be deployed in examining the level of availability and use of the ICT tools in the delivery of Arabic Language instructions in Colleges of Education in the North-Central Nigeria and the FCT.

The Concept of Education and Nigeria Education

Education is derived from two Latin words “educare” and “educere”. According to Amaele (2005), “educare” is moulding or making something out of nothing. The advocates of this meaning perceive

ive education as a means of bringing up an individual from a state of ignorance to the level of knowledge. He added that as for the “educere”, etymologically, education is viewed as a way of leading and assisting somebody to develop his/her latent quality. He further asserted that moralists, such as Athenians and Plato, defined education as a means of developing morality of an individual in relation to the societal norms. With reference to the above etymological and philosophical definitions, education can be considered as an instrument of bringing about the set goals for continuous national developmental changes.

Education can be provided in formal, informal and non-formal systems. Formal education can be held in an organised and programmed approach in line with approved educational goals set by the government (Mangal & Mangal, 2014). A formal type of education takes place in an organised environment within a school having teachers, students, and learning facilities. It leads to certification at the completion of a specific period of instructional delivery, after necessary assessments and examinations of the students in various school subjects (Amaele, 2005).

Informal education, according to Amaele (2005) and Jekayinfa and Kolawole (2008), is that form of education gained by the individuals from their experience and interactions with people in the society. The society is considered as the main agent of this form of education. There is no specific school or study place. It can be acquired on the streets, in market places, in mosques, at home, in the church and among the elders and peer groups. Informal education can also be through radio, television, Internet based media, among other sources.

Non-formal education is neither formal nor informal but it shares slight features with formal education. The only similar feature between formal and non-

formal systems of education is in planning. It is also planned activities like seminars and workshops (Amaele, 2005).

No nation can develop above its education because it is the backbone of any successful socio-economic and political development in any country. Education comprises teaching and learning delivery and the teacher is the only tool of delivery. A country can have good educational plan, best educational policy which is well desired, however, the teacher is responsible for translating the policy into action and the principle into practice through his/her interactions with learners; so the teacher is the bedrock of every nation education's system (Talabi, 1985&Afe, 1992).

Teacher education can be referred to as a type of education used for preparing an individual that is interested in child-development specialized training so as to be responsible and productive in the society (Ogunyinka, Okeke, & Adedoyin, 2015). In Nigeria, teacher education originally started in the pre-colonial era. In the 1842 to 1860, some church missionaries like the Wesleyan Methodist, the Church Missionary Society, the Baptist, the Church of Scotland (Presbyterian) and the Roman Catholic have all contributed immensely in the establishment of teacher education in Nigeria (Fafunwa, 1974). He further noted that the missionaries devoted their time initially to the development of elementary (Primary) education in the country. By this time, the missionaries established elementary school using their residential premises, and some pupils were living with them (National Open University of Nigeria, 2006). According to Amaele (1971), the missionaries trained the teachers by apprenticeship system of the school. Every pupil of age 14 years was made to sit for standard five (v) examination. Those who excelled were employed as teachers. They had one hour instruction period from the head master (head teacher) daily. These lessons were based on teaching methodology for two years. After this class, they would sit

t for the pupil-teacher examination. The examination would enable the student-teachers to further their education.

In 1856, the first teacher training college was established at Abeokuta and was named “The Training Institution” by the Church Missionary Society (CMS). The Institution was later relocated to Lagos in 1896 when the missionary was driven away from Abeokuta. It was later moved to Oyo and was renamed St. Andrew’s College. The Baptist Missionary established one in 1897 and named it “Baptist Training College at Ogbomosho. Another was established in Ibadan in 1905 by the Wesleyan Methodist Missionary Society for the training of catechists and teachers. It was later known as Wesley College, Ibadan (Jekayinfa, 2008 & National Open University of Nigeria, 2006). They had earlier explained that in 1892, Hope Wadell (Training) institute at Duketown in Calabar was established by the Presbyterian Church of Scotland. The institution was established based on two things: training the young primary school pupils and training the teachers and preachers. In the northern region of Nigeria, Nasarawa School was established in 1909 by the British Government.

In 1926, the number of teacher training institutions rose to 13 with 290 male and 30 female students, making a total of 320 students.

Fafunwa (1974) mentioned that the curriculum used in the institutions comprised theology, with teaching methods. In 1925, the Phelps-Stokes Commission faulted the teacher training curriculum. The commission reported that the system of the education was not satisfactory as the pupil-teachers had too much workload but with little pay. The curriculum was simply not fitted for African education. To this end, the Commission laid down two institutions for teacher-training as follows:

1. The Elementary Training College (E.T.C) Glll, for lower primary school teachers

2. The Higher Elementary Training College (H.E.T.C) (Fafunwa, 1974). This was a two-year course. The Gll certificate is a continuation of E.T.C. (Glll) after serving as a pupil-teacher for two years. (Jekayinfa 2008).

The Yaba Higher College opened in 1932 and offered three years course for teacher-training. At that time, there was no B.A Ed or B. Sc (Ed) in Nigeria. Students only bagged Graduate Diploma in Education (PGDE) at the University of London. Jekayinfa (2008) added that this was why the Ashby Commission requested for new or more universities, which would offer the Bachelor's Degree in education, B.A (Ed), B. Sc. (Ed) or B. Ed, and the training of more teachers for the nation's secondary schools. The University of Ibadan introduced Diploma in Education in 1957, a one-year course and also, one year course for a Gll teacher to become a head teacher in primary schools (Fafunwa, 1974).

The Ashby Commission reported that Glprogramme should also be introduced. But this was not implemented by the Government. Instead, the Nigeria Certificate in Education (NCE) was established, and was called Advanced Teachers' College. One of such was established in Lagos and another in Ibadan both in 1962. The one in Ibadan was later transferred to Ondo and renamed Adeyemi College of Education. Furthermore, Owerri College of Education was founded in 1963, Zaria college of education in 1962, Kano college of education 1964 and Abraka college of education 1968 (Taiwo, 1986 in Fafunwa 2008).

For the colleges of education in Nigeria to be well organised, the National Commission for Colleges of Education (NCCE) was established by the Nigeria Government with "decree No. 3 of 17th January, 1989" and Amended Act 12 of 1993. The NCCE was established to produce more quality teachers to improve the standard of education in the colleges of education in Nigeria (NCCE, 2018). The Commission was expected to recommend to the government all the colleges' needs, like finance, and the est

establishment of more colleges to the government. The body caters for colleges' academic and non-academic issue. It also sees to the development of national curriculum for the Colleges of Education in Nigeria (Omoniyi, 2012). He further explained that the Commission is in-charge of "minimum standards of academic programmes (syllabi), the admission requirements and its guidelines, the accreditation of the colleges and all courses offered after any college has met the required standard.

Arabic Education in Nigeria Colleges of Education

Language, whether indigenous or foreign, has crucial roles to play in every area of human endeavours. The Federal Government has recognised that language is an instrument used for storing cultural heritage and promoting social interaction (FGN, 2013). Nigeria, as a heterogeneous and multi-ethnic society, is endowed with several indigenous languages across its six geopolitical zones. Three of these languages are Hausa, Igbo and Yoruba spoken by a large number of indigenes and non-indigenes, and recognised as the major Nigerian languages to be taught and learnt in schools. The Arabic language assumes a different status in Nigeria. As a language, it can be classified as indigenous, foreign and professional language. It is among the languages taught in the formal education systems in Nigeria. In order to promote the language, the Arabic village was established in 1992 at Ngala in Bornu State (Oladosu, 2008; Ishaq, 2009; All Africa, 2010; Sanni, 2011).

Formal education refers to a system of education that is delivered in an organised school with scheduled programmes and curricula and activities. It can also take place in the school and outside the school with a focus on the school curriculum. This formal education centres became a system of Nigerian education through the two foreign types of education (Islamic/Arabic and western education) (Adeyemi, 2006; Fafunwa, 1997). It was recorded that UmmeJilmi, Dunama II (1221-

59 C. E.), an Emperor of the old Kanem-

Bornu, made the empire become a centre of Islamic learning by the 13th century. Islam spread with Arabic language because Arabic is its backbone. In the fourteenth century, the Hausaland (Northern Nigeria) welcomed Islam and its education through the commercial activities of traders and scholars who came among Wangarawa to Kano during the reign of Ali Yaji of Kano. Arabic and Islamic education gained a great growth through Usman Dan Fodiyo. At that time, many people wanted to know how to read the Qur'an and to write in Arabic. Furthermore, many rulers at that period employed Islamic scholars as their administrators. As earlier mentioned, Ummu al-Jilmi in the 11th century, was the first Emperor to use Arabic for transactions in commerce, trade, religion, politics and administration, among other activities, with the people in Northern Nigeria and Arab (Alkali, 2001; Ishaq, 2009; & Sanni, 2011).

The Arabic language has been observed to have had a greater relationship with Nigerians than other languages in Nigeria. The language has different status among different groups of the Nigerian populace. It is generally believed to be an indigenous language of the Shuwa Arabs, in Ngala, Bornu State. It is a second language for those who acquired it after their mother language and a professional language for those who take it as their career medium. It is a religious language among the Muslims across the country as it is everywhere in the whole world. It is a language that stores Africa cultural heritage and history before the arrival of the British and French colonialists in West Africa, especially in Hausaland (Northern Nigeria) (Abdul Raheem, 2004; Oladosu, 1992; Adeyemi, 2006).

The arrival of both the British and French colonialists in West Africa brought some setback to Arabic education in Nigeria. The result was the promotion gained by English in becoming the national official language. This led Arabic language into losing recognition in the Nigeria public schools. It was then regarded as a non-examinable subject in the schools (Balogun, 1985).

In 1953, the preservation of the knowledge of Arabic and Islamic culture was considered necessary in Nigeria by some Muslims. They held a meeting which comprised northern and southern regions ministries of education in Kaduna. The meeting was successfully conducted and Arabic and Islamic Religious Knowledge (IRK) were recognised by the West African Examination Council (WAEC). Candidates were presented for the West African School Certificate (WASC) examination in the late 1950s. In 1974, the problem of lack of textbooks, inadequate syllabus was solved and Arabic syllabus for General Certificate of Examination GCE was designed (Balogun, 1985; Sanni, 2011; Ishaq, 2016).

In the Nigeria colleges of education, Arabic is recognised as one of the core courses. It is considered also as an accredited subject by the National Commission for Colleges of Education (NCCE). This was aimed at providing for the Nigeria Government affordable teachers of Arabic for the Lower, Middle and Upper Basic classes (FRN, 2013). Students of Arabic Language therefore, have an ample opportunity of combining other subjects with Arabic language. Arabic can be combined with any Nigerian language, English or French, any Arts, Social Sciences and Science subjects. Other combinable subjects include Islamic Studies, History, Christian Religious Studies, Social Studies, Economics, Political Science and Computer Science. Arabic is offered in Nigeria universities as a single course or combined with some other courses. It is also offered as a borrowed course from other departments in Nigerian universities (UTME Brochure, 2016; Sanni, 2011; Ishaq, 2009).

Today, Arabic language is one of the tools used to access information on the world-wide web (www) like other global languages such as Chinese, English, French, Hausa, Igbo and Yoruba, among other world languages using the internet (Google Search, 2016). In addition, Arabic can be used as a medium to teach computer at all levels of education. The table below presents the equivalent Arabic interpretation of the computer hardware and software terminologies.

This table shows that Arabic language can be used to access computer. Some of the computer terms are found in Arabic while few were borrowed from other major world languages. Among these borrowed ones are Microsoft Word (مايكرو سوفت وورد), Microsoft Publisher (مايكرو سوفت بابليشر), Lotus (لوتس) Adobe Photo Shop (أدوبي فوتوشوب) and so forth.

Concept, Nature and Forms of Information and Communication Technology (ICT) Tools in Education

Information can be explained as an act of providing facts or details about somebody or something. It is also a way of giving directives to somebody about something (Hornby, 2006). Communication, on the other hand, is the process of disseminating and receiving information with a comprehensive feedback via a medium or some media between the source and the target destination. Hornby (2006) explains further that communications are methods of sending information using telephone, computer, radio, television and railway. Information and Communication Technology (ICT) tools can, therefore, be defined as those instruments which can receive, store and disseminate facts and instructional programmes. According to Eze and Aja (2014), ICT teaching and learning activities are related to communication process between the teacher and the learner using instructional materials, which comprise such ICT tools as radio, tape recorder, television, telephone/teleconference, computer, the Internet, among other technological devices.

It is important to state that, prior to the contemporary ICT tools which are globally recognised, various instructional materials have been in existence. They are still useful and valuable in the art of instructional delivery. For instance, the use of real objects, improvised materials, models, pictograms, mounting of pictures on the cardboards, flannel board, flashcards, flipcharts, opaque and overhead projectors, films and photographs, among other tools, are instructional technologies. All of these can be

harmonised and used with the present ICT tools. These materials are, in the study, referred to as primitive or traditional technologies. The evolution of ICT tools has given positive development to each of them.

Furthermore, on the concept of ICT tools, the use of textbooks as print resources for instructional delivery has forever been an unavoidable technology in educational activities. Even the modern ICT recognises print as a hard copy product of the computer software. Note writing on the chalkboard by the teachers is taken by the learners in their exercise books using pen, or pencil and other notable technologies/tools for instructional activities in the school.

The nature of ICT tools can be referred to as their characteristics and functions. They can be enumerated as follows:

- a) e-Prints:
 - i. e-Books
 - ii. On-line periodical literature, this includes newspapers and magazines
- b) Pictures and Graphics
- c) Projection Devices
 - i. Filmstrips
 - ii. Films slides
- d) Sound recordings and radio
 - i. Audiotapes
 - ii. Compact Disk
 - iii. Radio
- e) Film and Videos
 - i. Films

- ii. Video Recording
- f. Educational Broadcasting
- g. Electronic Mail
- h. Teleconferencing
- i. Computer Conferencing
- j. World-Wide Web (www)

The pictures of some of the afore-mentioned educational technologies are displayed in Appendix B. Meanwhile, a brief explanation of each of them can be presented thus:

(a) **Projection Devices**

(i) A Slide Projector (Fig 1)

A slide projector is used with the computer system for presentation of programmes such as lectures, paper presentations in seminars, workshops and conferences. It can be used to deliver lectures to a large crowd with ease and thereby enhancing comprehension by the target audience.

For example, it is useful in teaching Arabic literature in a large class to show the material used; it can also be used to teach reading.

(ii) An Overhead Projector (Fig. 2)

It is another projection device that is used to magnify the appearance of a picture on a screen to a large audience. It is also referred to as transparency projector using transparent materials on which the text has been written and a picture has been drawn (Adegbija, 2000).

(iii) An Opaque Projector (Fig 3)

An opaque projector can be used to show texts, pictures and graphics to either a small or a large group of audience. It is educationally advantageous because it can display an already prepared lesson t

o the learners using chalkboard as screen with a reflection of light. It can also be used to display instructional materials which cannot be easily shown with the overhead projector (Mangal & Mangal, 2014; Olumorin, 2016).

(iv) A Television Set (Fig. 4)

Television is one of the instructional resources that are very useful for the teaching and learning processes. Students can be instructed by the teacher to watch an Arabic programme or Arabic channels at a particular time to disseminate knowledge, skills and values. Such channels to be watched include NTA Knowledge and Iqraa on Star Times. One can also connect it with the VCD or DVD machine to play already made Arabic programmes to students.

(v) A Radio Set (Fig. 5)

The radio set is an important instructional material which can be used to send and receive information/instruction to a wide range of audience at a time. It is useful in the area of public enlightenment as well as a source for educative information. It is an affordable instructional media. A programmed lesson, such as Arabic language skills, can be disseminated to as many targeted audience as possible at the same time. Furthermore, students can be instructed to listen to Arabic educative programmes at a particular time (Ughamadu, 1998; Mangal & Mangal, 2014; Olumorin, 2016).

(vi) A Tape Cassette Recorder (Fig. 6)

A tape cassette recorder can be used to record several lesson topics to be delivered to the learners. It can be displayed in the classroom controlled by the teacher. It can also be given to the learners for self study, for improvement on Arabic language skills, among other topics. It is easy to teach oral Arabic (Ughamadu, 1998).

(vii) A Video Camera (Fig. 7)

A video camera (on a tripod stand) can be used in education process to shoot educative plays and historic events to update and upgrade students' knowledge, skills and values in a particular topic of interest. In Arabic education, it can be effectively utilised to record topics in Drama (*masrahiyyah* المسرحية), using DVD or VCD players for delivering the recorded activities on a Video Display Unit (VDU) or a television set. According to Olumoriin (2016), any programme or lesson covered with the use of video camera is editable because it works with cassette.

(viii) Reel to Reel Projector (Fig. 8)

Reel to Reel (Cinematography) projector is an audio-visual projector. It has two reels that role its software which is 16mm or 35mm film. The reels move the software to an indicator and shoot it into the screen by showing images in the film and producing sound. These make it effective in the teaching and learning processes. Reel to reel projector can be used to show an Arabic educative event or Arabic drama (*masrahiyyah* المسرحية) (Olumoriin, 2016).

(ix) A Motion Picture Film (Fig. 9)

Motion picture can be referred to as instructional films that are lined up with different topics of a subject. They are usually available in 16mm and 35mm sizes respectively. The motion pictures can be shown using either 16mm or 35mm sized projectors. The projectors would be effectively operated by the teacher who is also the planner of the lesson topics. This can be used to show some areas in Arab countries and images of people in the history of the Arabs.

(x) A Personal Computer (Fig. 10)

Computer is used for educational delivery (for teaching and learning). It is the home of knowledge, skills, values and information. It can do everything a projector does. Furthermore, it is used to store, assemble, process, collate and print materials as well as to disseminate information in teaching and learning.

There are three different types of computer, namely desktop, laptop and palmtop. The computers comprise hardware and software. Hardware is the input device such as the central processing unit (CPU), monitor, keyboard, mouse and printer. The software includes discs, memory card, floppy discs, zip, flash drive, diskettes, etc.

The physical appearance of a computer is not the limit of its functions but it is beyond that as it places all knowledge in the entire world at one's finger tips. For example, it can be used as an Arabic instructional material for students storing in it a programme to be shown to them. The students can also be asked to open a site or a world-wide web (www) network by referring them to a material relevant to a particular Arabic topic or lesson. It can be used to send educational materials to their e-mail to read or as an online examination/test, etc. It is faster than other instructional machines in operation and delivery (Olumorin, 2016; Mangal & Mangal, 2014; Adegbija, 2000). Haddad and Drexler (n. d.) identified five levels of technology use. The levels include the following: Presentation, Demonstration, Drill and Practice, Interaction, and Collaboration.

Presentation and demonstration are regarded as the most basic of all other levels. The two can use all of the other technologies. It has been observed that technologies can be sorted into print, audio/video, radio and TV broadcasters, computer or the Internet. Presentation and demonstration of educational programmes make use of all of these categories. Drill and practice may also be conducted using an appropriate technology in all categories other than the video technologies (Haddad & Drexler n. d.). As for the interactive and collaborative learning, networked computer/Internet technologies are best used.

Radio and television broadcasts have played vital roles as ICT tools in the development of teaching and learning. The approaches to the use of radio and television broadcasting available for teaching and learning include:

- a. direct class teaching;
- b. school broadcasting to complement the instructional resources; and
- c.

general educational programming over community and international stations, which provides opportunities for the acquisition of both “general and informal education (p.2)”.

The direct class teaching approach is a temporary substitutive programme for teachers using broadcast programming. An example of this approach is “Interactive Radio Instruction” (IRI). According to en.wikibooks.org/ICT (2016), it is usually a “ready-made 20-30 minutes direct teaching and learning” (p. 2) activities to the learners on daily basis. The lessons are prepared based on specific learning objectives on particular aspects of such school subjects as mathematics, science, health and language, in the national curricula (p. 2). The use of radio broadcasting technology is aimed at improving the quality of classroom activities. It also assists teachers in less-resourced schools. This type of technology has been in use for educational activities in such places as Latin America, Africa and Asia since 1920-1990 (en.wikibooks.org/ICT, 2016).

Another technology of the direct class teaching approach is the television programme. This is a scheduled education programme specifically presented through satellite within a specified period of time. Perration (2016) described the Mexico Telesecundaria as a television instruction centrally produced to cover the same school curriculum throughout the country via satellite. It can be programmed like normal school daily activities considering each school subject (en.wikibooks.org, 2016).

With particular reference to the enumeration presented above of the ICT tools, it can be concluded that there are traditional and modern ICT tools. Both types consist of several forms, ranging from manuals to electronics. As a result of this, there are historical trends in the use of ICT tools for educational activities worldwide.

Influence of ICT Tools on Instructional Delivery of Arabic Education

As observed in Chapter One, both traditional and modern technologies have been contributing to the productivity of instructional delivery. This study reviews some of the previous works on the influence of ICT tools on instructional delivery in institutions of learning.

Adesote and Fatoki (2013) wrote a paper examining the role of ICT in the teaching and learning of History in the 21st century. They observed that the new ICT such as the Internet and multimedia have impacted positively on the field of education in many developed countries, while they are fairly or not used in schools in the developing countries. Adesote and Fatoki, (2013) asserted in their paper that the role of ICT in the provision of additional strategy is central to addressing the “major challenges” confronting the teachers and students of history” (p.2155). The conclusion of their paper was that traditional methods of teaching and learning of history can be influenced and changed by appropriate use of ICT to ensure quality education.

Yinusa-

Afolabi (2015) studied the role of ICT in national development, using the educational sector in Lagos State as a case study. He stated that the use of information and communication technologies is accepted by different nations, including Nigeria. This is because it is instrumental to economic development.

Yinusa-

Afolabi conducted a quantitative research using the questionnaire administered on some educators in the Lagos State education sector. The findings of his study revealed that most of the schools were not

equipped with ICT tools, despite its use for teaching and research by teachers. Lack of adequate power supply was also observed to be the cause of limitation in the use of ICT tools. Inadequate funding by the government was another factor contributing to the non-use of ICT tools in Lagos. This study recommended that personal interest should be developed by both the teachers and students in the use of ICT tools.

Another study was carried out by Utoware (2014), in Delta State University, to examine the implication of utilising Information and Communication Technology for effective instructional delivery in Business Education. It was observed that lecturers of Business Education were not fully provided with pedagogical and manipulative training in ICT, and this was the reason for the challenges faced by the teachers in the use of ICT tools as instructional materials. The study recommended that regular in-service trainings should be organised for the lecturers of Business Education for effective utilisation of those tools in instructional delivery.

Eze and Aja (2014), in their study on the implications of availability and utilisation of ICT for effective teaching and learning, observed that ICT devices were not adequate and the teachers were not adequately trained to utilise the available ICT tools. They finally recommended that: urgent review and implementation of policy on ICT in schools should be established; qualified ICT personnel should be recruited and posted to operate ICT tools; and, ICT skills and training should be incorporated into the teacher education curriculum.

Michael and Samson (2014) established that the use of ICT tools will provide employment opportunities for the youth, which will provide the nation with social and economic security. Kramer, Jenkins and Katz (2007) observed that "ICT has become the foundation of every sector of nations' economy, everywhere" (p.7). They also identified five fundamental roles of ICTs in modern economic growth and development. The roles include:

- (a) reduction of transaction costs, which enhances productivity;
- (b) enhancement of efficiency, transparency and accuracy by offering immediate connectivity with voice, data and vision;
- (c) substitution for other more expensive means of communicating and transacting such as travelling from one place to another;
- (d) widening the geographical scope of potential markets; and,
- (e) channelling knowledge and information of all kinds (p.7).

It can be deduced from all of the research works reviewed above that the impact of Information and Communication Technology can never be overlooked in educational delivery processes. Whether traditional or modern, ICT plays effective and efficient roles in the development of educational system worldwide. As a result of this, different forms of technologies have been used to enhance teaching/learning delivery. Series of advancement have been occurring as a result of information and communication technologies, especially in relation to educational technology. There is none among the educational subjects that is independent of educational technologies, and this is why Arabic language teaching/learning is given a special attention by this study with respect to the availability and use of ICT tools. This, among other reasons, has drawn the interest of the researcher into a concise writing about the position of Arabic education in Nigeria.

Globally ICT tools were useful in the education process. According to Bekele (2004), there are four benefits of ICT in instruction. These include: psychological benefit, sociological benefit, educational benefit, and economic benefit. These are expatiated further upon:

- (a) The psychological benefit, promotes the learners' motivation to learning. It increases their concentrations, interest and self-

control towards learning and understanding. The learners are positively affected in terms of attitudes, thinking, paying-attention and problem-solving, among other values (Opati, 2013 & Bekele, 2004).

(b) The educational benefits of ICT tools are noticeable in the area of motivating learners to interactive experience of learning the subject matters. It also exposes the learners to various experiences through the development of problem-solving skills.

(c) The sociological benefits of ICT tools are in terms of interpersonal communication between teachers and students, teachers and teachers, students and teachers, and students and students. This makes communication easy among these sets of people. The use of mobile phone, Ipad and Internet facilities has made dissemination of information and facts easier among the teachers and students as well as the community in which a particular institution is sited. As observed by Opati (2013), the use of ICT tools has been promoting the communication of findings and as well as support cooperative learning style, among diverse learners. However, Harvard (2011), in Opati (2013), has been reported to have noted that 90 % of the students spent “a considerable amount of time on social media” interacting with each other.

(d) The economic benefit of ICT tools, according to Chacha (2004), in Opati (2013), has solved the problem brought about by the needs for adequate learning facilities and materials commensurate to the larger population of the learners in Higher Education Institutions. In other words, the use of ICT tools has widened learners’ horizons of retrieving relevant materials online. The online education programmes in form of module preparation and distance learning has contributed economically to giving opportunity to many online based learners worldwide.

Availability and Use of ICT Tools for Instructional Delivery of Arabic Education

Historically, the use of technologies for educational purposes has been in existence right from the creation of mankind. Technologies have been referred to as aids, media, devices or tools of instructional delivery. Oral communication has been said to have predated the use of writing materials such as

leaves, stones, charcoals and reeds to keep records of events as well as to educate the young ones in the primitive stages of human society (Adegbija, 2000). Inscription of signs and symbols on stones and mud-

tablets were used in the past for record keeping. All these, among other technologies, formed the materials available and used for information and communication in the olden days. It is on record that the development of writing was discovered through the Egyptian civilisation. The advancement in technology for writing, using papyrus plants to make papers, and reeds of corn as pen with liquid extracted from leaves or charcoals was started by the Egyptians and Babylonians around the River Nile of Egypt.

Rote learning and memorisation was the traditional form of education worldwide then, including Nigeria before the introduction of Islamic and western systems of education. Despite the emphasis on memorisation, Islamic civilisation had developed the technologies to preserve the verses of the Holy Qur'an since the early seventh century. The verses were said to have been written on flat stones, bones of animals, plant leaves wood plants and palm branches, among other technologies. This continued and was transformed gradually to the advanced technologies with change of time. Now, records are kept using paper and pen which can further be stored in a vast Random Access Memory (RAM) of the computer system. The information stored in computer can be retrieved at anytime the need arises. It can be sent to the Internet, which is also capable of retaining it permanently and preserving it for future use.

The computer, the Internet and the world-wide web (www) are the most current ICT tools that enhance instructional delivery, in particular, and other informational and educational services in general. The computer has been described as an electronic gadget or device which can accept, process, store and reproduce data/information for use (Adegbija, 2000; Mangal & Mangal, 2014). In education, both the teacher and the learner are beneficiaries of the computer system. A teacher can programme his/her instructions on periodical basis and save them in

the computer to be delivered at an appropriate and sequenced time. The computer is made up of hardware and software materials. The hardware are the components that can be seen and held, while the software are those that cannot be touched but can be seen. In other words, the software are the in-built programmes that enable the computer users to perform operations.

Table 3

Summary of Evolutionary Trends in Information and Communication Technology (ICT)

s/	Invention	Inventor	Date
n			
1	Movable type (paper and ink)	Gutenberg (Germany)	1438
2	Telegraph	S.F.B. Morse of U.S.A.	1837
3	Photography	Frenchman L.G.M. Daguerre and an Englishman W.H.F. Talbot	1849
4	Telephone	Alexander Graham Bell of Scotland	1876
s/	Invention	Inventor	Date
n			
5	Radio	G. Marconi of Italy	1895
	Photostat	Professor Abbe Rene Graffin of France	1900
6	Television	J.L. Baird of Scotland	1925
7	Xerography	Chester F. Carlson of U.S.A.	1938

8	Micrograph (obtaining copies of the recorded material in highly reduced format)	Englishman J. B. Dancer and Frenchman Rene Dargan	1940
9	Development of communication satellites	U.S.S.R	4 th oct 1957
10	Laser technology (used for printing and memory device)	Theodore Mainman of U.S.A.	1960
11	Cable and facsimile transmission (Fax) technology	U.S.S.R	20 th century
12	Magnetic video camera, video disc and computers developed		20 th century

Source: Adapted from Adegbija (2000); Mangal & Mangal (2014) and Fakomogbon (2016)

The table presented above explains the development of educational technology to information and communication technology and their inventors with year of invention.

Empirical Studies on the Availability and Use of ICT Tools for Educational Programmes

Aja and Eze (2016) conducted a study on the use of Information and Communication Technology (ICT) devices for instructional delivery in secondary schools in Ebonyi State, Nigeria. They examined teachers' perception on the use of ICT tools for instructional delivery. A total of 3,285 teachers from 221 public schools formed the study population. 720 respondents were sampled randomly with the selection of eight (8) teachers from each of the 90 schools sampled. Mean scores were used to analyse the data collected. Their study revealed that ICT devices were not adequately available; the most available ones were not working well, which made them not to be adequately used. The trained personnel, who can use the ICT tools for instructional delivery, were not adequately available. Their study, therefore, suggested that the government should ensure adequate procurement and distribution of necessary ICT tools for instructional delivery in the schools. The study concluded that trained personnel should be

recruited, while the available ones should be retrained through “short term holiday programmes, workshops and conferences” (p.222), for improvement on the instructional delivery using ICT tools.

Salisu, Dollah and Zakariya (2014) conducted a study on Arabic education in the University of Ilorin. They reported that the role of Arabic documents as “source of information for European writers on Western and Central Sudan (p.647) was notable between 17th and 19th centuries. Their study showed the various forms of Arabic programmes in many Nigeria universities. Among the forms are B.A. (Arabic); B.A. Ed./B. Ed. (Arabic); B.A. (Arabic and Islamic Studies); M. A.; M. Ed.; and Ph.D. all in Arabic. Their study listed eleven (11) federal universities, nine (9) state universities and four (4) private universities that offer Arabic in Nigeria. The federal universities include:

- a. University of Ibadan, Ibadan
- b. University of Ilorin, Ilorin
- c. Obafemi Awolowo University, Ile-Ife
- d. University of Lagos, Lagos
- e. University of Jos, Jos
- f. Bayero University, Kano
- g. Ahmadu Bello University, Zaria
- h. Usmanu Danfodio University, Sokoto
- i. University of Maiduguri, Maiduguri
- j. Federal University, Dutse
- k. University of Abuja

The state universities in which Arabic is offered are:

- a. Nassarawa State University, Keffi
- b. Lagos State University, Ojo Lagos

- c. Umaru Musa Yar'adua University, Katsina
- d. Kogi State University, Anyigba
- e. Olabisi Onabanjo University, Ago-Iwoye
- f. Kaduna State University, Kaduna
- g. Adamawa State University, Mubi
- h. Tai Solarin University of Education, Ijagun
- i. Kwara State University, Malete

The list of the private universities in Salisu, Dollah and Zakariyah (2014) includes:

- a. Crescent University, Abeokuta
- b. Al-Hikmah University, Ilorin
- c. Fountain University, Oshogbo
- d. Katsina University, Katsina is now Al-Qalam University, Katsina

The study presented above concentrated on the role played by Arabic in national development as well as the stages it has passed. The present study differs from it with respect to its focus on the availability and use of ICT tools for Arabic education.

Onwuagboke and Single (2016) surveyed the faulty attitude and use of ICT in instructional delivery in a developing nation. Imo State of Nigeria was the population of the study that was carried out among the tertiary institutions in the state. A random selection of 300 academic staff was drawn from three types of tertiary institutions in Nigeria, namely colleges of education, polytechnics and universities. The descriptive, inferential and correlational statistics were used to analyse the data collected from a set of instruments tagged ICT attitude questionnaire. The findings of their study revealed that the academic staff had positive attitude towards ICT but with a low level of use. It was also revealed that no sign

ificant difference existed in their attitude based on gender as well as among the lecturers of Arabic in Nigeria colleges of education.

Ogunsola and Aboyade (2005) conducted a research on whether ICT is a revolution or evolution in Nigeria. The paper reviewed the first Nigerian satellite planted in Lanlate, which was a gateway to the other parts of the world in terms of international telecommunications. It investigated the general level of information technology devices in Nigeria. The paper was also concerned with finding out the level of use of technology to support information delivery and educational advancement in Nigeria. The paper concluded that the technique for data and information processing, storage, retrieval and dissemination with the advancement in computer technology is, indeed, a revolution within a decade.

The e-prints Library and Information (2014) has revealed some constraints on the implementation of ICT in Nigeria libraries. According to the e-prints Library and Information (2014), the following factors are among the problems that are hindering the adequate use of ICT tools:

- (a) Erratic power supply and inadequate national power grid
- (b) Low bandwidth and Internet connectivity problems
- (c) Lack of trained personal for sustainable capacity building
- (d) Limited financial resources
- (e) Lack of cooperative ventures
- (f) Low Current Supplied

By erratic power supply, we mean the supply of electricity in high voltages which often destroy electronic gadgets. In addition, there is insufficiency in the Nigerian power supply. This has been promoting the purchase of poorer generating sets.

The high cost of Internet connectivity as well as low bandwidth service and truncation are discouraging factors to the use of ICT tools in all our sectors. It was observed that for ICT to be effective in Nigeria, there is a need for strengthening the Internet network services, which will enable the GSM mobile phone to provide easy access to the Internet. By this, the competition between different service providers will reduce the prices via efficiency and effectiveness.

In addition to the above, hardworking personnel of our immediate nationality are needed in large quantity and required quality to build on a well trained information technology workforce. It has been observed by e-

prints that some of the existing trainers are foreigners who always flew out of the country after training our people without leaving back-

up with the trainees or the organisation that hired them. Therefore, it is crucial to have in-house trainers, apart from the expatriates, for effective use of ICT tools in Nigeria.

In terms of funding, e-prints library & information (2014) has lamented the inadequate funding of university libraries. It is one of the factors causing ineffectiveness of e-prints services. It was, therefore, recommended that adequate funding of e-libraries by the government would enhance the effective use of ICT in our institutions. Lastly, it was suggested that there is a need for cooperation among organisations in resource sharing to curb the problem of economic constraints. It was observed that the Nigerian Universities Library Consortium (NULIB) has

degrees, in or combined with education, are the most acceptable qualifications to practice the teaching profession (Yusuf, 2010 & Ishaq, 2016).

However, those degrees earned without any teaching qualification are not recognised for the teaching profession. They can only be remedied by having either an NCE or a Post-Graduate Diploma in Education (PGDE) as an additional qualification, even though the holders of B. A. or B. Sc without education may possess adequate knowledge of the subject matters. Yusuf (2010) conducted a study on the concurrent and consecutive teacher education programme in some selected Nigerian Universities. Her study scope covered the Universities in Kwara, Osun and Oyo States. She involved the school administrators, teacher educators and non-teacher educators of those universities. She used two varied questionnaires to gather information from the two groups of educators. Other instruments used in her study included the analysis of results of the students in Biology, Economics, English Language and Mathematics. The concurrent and consecutive teacher education curricula were used as criteria for observation. Robert Stake's Countenance Model was used to evaluate the programmes. Among her findings was that the concurrent teacher education model is better than the consecutive model based on the teacher training aspects (Yusuf, 2010 & Ishaq, 2016).

Having possessed a required qualification and knowledge of the subject matter to teach a particular subject, experience in a given profession is also influential on the effective teaching-learning process. Yusuf and Dada (2016) researched on the impact of teachers' qualification and experience on the performance of students in colleges of Education in Kaduna State, Nigeria. Their study population comprised two colleges involving 20 teachers and 100 students randomly selected. The questionnaire was used to collect data. The data were analysed using frequency counts, percentages and the t-test. Their study results depicted a better performance of those students taught by trained and experienced teachers than those taught by untrained and less-

experienced teachers. They included among their recommendations that the trained and experienced teachers should be employed to teach in the colleges of education in Kaduna State.

Another research was conducted by Dial (2008) on the effect of teacher experience and teacher degree levels on student achievement in Mathematics and Communication Arts. She used descriptive statistics and factorial ANOVA to analyse the data. She gathered the sections of Communication Arts and Mathematics of the Missouri Assessment programme examination conducted from 2005/2006 to 2006/2007 academic session. Her findings revealed that “years of experience ... and level of degree” (p.iii) had significant effects on the achievement of the learners in both courses examined. She finally recommended continuity in her research to cover the whole State.

Regarding the previous reviews of literature on gender attitude influence, teachers’ qualification and experience on the students’ academic performance, this study would examine the same with reference to the use of ICT tools for Ara12112bic education in the North-Central Nigeria Colleges of Education. This study would, among its expected findings, examine the level of the teachers’ trainings in ICT skill including their respective qualifications in computer-related knowledge, skills and value.

The subject areas of the participants in which there were difference are Humanities, Sciences, Language and General Studies. It was concluded by Teo (2008) that teachers should endeavour to develop positive attitudes to the use of computer as a vast technology which can aid teaching and learning.

Maikauskaite (2006) carried out a study on gender issues among pre-service teachers’ training in ICT literacy and online learning. A dynamic model was used based on three main components, namely

- (a) Present general problems showing technical ICT capabilities;
- (b) Situational and longitudinal sustainability; and,

(c) Transferability of ICT capabilities into future professional domains.

The study of Maikauskaite found no gender difference between male and female participants in the previous experience with computer. However, significant differences were found among the females and males in the area of the ICT technical capabilities and situational and longitudinal sustainability. Unlike the aforementioned literatures, more female teachers use the ICT tools for explanation in the primary school classes, than their male counterparts. 33.91 per cent of the female teachers had background knowledge usage while the male background knowledge and usage was 17.88 per cent (Motly, 2011).

The present researcher intends to examine some of the variables and peculiar issues as regards the gender attitudinal difference, if any, in the use of ICT tools for Arabic Education in Nigeria colleges of Education.

Appraisal of the Literature Reviewed

Various literatures have been reviewed in line with the topic of this research as itemised at the beginning of this chapter. With respect to the concept, nature and forms of Information and Communication Technology (ICT), it was observed that the use of technology in educational enterprises is as old as the existence of man. As a result, technology can be categorised into two broad divisions namely, traditional and modern technologies (Adegbija, 2000; Mangal & Mangal, 2013; Fakomogbon, 2016). This study investigates the level of availability and use of both traditional and modern ICT in the delivery of Arabic instruction in Nigeria colleges of education.

It was also noted in the review that series of advancements have occurred on the development of ICT tools in line with changes in human development. The changes range from visual, through audio, to audio-visual, including inscriptions of letters and signs and invention of papers and pen (Haddad & Drexler,

n.d; en-

wiki books.org, 2016; Mangal & Mangal, 2014; Adegbija, 2000). This study will compare the effectiveness of the existing past and present ICT tools in relation to their relevance to the delivery of Arabic education in Nigeria colleges of education.

It is a general belief that an effective instructional delivery is always influenced by the use of quality instructional tools. The use of ICT tools cannot be underrated in any effective teaching and learning activities. This submission has been endorsed by various scholars and researchers in the field of education (see, for example, Adesote & Fatoki, 2013; Yinusa – Afolabi, 2015; Utowase, 2014; Eze & Aja, 2014; Michael & Samson, 2014). This study will, therefore, look into the current influential role played by the appropriate use of the ICT tools to teach Arabic in Nigeria colleges of education.

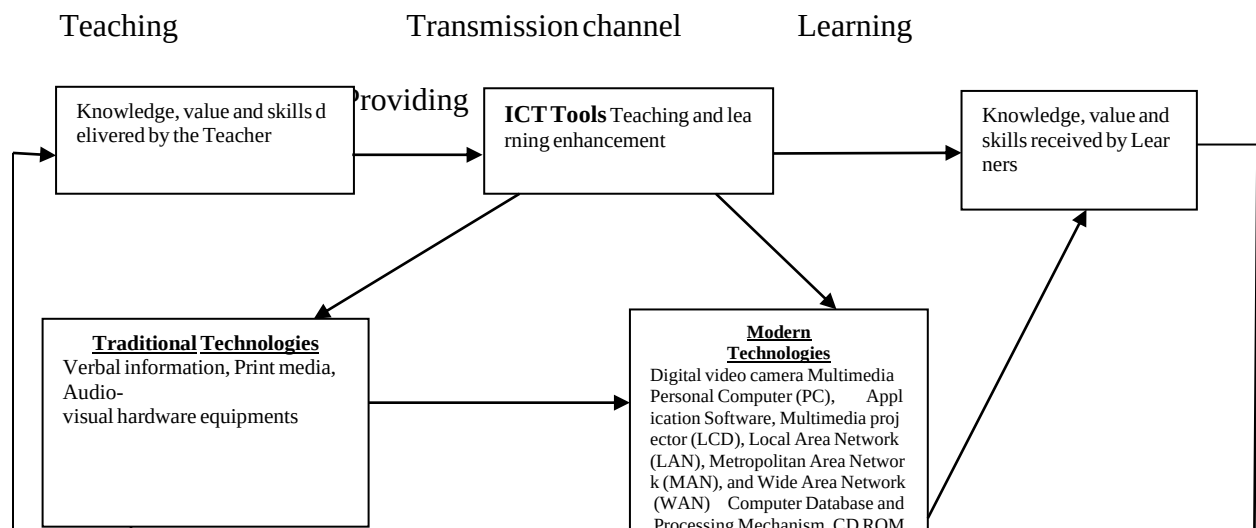
Arabic education is one of the courses run in many Nigeria colleges of education. It is categorised among the school of languages' departmental courses. Its place in Nigeria varies from one context to another. It has been observed by various scholars that Arabic education is learnt as a second language among the Muslims who need it for their religious rites. It is a foreign language among the academics and a mother tongue for a group of Nigeria ethnic community known as Shuwa Arab (Balogun, 1985; Fafunwa, 1997; AbdulRaheem, 2004; Adeyemi, 2006; Ishaq, 2009; All Africa, 2010; Sanni, 2011; Oladosu, 2012; NPE, 2013).

Empirically, studies have shown different type of ICT tools and their availability and levels of use in Nigeria institutions of learning. Most of the reports showed inadequacy in the use of the ICT tools, especially in the secondary schools and some higher institutions of learning (Aja & Eze, 2016; Salisu, Dollar & Zakariya, 2014; Omouagboke & Single, 2016; Ogunsola; Aboyade, 2005; e-prints library & information, 2014).

With particular reference to the title of this research and the literature reviewed, a conceptual framework has been constructed with adaptation from communication models explained by Adegbija (2000), Mangal and Mangal (2014), and Yusuf (2016).

Conceptual Framework

Fig1: A Communication Model on the Availability and Use of ICT Tools for Arabic Education in Nigeria Colleges of Education



Source: Modified by the researcher from communication models of Adegbija (2000), Mangal and Mangal (2014) and Yusuf (2016)

With Reference to the communication model (fig. 1), which can also be likened to Input-Process-Product (IPP) scheme, adapted by the researcher from Adegbija (2000), Mangal and Mangal (2014) and Yusuf (2016), the teaching of Arabic knowledge, concept, value and skills can be regarded as message (Input) to be transmitted using specific channels. These channels can be traditional or modern or a mixture of both (ICT Tools). The use (Process) of ICT tools is dependent on their availability in terms of functionality and accessibility. It also requires the teacher's skill to make effective use of the available tools to transmit instruction to the learners. Learning is also determined by the teacher's effectiveness and skills as regards the use of the ICT tools appropriately. All these are expected to enhance teaching and learning processes, which would further determine the students' level of performance (Product) in Arabic education. The performance provides the feedback which can be checked on skills of the teachers with respect to his/her use of the ICT tools based on the level of their availability. This feedback shall pave way for necessary correction and enhancement on further delivery of knowledge, value, con

cepts and skills, taking cognizance of adequate supply of required ICT tools and facilities as well as retraining teachers for the acquisition of necessary skills for the utilisation of the tools.

CHAPTER THREE

RESEARCH METHODOLOGY

In this chapter, the methodology for conducting the research is discussed as follows:

- a) Research Type
- b) Population, Sample and Sampling Techniques
- c) Instrumentation
- d) Procedure for Data Collection
- e) Data Analysis Techniques

Research Type

A descriptive survey research type was adopted to investigate the extent to which the ICT tools are available and used by the lecturers of Arabic education in the North-Central Nigeria colleges of education. A descriptive research refers to the process of collection and analysis of necessary data which investigate a situation or a phenomenon as it is (Gay, 1976; Razaq & Ajayi, 2000; Sanni, 2011; Kothari, 2013; Ishaq, 2016). For this reason, the descriptive research type was used to determine the availability and use of ICT tools by teachers of Arabic language in Colleges of Education, in the North-Central Nigeria.

Population, Sample and Sampling Techniques

The population of this study consisted of all Nigeria Colleges of Education. The target population was all the 75 lecturers of Arabic language in the 15 Colleges of Education in the North-Central zone of Nigeria, which was selected from six states, namely Kogi, Kwara, Nasarawa, Niger, Plateau and FCT-

Abuja. The study sample was purposively drawn from the colleges where Arabic language education is run. Finally, all the lecturers from the purposively sampled colleges participated in the study. The following is the list of the Colleges involved:

Table 4: Sampling Grid of Colleges Involved

S/N	College Name	Status
A.	Federal College of Education, Okene (FC-Okene), Kogi State	Federal
B.	Nigeria Army School of Education, Ilorin (NASE), Kwara State	Federal
C.	Federal College of Education, Kontagora (KONTA), Niger State	Federal
D.	Federal College of Education, Pankshin (FC-PANK), Plateau State	Federal
E.	Kwara State College of Education, Ilorin	State
F.	Kwara State College of Education, Oro	State
G.	Niger State College of Education, Mina,	State
H.	FCT College of Education, Zuba (ZUBA), FCT, Abuja	State
I.	College of Education, Akwanga (AKWANGA), Nasarawa State	State

	J. Alhikma College of Education, Ankpa (ACOE), Kogi State	Private
	K. Muhyideen College of Education, Ilorin, (MUHYIDEEN), Kwara State	Private
S/N	College Name	Status
	L. Adesina College of Education, Sahare (ADESHINA), Kwara State	Private
	M. Nana Aisat Memorial College of Education, Ilorin, (NANA), Kwara State	Private
	N. PAN Africa College of Education, Offa (PAN-AFR-COE), Kwara State	Private
	O. College of Education, Ilemona (COE-OFFA), Kwara State	Private

Instrumentation

A researcher-
designed questionnaire was used to elicit information about the levels of availability and use of the ICT
T tools for teaching Arabic Language in North-
Central Nigeria Colleges of Education. It was tagged “Questionnaire on the Availability and Use of IC
T Tools for Teaching Arabic Language in North-
Central Nigeria Colleges of Education (QAUITTACENCN)”. Section A of the instrument elicited the
respondents’ demographic data. Section B assessed the level of availability and use of the ICT tools by
the Arabic lecturers based on the twelve (12) research questions and four (4) hypotheses that addresse
d such in Chapter One. The research questions were answered accordingly by levels of affordability, a
dequacy, usability, functionality, accessibility, teachers’ gender, teachers’ qualification, teachers’ ex
perience, college ownership and attitude to the use of ICT tools to deliver instructions on Arabic. For e
ach item in the tables in section B, there are three alternative responses written against it. These are Ver

y Affordable/Very Adequate/Very Accessible (VA), Affordable/Adequate/Accessible (A) and Not Affordable/Not Adequate/Not Accessible (NA), Very Functional (VF), Functional (F) and Not Functional (NF), Very Usable (VU), Usable (U) and Not Usable (NU). The respondents were asked to choose and tick any one from three responses that is an appropriate answer to them.

To ensure that the instrument measures what it is supposed to measure, its face and content validity was established. A measurement and evaluation expert of the University of Ilorin was given the draft of the instrument to assess its ability to elicit necessary information. The expert's comment was used to produce the final draft of the questionnaire.

The reliability of the research instrument was ensured by conducting a test-retest method. The questionnaire was administered twice (three week interval) on the subset of the population which were not part of the population sampled. The research instrument was administered on 18 Arabic lecturers in the federal, state and private colleges of education (Federal College of Education (Special), Oyo, The College of Education, Lanlate and Mufutaudeen Olaniun College of Education) in Oyo State, Nigeria. The two results obtained were subjected to spearman's rho statistics and the reliability index of 0.78 was obtained. The instrument was therefore adjudged to be reliable.

Procedure for Data Collection

The researcher took permission from the authorities and the Arabic lecturers of the sampled colleges of education for a successful administration of the research instrument. The instrument was administered personally by the researcher with the help of research-assistants, to avoid unnecessary delay and to ensure the proper completion of the various sections of the questionnaire. The questionnaire was explained to the research-assistants, who in turn explained to the respondents, before its administration.

Data Analysis Techniques

The percentage indices was used to analyse the data which were collected in respect of levels of the availability and use of ICT tools by the lecturers of Arabic in the sampled colleges of education. The hypotheses on gender was tested with the use of the t-test, while the One-way Analysis of Variance (ANOVA) was applied for testing the hypotheses on Teachers' Qualification, Teachers' Experience, College Ownership and Teachers' Attitude.

CHAPTER FOUR

ANALYSIS AND RESULTS

This chapter deals with the analysis of data and the results. The presentation is guided by the research questions, the research hypothesis and the summary of the major findings. The demographic information of the participants is given in Table 4.

Demographic Characteristics of the Respondents

Demographic characteristics of the Lecturers (gender, college ownership, qualification, and experience) are described in table 4.

Table 5: Demographic Distributions of the Lecturers' Sampled (N=75)

S/N	Variable	Frequency	Percentage %
1.	Gender		
	Male	63	84
	Female	12	16
2.	Ownership		
	Federal	27	36
	State	39	52
	Private	9	12
3.	Qualification		
	Post-Graduate Diploma in Computer (PGDC)	19	25.3
	Advanced Diploma in Computer (ADC)	37	49.3
	Certificate in Computer Science (CCS)	13	17.3
	Self Effort Experience (SEE)	6	8
4.	Lecturing Experience		
	Less Experienced	21	28
	Experienced	34	45.3
	Very Experienced	20	26.7

Table 4 shows the demographic profile of lecturers teaching Arabic in North-Central Colleges of Education in Nigeria. Out of the 75 respondents that participated in the study, 63(84.0%) were males while 12(16.0%) were females. Moreover, 27(36.0%) were from Federal Colleges

of Education, 39(52.0%) were from State Colleges of Education while 9(12.0%) were from Private Colleges of Education.

Furthermore, 19(25.3%) of the Arabic lecturers have self effort experience (SEE), 37(49.3%) had Certificate in Computer Science (CCS), 13(17.3%) bagged Advanced Diploma in Computer (ADC), while 6(8.0%) obtained Post Graduate Diploma in Computer (PGDC). Further still, 21(28.0%) of the Arabic lecturers were less-

experienced, 34(45.3%) of them were experienced, while 20(26.7%) were very experienced in lecturing. The Research Questions A to E are answered in the following Tables by using the percentage.

Research Questions

Percentage was used to answer research questions A to E as shown in tables 5 to 10.

Research Question A: What ICT tools are available for teaching Arabic in colleges of education in North-Central Nigerian?

Table 6: Availability of ICT Tools for Teaching Arabic in Colleges of Education in North-Central Nigerian

S/N	Items	Availability				Inferences
		N/A	%	A	%	
1	Radio	0	0.0	75	100.0	Available
2	Television	1	1.3	74	98.7	Available
3	Slide projector	0	0.0	75	100.0	Available
4	Opaque projector	65	86.7	10	13.3	Not Available
5	Overhead projector	6	8.0	69	92.0	Available
6	Motion pictures	4	5.3	71	94.7	Available
7	Tape recorder	0	0.0	75	100.0	Available
S/N	Items	N/A	%	A	%	Inferences
8	Audio-video recorder device	0	0.0	75	100.0	Available

9	Teaching machines	69	92.0	6	8.0	Not Available
10	Digital video camera	0	0.0	75	100.0	Available
11	Multimedia personal computer (PC)	0	0.0	75	100.0	Available
	Application software such as:					
12a	Word processing	9	12.0	66	88.0	Available
12b	Spreadsheets	32	42.7	43	57.3	Available
12c	Power-point simulation	14	18.7	81	81.3	Available
12d	Speed recognition	56	74.7	19	25.3	Not Available
13	Multimedia projector; Liquid crystal display (LCD) to communicate to large group	37	49.3	38	50.7	Available
14	Local area network (LAN)	63	84.0	12	16.0	Not Available
15	Metropolitan area network (MLN)	47	62.7	28	37.3	Not Available
16	Wide area network (WAN)	58	77.3	17	22.7	Not Available
17	Multimedia PC/laptop with video card and web camera or digital video camera	6	8.0	69	92.0	Available
18	Computer Database and data processing mechanism, CD ROM and DVD	5	6.7	70	93.3	Available
19	E-mail, G-mail, WhatsApp, Internet and World Wide Web (WWW)	20	26.7	55	73.3	Available
20	Hypermedia and Hypertext resources	69	92.0	6	8.0	Not Available
S/N	Items	N/A	%	A	%	Inferences
21	Computer-mediated conferencing-	67	89.3	8	10.7	Not Available

	video and audio conferencing					e
22	Video text, tele-text, interactive video disk (IVD), interactive remote instruction (IRI) and Cell phone	63	84.0	12	16.0	Not Available
23	Idea of virtual classroom	65	86.7	10	13.3	Not Available

Table 5 reveals that fourteen (14) out of the twenty-three (23) items that addressed the ICT tools that were available for teaching Arabic in Colleges of Education in North-Central Nigeria. These include Radio, Television, Slide projector, Overhead projector, Motion pictures, Tape recorder, Audio-video recorder device, Digital video camera, Multimedia Personal Computer (MPC), Application software (Word processing, Spreadsheets, Powerpoint simulation and Speech recognition), Multimedia projector; Liquid Crystal Display (LCD) to communicate large group, Multimedia PC/Laptop with video card and web camera or digital video camera, Computer database, Data processing mechanism, CD ROM and DVD, E-mail, G-mail, WhatsApp, Internet and World Wide Web (www). The remaining 9 items which were not available are Opaque projector, Teaching machines, Local Area Network (LAN), Metropolitan Area Network (MLN), Wide Area Network (WAN), Hypermedia and Hypertext, Computer-mediated conferencing-video, Video text, Tele-text, Interactive Video Disc (IVD) interactive remote instruction (IRI) and Cell phone and idea of virtual classroom.

Research Question B: Are the Arabic education ICT tools affordable?

Table 7: Affordability of ICT tools for teaching Arabic in Colleges of Education in North-Central Nigerian

S/N	Items	Affordability						Mean	SD	Inferences
		N/A	%	A	%	V/A	%			
1	Radio	0	0.0	34	45.3	41	54.7	2.1867	.74785	Very Affordable
2	Television	9	12.0	25	33.3	41	54.7	2.4267	.70084	Very Affordable
3	Slide projector	20	26.6	23	30.6	32	42.6	2.1600	.82265	Very Affordable
4	Opaque projector	22	29.3	28	37.3	25	33.3	2.0800	.81804	Affordable
5	Overhead projector	15	20.0	27	36.0	33	44.0	2.2400	.76829	Very Affordable
6	Motion pictures	29	38.7	25	33.3	21	28.0	1.9467	.85255	Affordable
7	Tape recorder	15	20.0	27	36.0	33	44.0	2.2400	.76829	Very Affordable
8	Audio-video recorder device	17	22.7	27	36.0	31	41.3	2.1867	.78316	Very Affordable
9	Teaching machines	36	48.0	17	22.7	22	29.3	1.8133	.86514	Not Affordable
10	Digital video camera	23	30.7	30	40.0	22	29.3	1.9867	.77970	Affordable
11	Multimedia personal computer (PC)	8	10.7	27	36.0	40	53.3	2.4267	.68128	Very Affordable
	Application software such as:									
12a	Word processing	6	8.0	25	33.3	44	58.7	2.5067	.64459	Very Affordable
12b	Spreadsheets	4	5.3	28	37.3	43	57.3	2.5200	.60090	Very Affordable
12c	Power-point simulation	8	10.7	27	36.0	40	53.3	2.4267	.68128	Very Affordable
12d	Speech recognition	14	18.7	31	41.3	30	40.0	2.2133	.74059	Affordable
13	Multimedia projector; Liquid crystal display (LCD) to communicate to large group	12	16.0	25	33.3	38	50.7	2.3467	.74423	Very Affordable
S/N	Items	N/A	%	A	%	V/A	%	Mean	SD	Inferences
14	Local area network (LAN)	10	13.3	36	48.0	29	38.7	2.2533	.67969	Affordable
15	Metropolitan area net	21	28.0	28	37.3	26	34.7	2.0800	.80135	Affordable

	work (MLN)									
16	Wide area network (WAN)	17	22.7	32	42.7	26	34.7	2.2000	.78843	Affordable
17	Multimedia PC/laptop with video card and web camera or digital video camera	12	16.0	34	45.3	29	38.7	2.2267	.70851	Affordable
18	Computer Database and data processing mechanism, CDROM and DVD	2	2.7	37	49.3	36	48.0	2.4533	.55247	Affordable
19	E-mail, G-mail, WhatsApp, Internet and World Wide Web (www)	3	4.0	21	28.0	51	68.0	2.6400	.56089	Very Affordable
20	Hypermedia and Hypertext resources	16	21.3	31	41.3	28	37.3	2.2000	.77110	Affordable
21	Computer-mediated conferencing- video and audio conferencing	13	17.3	26	34.7	36	48.0	2.3067	.75289	Very Affordable
22	Video text, tele-text, interactive video disk (IVD) interactive remote instruction (IRI) and Cell phone	14	18.7	31	41.3	30	40.0	2.2133	.74059	Affordable
23	Idea of virtual classroom	18	24.0	31	41.3	26	34.7	2.1067	.76359	Affordable

Table 7 reveals that only item 9 (teaching machines) was not affordable out of all the twenty-three (23) ICT tools used in teaching Arabic Education. Eight (8) of the items were affordable, they are ; Digital video camera, Speech recognition, Local area network (LAN), Metropolitan area network (MLN), Wide area network (WAN), Multimedia PC/laptop with video card and web camera or digital video camera, Computer Database and data processing mechanism, CDROM and DVD, Video text, tele-

text, Interactive video disk (IVD), Interactive remote instruction (IRI) and Cell phone, Idea of virtual classroom. Thirteen (13) items were very affordable include ; Radio, Television, Slide projector, Overhead projector, tab recorder, Audio-video recorder device, Multimedia personal computer (PC), Application software such as: (Word processing, Spreadsheets, power-point simulation, Speech recognition), Multimedia projector; Liquid crystal display (LCD) to communicate to large group, E-mail, G-mail, WhatsApp, Internet and World Wide Web (www), Computer-mediated conferencing-video and audio conferencing

Research Question C: Are the Arabic education ICT tools adequately provided?

Table 8: Adequacy of ICT Tools for Teaching Arabic in Colleges of Education in North-Central Nigerian

S/N	Items	N/A	%	A	%	V/A	%	Mean	SD	Inferences
1	Radio	15	20.0	35	46.7	25	33.3	2.1333	.72286	Adequate
2	Television	12	16.0	43	57.3	20	26.7	2.1067	.64877	Adequate
3	Slide projector	24	32.0	27	36.0	24	32.0	2.0000	.80539	Adequate
4	Opaque projector	56	74.7	14	18.7	5	6.6	1.9333	.79412	Not Adequate
5	Overhead projector	41	54.6	20	26.6	14	18.6	2.1067	.78108	Not Adequate
6	Motion pictures	42	56.0	19	25.3	14	18.7	1.7733	.72733	Not Adequate
7	Tape recorder	14	18.7	38	50.7	23	30.7	2.1200	.69671	Adequate
8	Audio-video recorder device	20	26.7	34	45.3	21	28.0	2.0133	.74423	Adequate
9	Teaching machines	60	80.0	8	10.7	7	9.3	1.6533	.74423	Not Adequate
10	Digital video camera	17	22.7	22	29.3	38	48.0	1.7467	.80695	Adequate
11	Multimedia personal computer (PC)	8	10.7	31	41.3	36	48.0	2.3733	.67330	Very Adequate
S/N	Items	N/A	%	A	%	V/A	%	Mean	SD	Inferences
	Application software such as:									
12a	Word processing	10	13.3	26	34.7	39	52.0	2.3867	.71458	Very Adequate
12b	Spreadsheets	7	9.3	39	52.0	29	38.7	2.2933	.63189	Very Adequate

12c	Power-point simulation	8	10.7	43	57.3	24	32.0	2.2133	.62154	quate Very Adequate
12d	Speech recognition	18	24.0	39	52.0	18	24.0	2.0000	.69749	Very Adequate
13	Multimedia projector; Liquid crystal display (LCD) to communicate to large group	24	32.0	28	37.3	23	30.7	1.9867	.79684	Adequate
14	Local area network (LAN)	50	66.7	19	25.3	6	8.0	1.9600	.74326	Not Adequate
15	Metropolitan area network (MLN)	49	65.3	18	24.0	8	10.7	1.8400	.75409	Not Adequate
16	Wide area network (WAN)	70	93.3	3	4.0	2	2.7	1.8933	.78108	Not Adequate
17	Multimedia PC/laptop with video card and web camera or digital video camera	40	53.3	6	8.0	12	16.0	1.8533	.67169	Not Adequate
18	Computer Database and data processing mechanism, CDROM and DVD	1	1.3	51	68.0	23	30.7	2.2933	.48695	Very Adequate
19	E-mail, G-mail, WhatsApp, Internet and World Wide Web (WWW)	4	5.3	26	34.7	45	60.0	2.5467	.59940	Very Adequate
20	Hypermedia and Hyper text resources	54	72.0	15	20.0	6	8.0	1.9600	.81274	Not Adequate
21	Computer-mediated conferencing- video and audio conferencing	55	73.3	12	16.0	8	10.7	1.0000	.82199	Not Adequate
22	Video text, tele-text, interactive video disk (IVD), interactive remote instruction (IRI) and Cell phone	66	88.0	5	6.7	4	5.3	1.9200	.78431	Not Adequate
23	Idea of virtual classroom	68	90.6	5	6.7	2	2.7	1.7733	.70851	Not Adequate

Table 8 reveals that out of the twenty-three (23) ICT tools used in teaching Arabic Education, seven (7) items that were adequate include Ra

dio, Television, Slide projector, Overhead projector, Motion pictures, Tape recorder, Audio-video recorder device, Digital video camera, Multimedia projector; Liquid Crystal Display (LCD) to communicate large group, Multimedia PC/Laptop with video card and web camera or digital video camera. The very adequate items for teaching Arabic are Multimedia Personal Computer (MPC), Application software (Word processing, Spreadsheets, Powerpoint simulation and Speech recognition), Computer database, Data processing mechanism, CD ROM and DVD, E-mail, G-mail, WhatsApp, Internet and World Wide Web (WWW), while (12) items that were not adequate are Opaque projector, Overhead projector, Motion pictures, Teaching machines, Local Area Network (LAN), Metropolitan Area Network (MLN), Wide Area Network (WAN), Multimedia PC/laptop with video card and web camera or digital video camera, Hypermedia and Hypertext resources, Computer-mediated conferencing-video and audio conferencing video text, tele-text, Interactive Video Disk (IVD) and Interactive Remote Instruction (IRI) and Cell phone and Idea of virtual classroom.

Research Question D: Are the Arabic education ICT tools accessible to the teachers/learners?

Table 9: Accessibility of ICT Tools for Teaching Arabic in Colleges of Education in North-Central Nigerian

S/N	Items	Accessibility						Mean	SD	Inferences
		N/A	%	A	%	V/A	%			
1	Radio	16	21.3	44	58.7	15	20.0	1.9867	.64710	Accessible
2	Television	8	10.7	38	50.7	29	38.7	2.2800	.64849	Very Accessible
3	Slide projector	17	22.7	36	48.0	22	29.3	2.0667	.72286	Accessible
4	Opaque projector	40	53.3	16	21.3	19	25.3	1.9067	.70084	Not Accessible
5	Overhead projector	17	22.7	34	45.3	24	32.0	2.0933	.73839	Accessible
6	Motion pictures	56	74.7	15	20.0	4	5.3	1.7733	.68917	Not Accessible
S/N	Items	N/A	%	A	%	V/A	%	Mean	SD	Inferences
7	Tape recorder	14	18.7	41	54.7	20	26.7	2.0800	.67303	Accessible

8	Audio-video recorder device	18	24.0	42	56.0	15	20.0	1.9600	.66658	Accessible
9	Teaching machines	51	68.0	14	18.7	10	13.3	1.7333	.72286	Not Accessible
10	Digital video camera	22	29.3	43	57.3	10	13.3	1.8400	.63756	Accessible
11	Multimedia personal computer (PC)	8	10.7	37	49.3	30	40.0	1.2933	.65292	Accessible
	Application software such as:									
12a	Word processing	8	10.7	35	46.7	32	42.7	2.3200	.66088	Very Accessible
12b	Spreadsheets	7	9.3	41	54.7	27	36.0	2.2667	.62240	Very Accessible
12c	Power-point simulation	10	13.3	39	52.0	26	34.7	2.2133	.66360	Very Accessible
12d	Speed recognition	14	18.7	42	56.0	19	25.3	2.0667	.66441	Very Accessible
13	Multimedia projector ; Liquid crystal display (LCD) to communicate to large group	43	57.3	20	26.7	12	16.0	2.0267	.82156	Not Accessible
14	Local area network (LAN)	61	81.3	10	13.3	4	5.3	1.9733	.73472	Not Accessible
15	Metropolitan area network (MLN)	65	86.7	7	9.3	3	4.0	1.8000	.80539	Not Accessible
16	Wide area network (WAN)	60	80.0	8	10.7	7	9.3	1.8933	.78108	Not Accessible
17	Multimedia PC/laptop with video card and web camera or digital video camera	12	16.0	46	61.3	17	22.7	2.0667	.62240	Very Accessible
18	Computer Database and data processing mechanism, CDROM and DVD	2	2.7	60	80.0	13	17.3	2.1467	.42532	Very Accessible
19	E-mail, G-mail, WhatsApp, Internet and World Wide Web (WWW)	3	4.0	24	32.0	48	64.0	2.6000	.56949	Very Accessible
20	Hypermedia and Hypertext resources	67	89.3	5	6.7	3	4.0	1.8667	.81096	Not Accessible
21	Computer-mediated conferencing-video and audio conferencing	65	86.7	4	5.3	6	8.0	2.0000	.80539	Not Accessible

S/N	Items	N/A	%	A	%	V/A	%	Mean	SD	Inferences
22	Video text, tele-text, interactive video disk (IVD), interactive remote instruction (IRI) and Cell phone	53	70.7	12	16.0	10	13.3	1.9600	.74326	Not Accessible
23	Idea of virtual classroom	50	66.7	18	24.0	7	9.3	1.7200	.62731	Not Accessible

Table 9 reveals that out of all the twenty-three (23) ICT tool items used in teaching Arabic education seven of them were accessible. They are Radio, Slide projector, Overhead projector, Tape recorder, Audio-video recorder device, Digital video camera and Multimedia personal computer (PC). The five very accessible ICT tools for teaching Arabic comprise Television, Application software (Word processing, Spreadsheets, Powerpoint simulation and Speed recognition), Multimedia PC/laptop with video card and web camera or digital video camera, Computer Database and data processing mechanism, CD ROM and DVD and E-mail, G-mail, WhatsApp, Internet and World Wide Web (WWW). Eleven (11) items were not accessible: Opaque projector, Motion pictures, Teaching machines, Multimedia projector; Liquid crystal display (LCD) to communicate to large group, Local area network (LAN), Metropolitan area network (MLN), Wide area network (WAN), Hypermedia and Hypertext resources, Computer-mediated conferencing-video and audio conferencing, Video text, tele-text, interactive video disk (IVD) and interactive remote instruction (IRI) and Cell phone and Idea of virtual classroom.

Research Question E: Are the Arabic education ICT tools functional?

Table 10: Functionality of ICT Tools for Teaching Arabic in Colleges of Education in North-Central Nigerian

S/N	Items	Functionality						Mean	SD	Inferences
		N/F	%	F	%	V/F	%			
1	Radio	16	21.3	38	50.7	21	28.0	1.9333	.70391	Functional
2	Television	9	12.0	43	57.3	23	30.7	2.1867	.63017	Very Functional
3	Slide projector	33	44.0	21	28.0	21	28.0	1.8400	.83892	Functional
4	Opaque projector	55	73.3	14	18.7	6	8.00	1.7733	.78108	Not Functional
5	Overhead projector	20	26.7	31	41.3	24	32.0	2.0533	.76923	Functional
6	Motion pictures	47	62.7	19	25.3	13	17.3	1.7200	.68891	Not Functional
7	Tape recorder	25	33.3	31	41.3	10	25.3	1.9200	.76688	Functional
8	Audio-video recorder device	20	26.7	40	53.3	15	20.0	1.9333	.68445	Functional
9	Teaching machines	68	90.7	5	6.7	2	2.6	1.6667	.72286	Not Functional
10	Digital video camera	29	38.7	36	48.0	10	13.3	1.7467	.67969	Functional
11	Multimedia personal computer (PC)	6	8.0	34	45.3	35	46.7	2.3867	.63445	Very Functional
	Application software such as:									
12a	Word processing	7	9.3	33	44.0	35	46.7	2.3733	.65292	Very Functional
12b	Spreadsheets	10	13.3	43	57.3	22	29.3	2.1600	.63756	Very Functional
12c	Power-point simulation	9	12.0	41	54.7	25	33.3	2.2133	.64291	Very Functional
12d	Speech recognition	10	13.3	43	57.3	22	29.3	2.1600	.63756	Very Functional
13	Multimedia projector; Liquid crystal display (LCD) to communicate to large group	49	65.3	14	18.7	12	16.0	1.0667	.68445	Not Functional
14	Local area network (LAN)	60	80.0	7	9.3	8	10.7	1.0267	.77063	Not Functional
15	Metropolitan area network (MLN)	50	66.7	10	13.3	15	20.0	1.9067	.79140	Not Functional
16	Wide area network (WAN)	55	73.3	11	14.7	9	12.0	2.0000	.78843	Not Functional

S/N	N) Items	N/A	%	A	%	V/A	%	Mean	SD	onal Inferences
17	Multimedia PC/laptop with video card and web camera or digital video camera	8	10.7	50	66.7	17	22.7	2.1200	.56854	Very Functional
18	Computer Database and data processing mechanism, CD ROM and DVD	15	20.0	41	54.7	19	25.3	2.0533	.67570	Very Functional
19	E-mail, G-mail, WhatsApp, Internet and World Wide Web (WWW)	3	4.0	36	48.0	36	48.0	2.4400	.57516	Very Functional
20	Hypermedia and Hypertext resources	60	80.0	10	13.3	5	6.7	1.9467	.80360	Not Functional
21	Computer-mediated conferencing-video and audio conferencing	61	81.3	6	8.0	8	10.7	1.9867	.76217	Not Functional
22	Video text, tele-text, interactive video disk (IVD), interactive remote instruction (IRI) and Cell phone	60	80.0	6	8.0	9	12.0	1.8933	.74568	Not Functional
23	Idea of virtual classroom	68	90.6	2	2.7	5	6.7	1.2933	.98328	Not Functional

Table 10 reveals that six (6) ICT tools used in teaching Arabic language were functional such as: Radio, Slide projector, Overhead projector, Tape recorder, Audio-video recorder device and Digital video camera. The six (6) that were very functional are Television, Multimedia personal computer (PC), Application software (Word processing, Spreadsheets, Powerpoint simulation, Speech recognition, Multimedia PC/laptop with video card and web camera or digital video camera, Computer Database and data processing mechanism, CD ROM and DVD E-mail, G-mail, WhatsApp, Internet and World Wide Web (WWW). The eleven (11) that were not functional are Opaque projector, Motion pictures, Teaching machines, Multimedia projector; Liquid crystal display (LCD) to communicate to large group, Metropolitan area network (MLN), Wide area network (WA

N), Hypermedia and Hypertext resources, Computer-mediated conferencing-
video and audio conferencing Video text, tele-
text, interactive video disk (IVD) and interactive remote instruction (IRI) and Cell phone, Local area n
etwork (LAN) and Idea of virtual classroom.

Research Question f: To what extent are the Arabic education ICT tools used?

**Table 11: Usability of ICT tools for teaching Arabic in Colleges of Education
in North-Central Nigerian**

S/N	Items	Usability						Mean	SD	Inferences
		N/U	%	U	%	V/U	%			
1	Radio	16	21.3	38	50.7	21	28.0	2.0667	.70391	Usable
2	Television	14	18.7	37	49.3	24	32.0	2.1333	.70391	Very Usable
3	Slide projector	30	40.0	19	25.3	26	34.7	1.9467	.86826	Usable
4	Opaque projector	44	58.7	3	4.0	28	37.3	1.8000	.83827	Not Usable
5	Overhead projector	28	37.3	22	29.3	25	33.3	1.9600	.84534	Usable
6	Motion pictures	31	41.3	31	41.3	13	17.3	1.7600	.73227	Usable
7	Tape recorder	25	33.3	30	40.0	20	26.7	1.9333	.77692	Usable
8	Audio- video recorder device	17	22.7	43	57.3	15	20.0	1.9733	.65705	Usable
9	Teaching machines	48	61.3	17	22.7	12	16.0	1.5467	.75861	Not Usable
10	Digital video camera	50	66.7	18	24.0	7	9.3	1.6000	.00000	Not Usable
11	Multimedia personal computer (PC) Application softwares such as:	5	6.7	41	54.7	29	38.7	2.0000	.00000	Very Usable
12a	Word processing	3	4.0	44	58.7	28	37.3	1.8800	.32715	Usable
12b	Spreadsheets	19	25.3	36	48.0	20	27.7	1.5733	.49792	Usable
12c	Power-point simulation	25	33.3	31	41.3	19	25.3	1.8133	.39227	Usable
12d	Speed recognition	26	34.7	28	37.3	21	28.0	1.2533	.43785	Usable
13	Multimedia projector; Liquid crystal display (LCD) to communicate to large group	49	65.3	19	25.3	7	9.3	1.5067	.50332	Not Usable
14	Local area network (LAN)	44	58.7	28	37.3	3	4.0	1.1600	.36907	Not Usable
S/N	Items	N/A	%	A	%	V/A	%	Mean	SD	Inferences

15	Metropolitan area network (MLN)	49	65.3	14	18.7	12	16.0	1.3733	.48695	Not Usable
16	Wide area network (WAN)	60	80.0	10	13.3	5	6.7	1.2267	.42149	Not Usable
17	Multimedia PC/laptop with video card and web camera or digital video camera	20	26.7	39	52.0	16	21.3	1.9200	.27312	Usable
18	Computer Database and data processing mechanism, CDROM and DVD	13	17.3	42	56.0	20	26.7	1.9333	.25112	Usable
19	E-mail, G-mail, WhatsApp, Internet and World Wide Web (WWW)	1	1.3	38	50.7	36	48.0	1.7333	.44519	Very Usable
20	Hypermedia and Hypertext resources	50	66.7	18	24.0	7	9.3	1.0800	.27312	Not Usable
21	Computer-mediated conferencing- video and audio conferencing	47	62.7	19	25.3	13	17.3	1.1067	.31077	Not Usable
22	Video text, tele-text, interactive video disk (IVD), interactive remote instruction (IRI) and Cell phone	49	65.3	14	18.7	12	16.0	1.1600	.36907	Not Usable
23	Idea of virtual classroom	60	80.0	7	9.3	8	10.7	1.1333	.34222	Not Usable

Table 11 shows that out of the twenty-three (23) items that addressed the ICT tools that were used for teaching Arabic education in colleges of education in North-Central Nigeria, only nine (9) items that were usable are these Radio, Overhead projector, Motion pictures, Tape recorder, Audio-video recorder device, Application software (Word processing, Spreadsheets, Power-point simulation, Speech recognition, Multimedia PC/laptop with video card and web camera or digit

al video camera and Computer Database and data processing. Three (3) items that were very usable include Television Multimedia personal computer (PC) E-mail, G-mail, WhatsApp, Internet and World Wide Web (www). The remaining eleven (11) items were not usable such as: Opaque projector, Teaching machines, Digital video camera, Multimedia projector; Liquid crystal display (LCD) to communicate to large group, Local Area Network (LAN), Metropolitan Area Network (MLN), Wide Area Network (WAN), Hypermedia and Hypertext resources, Computer-mediated conferencing-video and audio conferencing Video text, tele-text, interactive video disk (IVD), interactive remote instruction (IRI) and Cell phone and Idea of virtual classroom

Research Hypotheses

H₀₁:

There is no significant difference in the attitudes of the male and female teachers towards the use of ICT tools for teaching Arabic language.

Table 12: Differences in the Attitudes of the Male and Female Lecturers Towards the Use of ICT Tools for Teaching the Arabic Language

Gender	N	Mean	SD	Df	t-value	Sig (2-tailed)	Decision
Male	63	21.51	2.75	73	.384	.702	NS
Female	12	21.83	2.33				

Table 12 shows the t-test calculated value (73) = 0.384, while its p-value is 0.702 at alpha level of 0.05. Since the p-value is greater than the alpha value (0.702 > 0.05), the hypothesis was thus not rejected. The implication of this is that the male teachers' attitude towards the use of ICT tools for teaching the Arabic language was not significantly different from their female counterpart.

H02:

There is no significant difference among teachers in the use of ICT tools for teaching Arabic language based on qualification.

Table 13: Differences among Lecturers in the Use of ICT Tools for Teaching the Arabic Language Based on Qualification

Source of Variance	Sum of Squares	Df	Mean Square	F	Sig	Decision
Between Groups	37.58	3	12.53	1.80	.154	NS
Within Groups	492.90	71	6.94			
Total	530.48	74				

Table 13 reveals an F-value (3, 71) = 1.80 which is not significant at 0.05 alpha level. The hypothesis is thus not rejected since the p-value 0.154 is greater than the 0.05 alpha value ($0.154 > 0.05$). The result tends to indicate that teachers of Arabic language did not significantly differ in their use of ICT tools based on their qualification.

H03:

There is no significant difference in the attitudes of the lecturers in the Federal, State and Private Colleges of Education in the use of ICT tools for teaching Arabic language.

Table 14: Differences among Attitudes of the Lecturers in the Federal, State and Private Colleges of Education in the Use of ICT tools for Teaching the Arabic Language

Source of Variance	Sum of Squares	Df	Mean Square	F	Sig	Decision
Between Groups	36.514	2	18.257	2.661	.077	NS
Within Groups	493.966	72	6.861			
Total	530.480	74				

Table 14 reveals an F-value (2, 72) = 2.661 which is not significant at 0.05 alpha level. The hypothesis was thus not rejected since the p-value 0.077 is greater than the 0.05 alpha value (0.077 > 0.05). The result tends to indicate that Lecturers of Arabic Language did not significantly differ in their use of ICT tools based on their College Type.

H₀₄:

There is no significant difference Among Teachers in the Use of ICT Tools for Teaching Arabic Language Based on Lecturers' experience.

Table 15: Differences among Attitudes of the Lecturers in Colleges of Education in the Use of ICT Tools for Teaching the Arabic Language Based on Lecturers' Experience

Source of Variance	Sum of Squares	Df	Mean Square	F	Sig	Decision
Between Groups	11.172	2	5.586	.774	.465	NS
Within Groups	519.308	72	7.213			
Total	530.480	74				

Table 15 reveals an F-value (2, 72) = .774 which is not significant at 0.05 alpha level. The hypothesis was thus accepted since the p-value 0.465 is greater than the 0.05 alpha value (0.465 > 0.05). The hypothesis which states that there is no significant difference among teachers in the use of ICT tools for teaching the Arabic language based on experience was thus not rejected. The result tends to indicate that teachers of Arabic language did not significantly differ in their use of ICT tools based on their teaching experience.

Summary of the Major Findings

The major findings of this study were summarized below using demographic information, the results of research questions and hypotheses respectively:

a) Seventy-

five (75) (84% male and 16% female) lecturers of Arabic responded to the questionnaire, which were d

istributed among 75 (27 Federal, 39 State and 9 Private) lecturers from 15 Colleges of Education across the North-

Central Nigeria, with consideration to their qualifications in the use of Computer and general teaching experiences.

b) Out of twenty-

three (23) ICT tools, which were assessed to ascertain their availability level for teaching Arabic in colleges of education in North-

Central Nigeria, 14 (60.9%) were available, while 9 (39.1%) were not available.

c) The findings on the affordability level of the ICT tools used for teaching Arabic depicted that 8 (34.8%) were affordable, 13 (56.5%) were very affordable, while 2 (8.7%) were not affordable.

d) It was also found that 7 (30.4%) were adequate, 4 (17.4%) were very adequate, while 12 (52.2%) were not adequate.

e) As regards the accessibility level of the ICT tools for teaching Arabic in the North Central Colleges of Education, 7 (30.43%) were accessible, 5 (21.74%) were very accessible and 11 (47.83%) were not accessible.

f) Functionality level assessment of the ICT tools for teaching Arabic at the Colleges of Education in the North Central showed that 6 (26.1%) were functional, 6 (26.1%) were very functional and 11 (47.8%) were not functional.

g) The findings further indicated that 9 (39.1%) were usable, 3 (13%) were very usable, while 11 (47.8%) were not usable.

h) The test of hypothesis one (H_{01}) depicted that there is no significant difference between the male and female lecturers in their attitude towards the use of ICT tools to teach Arabic.

- i) It was also found in hypothesis two (Ho₂) that qualifications of the lecturers have no significant difference in their attitude towards the use of ICT tools to teach Arabic.
- j) Hypothesis three (Ho₃) indicated of no significant difference between and within the lecturers based on College type in their attitudes towards the use of ICT tools to teach Arabic.
- k) Based on hypothesis four (Ho₄), there was no significant difference between and within the Lecturers' teaching experiences in their attitude towards the use of ICT tools for teaching Arabic.

CHAPTER FIVE

DISCUSSION, CONCLUSION AND RECOMMENDATIONS

In this chapter, the findings of the study are discussed, conclusions are drawn and recommendations are made, with relevant suggestions for future research.

Discussion of the findings

The first finding revealed that the available ICT tools for teaching Arabic were more than those which were not available. Among the Audio and Audio-visual hardware and software, only two items, that is, Opaque Projector and Teaching Machine were not available. The reason for non-availability of both is attributed to their status as old tools, which some modern applications such as computer systems have replaced in instructional delivery. On the part of the multimedia hardware and software, seven tools which were not available include LAN, MLN, WAN, Hypermedia and Hypertext resources, Computer-mediated conferencing-video and Audio conferencing, video text, tele-text, IVD and IRI, and Idea of visual classroom. They are said to be highly expensive to afford and maintain.

Some of the ICT tools that were said to be affordable were not available because the authority did not procure them. Conversely, the very affordable ones are those that were procured and distributed by the authority for instructional delivery. Out of all, only two were considered as not affordable among the 23 ICT tools assessed.

The finding showed that the adequacy level of the available ICT tools for teaching Arabic is below average level. This study therefore corroborates the study of Aja and Eze (2016) which reported that the ICT devices for instructional delivery in Ebonyi State were not adequately available. This is an indication of inadequate availability of the ICT tools for teaching at both secondary and tertiary levels of education.

What is not available cannot be accessible; as such this study revealed that nine out of the 23 ICT tools assessed were not available and not accessible, in addition to two other tools among the available ones. The remaining 12 available ICT tools were accessible. The reason for non-accessibility of two among the available tools is ascribed to the lack of operational skill by the personnel. This is also in line with Aja and Eze (2016).

The level of functionality of the available ICT tools for teaching Arabic in the North-Central Colleges of Education is high. This shows that the lecturers are making effective use of them, except those two that could not be accessed and the nine ICT tools which were not available.

There was no significant difference between the attitudes of the male and female teachers towards the use of ICT tools for teaching Arabic language. This outcome indicated that a relatively similar positive attitude was displayed by the male and female teachers towards the use of ICT tools for teaching Arabic language. This finding is in consonance with that of Olafare, Lawrence and Fakorede (2017). The result of their study showed that no significant difference existed between the attitude of male and female lecturers towards the use of ICT for instructional delivery. Also agreeing with this outcome was

s the study of Teo (2008) which showed a no significant difference in gender and attitude towards the use of ICT. Further still, the study of Maikauskaite found no gender difference between male and female participants in the previous experience with computer.

Negating the finding of this study were the studies of Alazan et. al. (2012) and Mustafa (2014). For instance, Mustafa's (2014) study revealed that male teachers possessed more knowledge and skills of ICT than the female teachers. He added that male teachers also had positive attitudes in terms of readiness to the use of ICT tools to teach, while the female teachers had negative attitudes. Similarly, Alazan et. al. (2012) pointed out that male teachers had more ICT background knowledge than female teachers in the higher institution. Conversely, significant differences were found among the females and males in the area of the ICT technical capabilities and situational and longitudinal sustainability. Unlike the aforementioned literatures, more female teachers use the ICT tools for explanation in the primary school classes, than their male counterparts. 33.91 per cent of the female teachers have background knowledge for using ICT tools, while the male background knowledge was 17.88 per cent (Motly, 2011).

There was no significant difference among teachers in the use of ICT tools for teaching Arabic language, based on qualification. Ajibade's (2017) finding has corroborated this study. She reported a no significant difference in qualified and unqualified teachers' use of resources for teaching vocabulary in senior secondary schools in Ibadan North. This seems to indicate that qualified teachers do not differ from unqualified ones in terms of their use of ICT tools for teaching Arabic. This implied that both qualified and unqualified teachers effectively use ICT tools for teaching Arabic in colleges of education. Conversely, this outcome was in disagreement with Okon's (2005) and Abiola's (2012) findings that qualification had a significant influence on teachers' standard in the classroom. It also negated the Federal Republic of Nigeria's (2004) statement in the National Policy on Education that qualified teacher

s will be more committed in the teaching profession. This does not in any way downplay the fact that qualification has a specific role to play in lecturers' use of ICT tools.

Adekeye's (2008) finding also contradicted that of this study. Adekeye (2008) reported a significant difference in the use of instructional resources between qualified teachers and their unqualified counterparts in the teaching of Social Studies. It further disagreed with Okonkwo's (2003) investigation into the relationship between schools, teacher variables and students' achievement in Social Studies as well as the utilisation of available instructional resources. From his findings, he concluded that in terms of teachers' qualification, teachers with a degree in Social Studies made a better use of instructional media thereby producing the highest scoring while the NCE holders followed.

There was no significant difference in the attitudes of the teachers in the federal, state and private colleges of education in the use of ICT tools for teaching Arabic language. Yasmeen el at (2015) worked on Comparative Study of the Availability and use of Information Technology in the Subject of Education in Public and Private Universities of Islamabad and Rawalpindi; they observed that there was no any excise significance difference between public and private universities' lecturers, based on usage of ICT tools in teaching educational subjects. Some lecturers were not used to IT in the teaching of the subjects in the lecture room. According to Abubakr Jamiu Sanusi of Kwara State College of Education, Ilorin, some of items were used by the state colleges of education lecturers, while few of them were not used (interview conducted, 5/04/2019). Sahi'd Hamad Ibrahim Khatibi, the acting H. O. D. Arabic, Kwara State College of Education, Ilorin, agreed that many items were not used by the lecturers (Interview conducted, 5/04/2019).

There was no significant difference among teachers in the use of ICT tools for teaching Arabic language in respect of experience. The finding suggested that the teachers are not familiar with the use

bility of quite a number of the ICT tools investigated hence, they did not employ them during their classroom interaction with learners. This outcome is a validation of the earlier finding of Abiola, Egwuatu and Njoku (2016). They discovered, through their outcome, that teaching experience had no significant influence on English Language teachers' use of instructional resources for teaching. This indicated that less experienced, experienced and more experienced English Language teachers claimed to make little or no use of over seventy per cent (70%) of the human instructional resources examined.

This finding also indicated a validation of the earlier view of Adegbile and Igweike's (2002) finding that teaching experience has no place in teachers' excellent performance. They added that as teachers have more experience, they become less dedicated, less hard-working and more preoccupied with other life engagements. Johnson (2009) corroborated this finding by stressing that experience does not necessarily result in expertise as eighteen years of experience could be one year of experience repeated seventeen times. The only time experience would contribute to expertise is when practitioners make conscious and conscientious efforts to learn constantly through reflective practices (Abiola, Egwuatu & Njoku, 2016). They stressed further that although experience appeared to be very important in the teaching-learning process, their study has not confirmed it. Experienced people are considered better practitioners because acquiring experience is a process of trying to make things work more differently (Abiola, 2012). He added that the saying that experience is the best teacher may not be justifiable after all since it is much easier and cheaper to learn consciously by wisdom than to learn by experience.

Conclusion

From the above discussions of findings, in this study could be concluded that:

- a) The available ICT tools for teaching Arabic in the Colleges of Education in North-Central Nigeria were mostly audio and audio-visual tools. The unavailable ones were modern but expensive to maintain.
- b) Despite the expensiveness and unavailability of some of the ICT tools, item 9 was considered not affordable.
- c) The ICT tools for teaching Arabic were not adequately available.
- d) Every ICT tools that were available for teaching Arabic were accessible by the lecturers, except two tools due to lack of operational skills.
- e) All the available ICT tools were functional including the two inaccessible ones.
- f) The lecturers possessed good attitude towards effective use of the available ICT tools for teaching Arabic in Colleges of Education in North-Central Nigeria. This implies that all the available ICT tools are usable.
- g) There was no significant difference between the attitudes of the male and female teachers towards the use of ICT tools for teaching the Arabic language.
- h) The teachers of Arabic language did not significantly differ in their use of ICT tools based on their qualification.
- i) The teachers of the Arabic language did not significantly differ in their use of ICT tools based on their College type.
- j) The teachers of Arabic language did not significantly differ in their use of ICT tools based on their teaching experience.

Recommendations

Based on the findings of this study, the following recommendations were made.

- a) Government should intervene by providing funds for the procurement of those unaffordable ICT tools for teaching Arabic in the colleges of education, for teaching and learning enhancement.
- b) Appropriate personnel should be recruited to facilitate the accessibility of the required ICT tools for Arabic in the colleges of education in North-Central Nigeria. The available personnel should be retrained from time to time to enable them have access to the use of ICT tools.
- c) Regular maintenance and repair of faulty tools should be carried out by the school authorities.

Suggestion for Further Research

The researcher wishes to suggest further research in the following areas;

- a) Availability and use of ICT tools for learning the Arabic Language in colleges of education in North-Central Nigeria.
- b) Availability and use of ICT tools for teaching Arabic in colleges of education in one of the other zones in Nigeria.
- c) Effect of ICT tools usage on the teaching of Arabic enhancement in colleges of education in North-Central Nigeria.
- d) Effect of ICT tools usage on colleges of education students' performance in North-Central Nigeria.

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