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Availability, Accessibility and Utilization of Information and Communication Technology in Teaching and Learning Islamic Studies in Colleges of Education, North-Eastern, Nigeria

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***Abstract*—**The use of Information and Communication Technology (ICT) in tertiary institutions by lecturers and students has become a necessity for the enhancement of quality teaching and learning. This study examined availability, accessibility and utilization of ICT in Teaching-Learning Islamic Studies in Colleges of Education, North-East, Nigeria. The study adopted multi-stage sampling technique, in which, five out of the eleven Colleges of Education (both Federal and State owned) were purposively selected for the study. Primary data was drawn from the respondents by the use of questionnaire, interviews and observations. The results of the study, generally, indicate that the availability and accessibility to ICT facilities in Colleges of Education in North-East, Nigeria, especially in teaching/learning delivery of Islamic studies were relatively inadequate and rare to lecturers and students. The study further reveals that the respondents' level of utilization of ICT is low and only few computer packages and internet services were involved in the ICT utilization, which is yet to reach the real expected situation of the globalization and advancement in the application of ICT if compared to other parts of the world, as far as the teaching and learning of Islamic studies is concerned. Observations and conclusion were drawn from the findings and finally, recommendations on how to improve on ICT availability, accessibility and utilization in teaching/ learning were suggested.

***Keywords*—**Accessibility, availability, college of education, ICT, Islamic Studies, learning, North-Eastern, teaching, utilization.

I. Introduction

ISLAM as a religion covers every aspect of human endeavors. The truth of its message lies in man's knowledge of reality and facts about himself and the world around him. This implies, taking into consideration his position of existence, the scope and links of his relationship with others, and his rights and obligations therein. Thus, such reality and facts must have exponents which shall explain and guide people to its path [1].

The Islamic concept of education entails facilitating the balanced growth of the total personality of man through spiritual, intellectual and rational training of man as manifest in his feelings and bodily senses. This indicates that, Islamic Studies show appreciation towards the capabilities of intellect, champion the cause of science and encourage man to exert all possible efforts in contemplating and identifying the signs of the visible world, as well as the secrets and horizons of the soul [1]. This indicates the need of incorporating ICT in the methodology of teaching and learning Islamic studies. ICT, on the other hand, deals with digital information that provides great means for information dissemination between devices by increasing access to communication, technology and knowledge. Based on this, ICT comprises every system of communication inform of devices or applications covering radio, television, mobile phones and computer of all categories. In the same vein, ICT includes network hardware and software, satellite systems and the numerous services, which are related to them that paves an easy way for online video conferences and distance learning by means of E-learning [2].

The Federal Ministry of Education, Nigeria, considers ICT to encompass all equipment and tools; inclusive of traditional technologies, radio, video and television to the newer technologies like computers, hardware, firmware, etc. It also include the methods, practices, processes, procedures, concepts and principles that come into play in the conduct of the information and communication activities [3]. Thus, availability accessibility and utilization of ICT are essential in teaching and learning Islamic studies, as asserted by [4] that;

> For a Muslim who believes in Allah's power, human's achievement in ICT is a sign of knowledge achievement that in fact need to be used in order to find a truth.

Preservation of Islamic knowledge and its transmission has been the concern of the Muslims right from the time of the Prophet (Peace be upon him), who was the prominent figure in the work of preservation of the Qur'an. The Rightly-Guided Caliphs also did their best in preserving the Holy Scripture. In the contemporary period, ICT is a veritable instrument of preserving and transmitting Islamic knowledge. There exist some software on the Quran and the *hadith* such as *Alim* for Windows containing Arabic texts, translation and commentary of the Quran. The Sahih Buhari and other Islamic books are made available for scholars to access. The *Mausuc at Kutubi* Disc is also in a CD plate where nine works of *hadith* literature are stored. Therefore, as a matter of urgency, lecturers and students of Islamic Studies in Federal and State Colleges of Education in North-Eastern, Nigeria must embark on the work of educational reform with a view to conforming to the application of ICT in the whole system of education at

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present. It is based on this that the research of this magnitude is carried out.

II. Background of the Study

A. The Study Area

There are six geo-political zones in Nigeria, which consist of the North Central Zone, North-Eastern Zone, North-Western Zone, South-Eastern Zone, South-Southern Zone and South-Western Zone [5]. The North-Eastern Zone comprises of six states , namely; Adamawa, Bauchi, Borno, Gombe, Taraba and Yobe.

Colleges of Education are established with the sole purpose of serving as "train-the-trainers" institutions. Teachers are to be trained and equiped in order to perform well-regarded functions. Thus, Colleges of Education award the National Certificate in Education (NCE). This is generally a three year course of study in any chosen discipline. Admission into a College of Education is through the Unified Tertiary Matriculation Examination (UTME) conducted by the Joint Admissions and Matriculation Board (JAMB). In deed, a part from the classroom work, students are required to participate in well-coordinated compulsory teaching practice in either a primary school or secondary school [6]. It is in this regard that Professor M.I. Junaidu, Former Executive Secretary; National Commission for Colleges of Education, [7] remarked that;

> "The mandate of the teacher training programme at the NCE level, which is the recognized minimum teaching qualification in Nigeria, is to produce quality teachers for the Basic Education sub-sector."

There are 11 colleges of education in North-Eastern Nigeria, classified according to their ownership; hence, Federal and State, colleges of education. The federal colleges of education are established and funded by the federal government, while the state colleges of education by their respective State governments. Table I presents a list of colleges of education in the region categorized into Federal and State owned colleges.

TABLE I
List of Colleges of Education in North-Eastern Nigeria [8]

S/No.	Name and Address	Location	Ownership
	Federal College of Education, Yola.	Adamawa State	Federal Government
1.	Adamawa State College of Education, Hong.	Adamawa State	State Government
2.	College of Education, Azare.	Bauchi State	State Government
3.	College of Education, Waka-Biu.	Borno State	State Government
4.	Umar Ibn Ibrahim El-Kanemi College of Education, Science and Technology, Bama.	Borno State	State Government
5.	Sir Kashim Ibrahim College of Education, Maiduguri.	Borno State	State Government
6.	Federal College of Education (Technical), Gombe.	Gombe State	Federal Government
7.	College of Education, Billiri.	Gombe State	State Government
8.	College of Education, Zing.	Taraba State	State Government
9.	Federal College of Education (Tech), Potiskum.	Yobe State	Federal Government
10.	College of Education, Gashua.	Yobe State	State Government

Considering the fact that, some of the colleges do not offer Islamic studies such as Umar Ibn Ibrahim El-Kanemi College of Education, Science and Technology, Bama, Federal College of Education (Technical), Gombe, Gombe State, Federal College of Education (Tech), Potiskum, Yobe state and College of Education, Billiri, Gombe state, the focus of our discussion was on the Federal College of Education, Yola, College of Education, Azare, Kashim Ibrahim College of Education, Maiduguri, College of Education, Zing and the College of Education, Gashua.

B. Purpose of the Study

i. Ascertain the availability of ICT facilities by the departments of Islamic Studies of the selected colleges.
ii. Examine the accessibility to ICT facilities by the departments of Islamic Studies of the selected colleges.
iii. Determine the levels of ICT use in teaching and learning Islamic Studies among the lecturers and students of the selected colleges.

C. Research Questions

i. What is the level of ICT facilities available in teaching and learning Islamic Studies in the colleges?
ii. What is the level of accessibility of ICT facilities to the lecturers and students of Islamic studies in the colleges?
iii. What is the level of the application of ICT in teaching and learning Islamic Studies?

III. Research Methodology

A. Sampling Technique/Sample Size

Multi-stage sampling technique was employed. In the first stage: Five out of the 11 Colleges of Education (both Federal and State owned) were purposively selected for the study. The reason for the purposive selection was to sample out only institutions that offer Islamic studies courses. In the second stage: All the lecturers (62) of Islamic studies in the chosen colleges were selected and served with structured questionnaires. In the same vein, all HODs (5) of Islamic studies were also selected and interviewed orally. Similarly, five heads of ICT units of all the colleges were considered for the study and interviewed orally as well. Again, a number of 326 students were randomly selected in proportion to the number of Islamic Studies students in each institution. Thus, a total number of 388 respondents formed the sample size for the study. Table II depicts the number of lecturers, HODs,

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heads of ICT units and proportionate selection of students from each institution.

TABLE II
NUMBER OF LECTURERS, HODS, HEADS OF ICT UNITS AND PROPORTIONATE SELECTION OF STUDENTS FROM EACH INSTITUTION

S/No.	Institution	HODs	Head of ICT units	Lecturers population	Students population	Proportion of Students sampled
1	COE Azare	1	1	19	600	60
2	KICOE Maiduguri	1	1	11	450	45
3	COE Gashua	1	1	13	800	80
4	FCE Yola	1	1	12	1275	128
5	COE Zing	1	1	7	125	13
6	Total	5	5	62	3250	326
7	Total respondents sampled					388

Source: Field survey, 2016

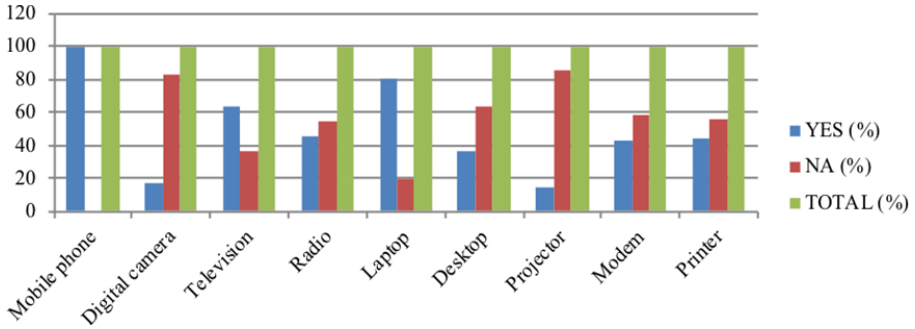


Fig. 1 Frequency of ICT facilities available to lecturers

B. Data Collection

Primary data was elicited from the respondents by the use of structured questionnaires and oral interviews. Sixty two lecturers and 326 students selected were served with the questionnaires, in which a total number of 41 and 232 questionnaires from lecturers and students, respectively, were successfully retrieved and analyzed. The remaining ones were either discarded for inconsistencies in filling them or they could not be retrieved. In addition to the information educed from the questionnaires, HODs and Heads of ICT units were orally interviewed and information gleaned from them also formed an integral part of the analysis.

C. Data Analysis

Data collected were analyzed using descriptive statistics such as frequencies and percentages. Five and Four-point Likert scales of "very often to "never" and "regularly" to "never" were used, respectively, to determine the frequency of accessibility of ICT facilities and using ICT facilities in teaching Islamic studies by lecturers of the selected Colleges of Education in North-Eastern Nigeria.

IV. RESULTS AND DISCUSSIONS

A. Availability of ICT Facilities to Lecturers

The ability of lecturers to innovate in their teaching activities is contingent on the availability of ICT facilities. Availability of a facility alone would normally motivate one to explore its potentials and uses. Modernization requires teachers to have relatively adequate facilities so as to impact knowledge to their students effectively.

The result of this study revealed that 100% of the lecturers have mobile phones (see Fig. 1), 80% of them possessed laptops while 46% of the lecturers own a radio. The result further revealed that 44% of the lecturers have indicated possession of printers and only 43% of them have modem for browsing the internet. Also, the percentage of Lecturers that have desktops was 37%, digital cameras were 17% and those that have projectors were 15% only. It follows from the above that a significant number of the lecturers have mobile phones and laptops. And these two facilities, when efficiently utilized, could do most of the services that the other listed facilities, with the exception of printer, can offer. For example, a mobile phone, such as android, can be used as radio in terms of recording and playing audios; as a modem for browsing by using Wi-Fi; as digital camera for snapping pictures; and so on. On the other hand, laptops can be used instead of desktops. This versatility of mobile phones and laptops could be the reason(s) for the low percentage of lecturers who indicate possession of other ICT gadgets. Therefore, we will conclude that lecturers of Islamic studies have relatively available ICT facilities that can be put to use to enhance teaching activities. This is in line with the findings of Egomo, Enyi & Tah [9] who indicated that "Internet connectivity and use of lap tops is a common phenomenon among institutions and lecturers".

B. Availability of ICT Facilities to Students

Students being in their youthful ages and possess agility, they usually embrace new technologies relatively faster than old people. It is expected that today, most, if not all of the

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students of Islamic studies will possess one form or another of ICT facility that they will be using in their learning processes.

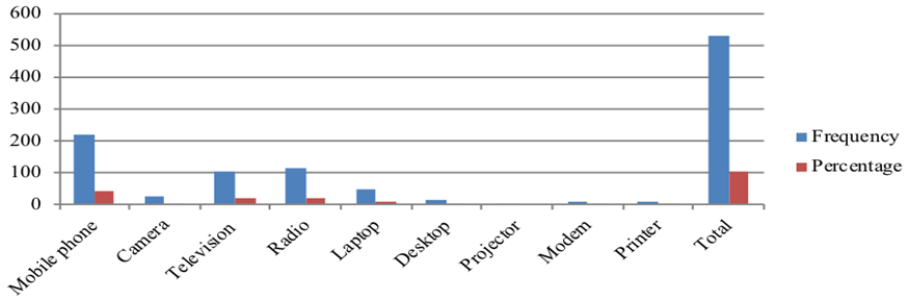


Fig. 2 Frequency of ICT facilities available to students

The findings of this research revealed that about 41% of the students have mobile phones, 21% of them have radio, while 19% claimed to possessed television set (see Fig. 2). Furthermore, 9% of the students indicated possession of laptops, 5% of them have digital camera, while 2% of the students have desktops and modems each and 1% indicated having printers. It can be seen from this result that majority, 91% and 59%, of the students do not own laptops and mobile phones, respectively. Thus, it can be inferred that ICT facilities is not much available to the students of Islamic studies in the study area. This finding corroborates with that of Hamilton-Ekeke and Mbachu [10], who asserted that "basic ICT facilities like computers are unavailable, students are unable to afford personal laptop, this has grossly affected e-learning and e-communication channels like email, e-board, internet and organized networking system between staff and students."

C. Head of Departments' Responses on Available ICT Facilities

Head of Departments (HODs) are experienced professionals entrusted with the responsibilities of manning the affairs of the Departments. Indeed, it is important to note that availability of ICT infrastructure and tools as well as internet access are among factors influencing the application of ICT in teaching and learning (Alassaf, 2014) [14].

In view of the above, oral interviews conducted with the HODs of the selected Colleges of Education to ascertain the availability of ICTs facilities in their respective Departments, revealed that ICT was not officially integrated in the methodology of teaching and learning of Islamic studies in all the colleges. Consequently, all the colleges had no departmental multi-media centre. In addition, it has been gathered from the interview that the Department of Islamic studies in FCE Yola has four computers, that of Maiduguri has only one computer, while that of Azare, Gashuwa and Zing has two computers each. Considering the number of students that do not own personal computers as mention earlier, this insubstantial number of computers will be considered as inadequate. Therefore, it can be concluded that ICT facilities are not much available in the Department of Islamic studies in the study area. This is in line with the findings of Gambari and Chike-Okoli [11] that there was inadequate provision of ICT facilities in federal higher institutions in Niger State. Enyi and Tam [12] findings also corroborate the stand that availability and utilization of ICT tools for effective instructional delivery is significantly low and very discouraging especially among lecturers.

D. Head of ICT Centers' Responses on Available ICT Facilities

The availability and accessibility of ICT Resource Centers is one of the most essential things needed for the effective utilization of ICT in teaching and learning for both lecturers and students of Islamic studies. This is in line with the position of Lubis, Yunus, Lampoh and Ishak [13] that the School Resources Center serve as units for school functioning in the collection, processing, managing which upgrade the teaching and learning process in reproducing knowledgeable community.

Oral interviews with the Heads of ICT centers revealed that in some colleges, especially College of Education, Azare, Bauchi state computers were concentrated in the School Libraries for both Internet Café and E-Library, while in others like College of Education Zing, computers were scattered around the school area. In terms of availability of ICT facilities, Table III shows the distribution of the facilities in the Colleges of Education sampled.

TABLE III
DISTRIBUTION OF COMPUTERS ACCORDING COLLEGES

S/No.	Institutions	Internet Cafe	E-Library	ICT Center	Total
1.	COE Azare	20	200	100	320
2.	KICOE Maiduguri	25	-	100	125
3.	COE Gashua	10	20	-	30
4.	FCE Yola	50	200	-	250
5.	COE Zing	5	46	300	351
	Total	110	466	500	1,076

Source: Field Survey, 2016

Evidence from Table III shows that, COE, Zing has high total number (351) of computers with 5, 46 and 300 computers in its Internet Café, E-library and ICT center, respectively. Even though the ICT center is under construction, but the facilities mentioned are on ground. The institution with less

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total number of computers is COE Gashuwa who has only 30 computers in all. Its internet café was equipped with only 10 computers while the E-library furnished with only 20 computers. The total number of computers recorded for all the colleges of education sampled was 1,076. Generally, this quantity is inadequate considering the large number of students who indicated lack of personal computers as previously stated. At this point, we can recall that the total number of students of Islamic studies in the selected colleges of Education was 3,250 (see Table II). Comparatively, it can be deduced from the above that the ratio of computers to Islamic students in the studied institutions is as given in the Table IV below. Note that the ratio was computed for Islamic students only, while the ICT centers were not mainly for them alone, but for all the remaining departments within each college. Therefore, competition for using ICT facilities in the institutions may be much higher than expected, even though, all students might not be using for the centers at the same time.

TABLE IV
RATIO OF COMPUTER PER ISLAMIC STUDENT IN THE SAMPLED COLLEGES

S/No.	Institution	No. of computer/no. of Islamic students	Computer per Islamic student ratio (approx.)
1	COE Azare	320:600	1:2
2	KICOE Maiduguri	125:450	1:4
3	COE Gashuwa	30:800	1:27
4	FCE Yola	250:1275	1:5
5	COE Zing	351:125	3:1

Source: Researcher's computation, 2017

It can be seen clearly from Table IV above that availability of computers is very low in the COE Gashuwa, FCE Yola and KICOE Maiduguri.

V. ACCESSIBILITY TO ICT FACILITIES

Having listed some ICT facilities available to the selected Colleges of Education, how accessible are they to lecturers is important so as to complement what they personally have.

A. Lecturers' Accessibility to College ICT Facilities

TABLE V
DISTRIBUTION OF RESPONSES ON LECTURERS' ACCESSIBILITY TO COLLEGE ICT FACILITIES

Items	Very Often	Often	Occasionally	Rarely	Never	Total
Frequency	3	6	10	11	11	41
Percentage	7	15	24	27	27	100

Source: Field Survey, 2016

The result of the research showed that majority (54%) of lecturers had rarely or even never accessed ICT facilities in their institutions. Those that claimed to be having access to the facilities occasionally were 24% (see Table V). However, 22% of the lecturers indicated that they have full access to ICT facilities in their various institutions. This variation in the accessibility could be attributed to the fact that ICT resource centers were inadequately equipped for the potential users. You only access what is available. Several researches such as Alassaf [14] have shown that availability of ICT facilities is among the major factors that affect accessibility and utilization of ICT facilities.

B. Students' Accessibility to College ICT

Centers with well-equipped ICT facilities will tremendously help students to access and utilize ICT effectively.

TABLE VI
DISTRIBUTION OF RESPONSES ON STUDENTS' ACCESSIBILITY TO COLLEGE ICT FACILITIES

Accessibility	Very Often	Often	Occasionally	Rarely	Never	Total
Frequency	9	18	41	67	97	232
Percentage	4	8	17	29	42	100

Source: Field Survey, 2016

Table VI depicts the distribution of responses of students on accessibility to college ICT facilities. It shows that 42% of the students never had access to ICT facilities, while 29% of them rarely had access to college ICT facilities. Also, 17% of the students occasionally had access to the facilities. The result further indicates that students who had often and very often access were 15% and 7% respectively. It can be inferred from this that majority [71%] of the students do not have frequent access to ICT facilities in their various institutions. Those that indicated frequent access were 12% only. This is quite very low.

The above findings are in disagreement with the findings of Gabadeen, Alabi & Akinnubi [15] who found that student in Secondary Education in Federal Capital Territory, Abuja-Nigeria have frequent access to ICT facilities and "e-learning technologies were relatively available to the teachers and students, reasonably accessible and adequately accessible to students and teachers, respectively, and fairly utilized by both".

VI. RESPONDENTS' LEVEL OF ICT APPLICATION

The extent to which ICT is being used in support of information delivery and communication in teaching and learning Islamic studies in the selected colleges of education was examined. The respondents' level of ICT application is, therefore, presented below.

A. Level of Application of ICT by the Lecturers

Table VII consists of eight statements on different uses of computer in teaching process. Four point Likert scale of "regularly" to "never" was used to determine the frequency of using computers in teaching Islamic studies by lecturers of the selected Colleges of Education. The table indicates that 36.3 % of the lecturers rarely use computer in teaching activities and 29% never used it. However, 19.4% use it sometimes, while 15.3% regularly used computer in teaching of Islamic studies.

Generally, the respondents' application of MS Word is rated fairly well. This is evident from the stand of 56% who regularly used it in preparing their lecture note as reflected in Table VII. Also, a significant number of 53% of the respondents indicated that they regularly or sometimes used e-

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mail too in communication, which enhances their teaching activities. Closely related to this, the data indicated that 44% of the respondents use internet regularly or occasionally to access information. Basically, the respondents indicated a fair application of internet in teaching Islamic studies. However, the result also showed the none preference and usages of the respondents to MS Excel, PDF and CD for various activities in teaching and, as such "very low" was revealed by the data in Table VII. This can be inferred from the responses of the respondents in which, 83% have rarely or never made presentations using MS PowerPoint, while 85% rarely or never converted PDF to MS Word. It has also been established from the result that, 73% of the lecturers rarely or never used MS Excel to prepare spreadsheets for computations and presentations of charts. Nonetheless, the cumulative percentage of 36.3% of the respondents rarely used ICT, while 29% never used ICT indicated that the level of application of ICT by lecturers in teaching/learning as also low. This reflected the finding of Enyi amd Tam [12] that the availability and utilization of ICT tools for effective instructional delivery is significantly low and very discouraging especially among lecturers. This position corroborated with the position of Gambari and Chike-Okoli (11) that ICT facilities in federal higher institutions in Niger State were insufficient and there difference between the availability and degree of actual use of ICT gadgets for the purposes of teaching and researches is insignificant. However, this is in contrast to the findings of Uriah, Eniekenemi and Joel [16] who concluded that ICT facilities are completely not available in Isaac Jasper Adakar Boro College of Education, Sagbama, Bayelsa State as such; the lecturers and students in the institution are not so exposed to ICT materials and facilities.

TABLE VII
THE USES OF COMPUTER APPLICATIONS IN TEACHING ISLAMIC STUDIES BY LECTURERS

S/No	Items	Regularly F [%]	Sometimes F [%]	Rarely F [%]	Never F [%]	Total
1.	I use computer to prepare lecture notes	23 [56]	9 [22]	7 [17]	2 [5]	41 [100]
2.	I use computer to make presentations	2 [5]	5 [12]	18 [44]	16 [39	41 [100]
3.	I prepare spreadsheets using MS Excel	-	11 [27]	17 [41]	13 [32]	41 [100]
4.	I used computer to convert PDF to MS Word	1 [3]	5 [12]	17 [41]	18 [44]	41 [100]
5.	I use application software to convert MS Word to PDF	9 [22]	3 [7]	8 [20]	21 [51]	41 [100]
6.	I use E-mail to communicate	9 [22]	13 [31]	18 [44]	1 [3]	41 [100]
7.	Access the internet	3 [7]	11 [27]	20 [49]	7 [17]	41 [100]
8.	I use the educational CDs to learn	3 [7]	7 [17]	14 [34]	17 [41]	41 [100]
	Cumulative percentage	15.3	19.4	36.3	29	100

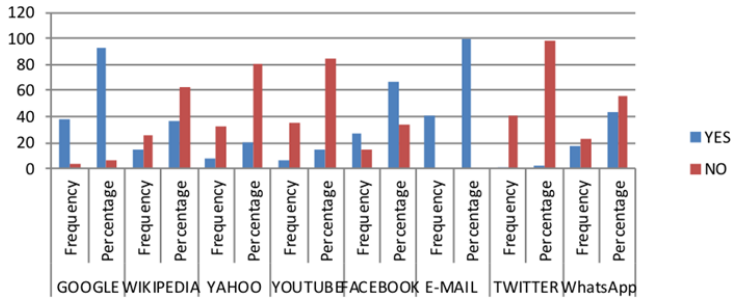


Fig. 3 Frequency of internet services used by lecturers

B. Level of Lecturers' Application of Internet Service in Teaching and Learning Islamic Studies

The application of internet services by lecturers varies according to the usage. The result [Fig. 4] revealed that all the respondents [100%] indicated their enthusiasm to having an e-mail account, 93% used Google in searching for learning and teaching materials, while 66% engaged in facebook for exchanging ideas with colleagues and others. Similarly, a fair number, 44% of the respondents indicated their usage of WhatsApp. However, the respondents indicated less or little attention to the application of other services that include; Wikipedia [37%], Yahoo [20%], YouTube [15%] and Twitter [2%]. Despite the variations in their level of applications of these services, the result indicated that the respondents acknowledged the importance of internet services in teaching and learning. This is in line with the view of Bidmos [17] who opined that Islamic Studies lecturers and students gain a volume and variety of knowledge through the use of search engines.

C. Level of Students' Application of ICT in Learning Islamic Studies

The result of Fig. 4, on the level of application of ICT by students in learning Islamic studies, reveals that, most of the respondents [42%] engaged in only searching for learning materials from internet and other related internet searching machines. The result further indicates that 38% of the respondents portrayed a good application of ICT in writing assignments, while 18% engaged in interaction with others through the application of ICT in the process of learning

Islamic studies. However, submitting assignment via e-mail scored only 2%.

It can be inferred from the above results that, mostly, students concentrate on applying ICT in two areas thus: searching for learning materials and writing assignments. This is almost similar to the findings of Dalha [18] that writing assignments was the activity mostly carried out by students, then interaction with other users and sending e-mail followed accordingly. Eze and Aja [19] uphold a similar position of underutilization of ICT devices in learning.

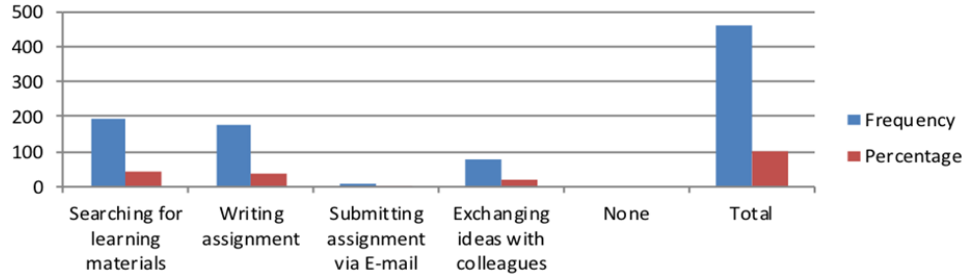


Fig. 4 Frequency of learning activities engaged by the students

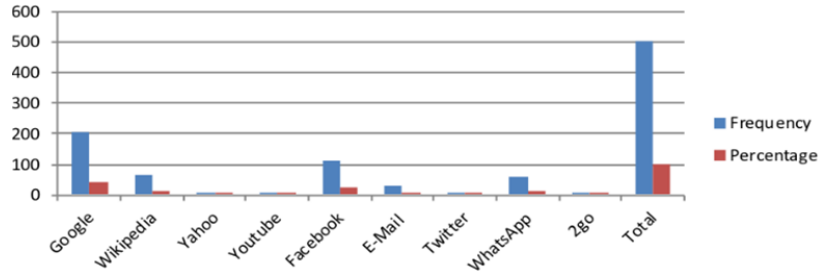


Fig. 5 Frequency of Internet Services used by the Students

D. Level of Students' Application of Internet Service in Learning Islamic Studies

The result showed that much needs to be done on the level of students' application of Internet services in learning Islamic studies, since only Google scored 41%, followed by Facebook with 22%, while Wikipedia constitutes 13% and WhastApp 12%. There was little or no attention paid by respondents to e-mail (6%), Yahoo (2%), 2go (2%), while twitter and YouTube 1% each (Fig. 5). This in is line with the finding of Utoware [20] that the internet, e-mail and multi-media projector were not being adequately utilized.

The foregoing result suggests the aspect of social media, in spite of its great significance in learning, as Bidmos [17] stressed, the e-mail and other social media like, facebook, Twitter, 2go, You Tube, WhatsApp and other correspondences, which are essential in teaching/learning for instance questions and answers have been grossly neglected. It is also obvious from the findings that Google that attracts most respondents for being a more pronounced search engines among others (Wikipedia and Yahoo), which probably are not known to most of the respondents. This reflected the finding of Hamilton-Ekeke and Mbachu [10] that the need ICT facilities, which include computers are unobtainable, students are incapable of possessing personal laptop. Invariably, this has an adverse effects on e-learning and e-communication networks. Similarly, organized networking system between staff and students in form of email, e-board and Internet in teaching and learning processes were affected.

VII. Observations

The researcher observed that the Internet Café in College of Education, Zing, had only 5 functional computers with 2 modems as source of networks. To this end, due to inadequate facilities, the café restricted its activities to only processing applications for admission and registration exercise for students during first and second semesters. This means no learning activities either by lecturers or students in the Cafe. Similarly, the E-library of the College, despite the availability of about 46 functional computers, had no internet services due to none registration of the section by the college management.

Accordingly, the researcher observed that, in terms of facilities in the resource centers of the other four colleges [COE, Azare, KICOE, Borno, COE, Gashua and FCE, Yola], all the colleges had computers. However, considering the students population, the computers were grossly inadequate. For example, the department of Islamic studies, College of education, Azare, had 600 students while the College Café had only 20 functional computers, ICT center with 100 computers and its e-library had 200 computers. By implication, if the students of other departments, numbering about 12,000 students [21], were also to use these centers coupled with the number of 929 academic staff in the colleges (College of Education Azare Handbook 2), the Department of Islamic studies with 19, the facilities would be highly inadequate. Also, COE, Gashua, with students' population of 800 and 13 lecturers in the Department of Islamic Studies, both the café and e-library of the college had only 30 computers. In KICOE,

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Borno, the Department of Islamic studies had a student population of 450 and 11 lecturers while the college café had only 25 computers and the ICT center 100 computers respectively.

Both the E-Library and Internet Café in FCE, Yola, had 250 Computers, while the Department of Islamic Studies had more than 1,200 students [NCE Programme], besides, there were other programmes like undergraduate, pre-NCE and Arabic Medium. The facilities are inadequate despite the availability of very effective internet access. Similarly, both the E-Library and Internet Café in FCE, Yola, had 250 Computers only. While the Department of Islamic Studies had more than 1,275 [NCE Programme], there were other programmes like undergraduate, Pre-NCE and Arabic Medium. The facilities were inadequate despite the availability of very effective internet access.

Considering the entire student population of all the colleges, it is not out of place to conclude that the facilities were not sufficient as at the time of conducting this research. Although, the lecturers had access to personal computers, it is important to note that, frequent access to school computers is equally important. Access to school computers, indeed, is essential for effective application of ICT. The desired learning will not be achieved in a situation where both lecturers and students have no frequent access to ICT facilities.

VIII. Conclusion

On the whole, the result of the study, generally, indicates that the application of ICT in Colleges of Education in North-Eastern Nigeria, especially in teaching/learning delivery of Islamic studies, is at the emergent stage. It is evident that the respondents' level of knowledge and application of ICT is low and only few computer packages as well as internet services were involved in the application, which has not reached the real expected situation of the globalization and advancement in the application of ICT as compared to other parts of the world. However, the enthusiasm shown by both lecturers and students regarding the application of ICT in teaching and learning of Islamic studies, particularly as demonstrated by their positive perception, suggests a great hope that in the near future the trend will definitely reach the desired status of proper application, integration and transformation stages in colleges of education, as exemplified in the selected Colleges of Education in North-Eastern Nigeria. It is imperative, therefore, to intensify effort in creating awareness and encouraging researches on the application of ICT in teaching/learning, particularly in Islamic studies, for the attainment of great success and realization of positive result from ICT.

IX. Recommendations

1. ICT should be considered as matter of priority to lecturers of Islamic studies.
2. Provision of adequate and high grade ICT facilities in all ICT resource centers in all colleges of education.
3. The establishment of a fully equipped departmental multi-media center in each College of Education, with internet services and other multi-media tools, that will serve as a resources room for Islamic studies department.
4. All ICT resource centers should be conducive and provided with adequate qualified personnel that will handle their immediate needs in terms of training, management and maintenance of all ICT facilities.
5. There is need for creating more awareness on the role of ICT in teaching and learning amongst lecturers and students by providing more literatures on various aspects of the area.

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Appendix

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[3] Yusuf Usman Muhammad, 41 years, Exam Officer, Islamic Studies, Kasim Ibrahim College of Education, Maiduguri, 7/12/2015.
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[5] Badamasi Muhammad Aliyu, 48 years, HOD, Islamic Studies, College of Education, Zing, 03/03/2016.
[6] Tahir Chiroma, 52 Years, HOD, Islamic Studies, Federal College of Education, Yola, 20/03/2016.
[7] Alhaji Modu Mustafa, 42years, Director ICT, KICOE Borno, Maiduguri, 22/03/2016.
[8] Tijjani Modu, 25years, Computer Operator, Internet Café, KICOE Borno, Maiduguri, 22/03/2016.
[9] Muhammad Manu Galadima, 34years, Librarian, (E-Library), Gasuha, Yobe State, 28/04/2016.
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