

## **Appreciation of Computer Knowledge in the Teaching and Learning of Islamic Studies in Nigeria**

**Salako Taofiki Ajani**

Faculty of Major Languages Studies  
University Sains Islam Malaysia  
71800, Negeri Sembilan, Nilai.Malaysia.

**Bhasah Abu Bakar**

Faculty of Major Languages Studies  
University Sains Islam Malaysia  
71800, Negeri Sembilan, Nilai.Malaysia.

**Harison Mohd Sidek**

Faculty of Major Languages Studies  
University Sains Islam Malaysia  
71800, Negeri Sembilan, Nilai.Malaysia.

### **Abstract**

*Islamic Studies is perceived by many Nigerians to be a religious course, which should centre on the worship of God and Spirituality. It is viewed as a subject that has nothing to do with the mundane world. Their perception makes them to believe that it cannot be taught or learnt using modern technological advancement. The lukewarm attitude which those in Islamic Studies put to computer knowledge and the fact that no computer course is included in Islamic studies curriculum from primary to the university level of education at this age prompted us to choose the topic. Attempt was made to examine the concept of computer knowledge, key components of computer, basic rudiments of computer knowledge, importance of computer education and search engines used in browsing the internet. These are tools that could facilitate the teaching and learning of Islamic Studies and take it beyond the realm of spirituality.*

**Key words:** Computer Appreciation, Islamic Studies Teaching and Learning.

### **Introduction**

Islamic Studies is perceived by many Nigerians to be a religious course which should centre on the worship of God and Spirituality. They view it as a subject that has nothing to do with the secular world. It is their belief therefore that it cannot be taught or learnt using modern technological advancement. The common questions they ask are: "Can you prove to us that there is God by showing Him to us? Can you show us the angels? Or can you give us the pictures of the spirits?" etc

They ask these questions erroneously believing that, one can only show a thing to prove its existence. Modern approaches to learning these days have proved to us that we cannot deny the existence of an object even though we cannot see it. This is because there are other parameters that could prove the existence. For instance, if a transistor radio is put on around 7 a.m. Nigerian time when news is being broadcast. A newscaster will be in the studio, behind the screen reading the news to us which many people will hear at a time from different parts of the country and beyond. For anyone to say that because he did not see the newscaster, he would not believe in his existence is definitely not going to be acceptable by all.

On the other hand, if he attempts to open the radio because he feels he would want to see the person reading the news, definitely he will spoil the radio.

This is a simple illustration to show that Islamic education goes beyond religion and worship; it covers all aspects of a man's life. This paper attempted to point out the importance of computer knowledge appreciation in Islamic Studies teaching and learning, to act as a facilitator to achieving the desired objectives of Islamic Studies education which are training for leadership roles, service to God and humanity and contribution to national development, and in these days training for employment because no nation can develop when her citizens are not gainfully employed. Individuals' employment leads to national development.

### **Objectives of the study**

The rationale for this paper was to prepare a guide through which a novice in computer education would be able to acquire some basic computer skills which would facilitate his learning in Islamic studies and equally assist him to do browsing on the internet to be able to source for additional information which are most current in his field of study. It was also to enable both teachers and students of Islamic Studies appreciate the use of computer in this age in the process of teaching and learning. It was to assist them in bringing closer to them distant useful information which could be of immense benefits to them in their academic, social and economic matters. This is due to the fact that the knowledge in and use of computer today transcends mere academia and one would be losing out a lot if not grounded a little in the knowledge and use of computer appreciation.

### **Concept of a Computer System**

A computer has been defined by Cathy Wright (2002) as a very large data and information base that allows a user to obtain important facts on any topic. According to him, computer enables the user to gain knowledge from home without going to a library and spending countless hours searching to obtain the right material needed for a particular paper.

It is easy to do a broad search on the computer system to get all the needed information on any field of study. There is no field of discipline that has not been included in the data base of a computer. It is equally possible to search for information on the computer in different languages that have been programmed on it. Getting information on the computer has saved the risks and rigours of having to leave one's home for libraries. It has quick response and resources to get information. The computer has ability to obtain information or knowledge at a very fast speed, with low failure rate and precisely accurate. The key component of a computer is the memory. It is a powerful tool which allows all of the paths and drives of a computer to work in proper order.

Abass, O. A. & Abimbola, B. L. (2007), define computer as a collection of electronic devices which is able to carry out operations like arithmetic, logic and manipulations on various categories of data which subsequently come out with results. They also see computer as an electronic device which accepts data as input and applies a predetermined process to the data to produce the results of the processing accordingly as output.

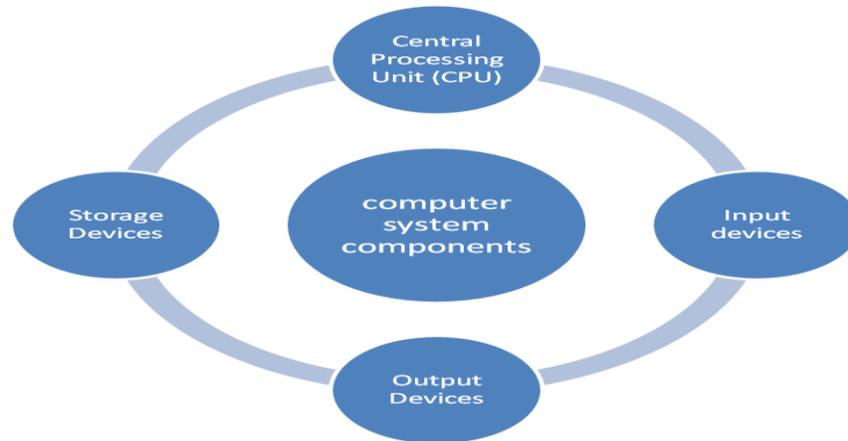
To Olowu F.A (2005), computer is defined in several ways by different people. He quoted Gerlach and Ely defining computer as a machine especially designed for the manipulation of coded information, i.e. an automatic electric machine for performing simple and complex operations, Wittich and Schuller defined it as a power driven machine equipped with keyboards, electronic circuits, storage compartment and recording devices for the high speed performances of mathematical operations. Ellington and Perceival in Olowu (2005) defined computer as a device which is capable to accept information, apply some processing procedures to it and supply the resulting new information in a form suitable to the user. Prigmore sees it as a machine that can store and manipulate information using that information. Olowu F.A (2005, p.108) described computer as "any machine or device which can accept data in a prescribed form, process the data and supply results of processing in a specified format providing information for immediate use or for further processing".

### **Components of a Computer System.**

The key components of a computer system according to Olowu F.A (2005, p.108) are:

- (i) Central Processing Unit (CPU);
- (ii) Input devices;
- (iii) Storage Devices;
- (iv) Output Devices.

### Components of a Computer System



(i). **Central Processing Unit (CPU)**: This consists of the arithmetical logic unit, registers, control section and internal bus. The logic unit carries out arithmetical and logical operations. The registers store data and keep track of operations. The control unit regulates and controls various operations while the internal bus connects the units of the CPU with each other and with the external components of the system. The bus is a set of hardware lines wires used for data transfer. According to Abass (2005 p.7) “digital computer has input / output unit and Central Processing Unit (CPU)”.

(ii). **Input devices**: Keyboard is the principal input devices for most computers. There are others like a mouse, joystick, scanner and light pen.

Keyboard is the keypad device with buttons or key that a user presses to enter data, characters and commands. Olowu F.A (2005) asserts that keyboards emerged from the combination of typewriter and computer terminal technology into a computer. A computer operator or user communicates with the computer through the keyboard according to Olowu “telling it what to do”. “Whenever any keyboard is depressed, it communicates with the CPU”. Olowu (2005) identifies two types of keyboards:

(a). Standard keyboard, and (b). Enhanced keyboard.

Enhanced Keyboard has extra keys for extra functions. It has 12 function keys across the top rather than 10 down the left side. It has control and alternative key and a bank of cursor movement and editing keys between the main part of the keyboard and the numeric keypad.

(iii). **Storage Devices**: are devices for the storage of information programmes and other data to be retrieved by the computer any time such information or programmes may be needed. There are external storage devices and internal storage devices.

The external storage devices are made up of:

(a) Magnetic floppy disks which can store about two megabytes of information

(b) Hard drives which store thousands of megabytes of information.

© CD – ROM (Compact Discs) which can store up to 630 megabytes of information

(d) DVD (Digital Video Discs) which can store up to 8.5 gigabytes of information and

(e) Magnetic tapes – reel – to – reel magnetic tape which is commonly used to store information for large mainframe or supercomputers.

Internal storage devices consists of the

(a) Ram: This is known as the Random Access Memory.

(b) Rom: This is known as the Read Only Memory.

© Memory Bands which is the circuit of the computer that holds millions of information.

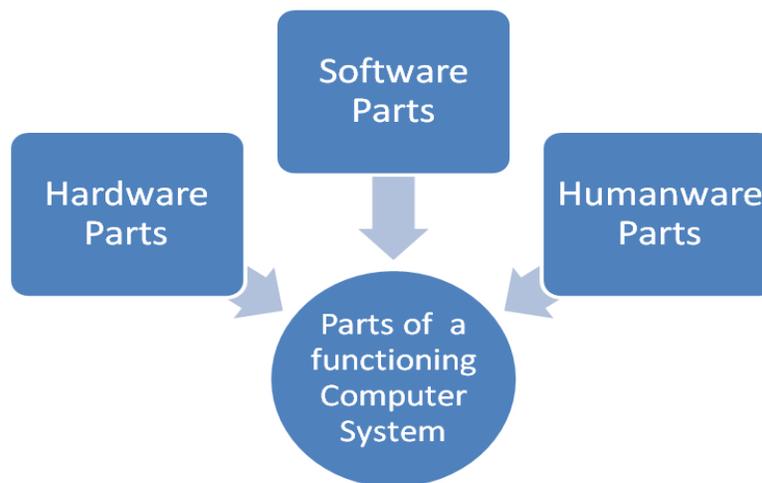
(iv). **Output Devices**: These are external devices that transfer information from the computer CPU to the computer user. These are the Video Display Unit (VDU) and the printer.

The VDU which is also known as the monitor is a video display screen which converts information generated by the computer into visual or see able information. Monitors are made up of a Cathode Ray Tube (CRT) which looks like a television screen. Monitor or liquid crystal display (LCD) screen which is flatter and smaller are usually used on laptops.

The printer is the other output device which takes text and images from a computer and prints them on paper. When information is still on the computer and copied with flash, disc or other device to another computer for use, it is known as soft copy. But when the information is printed on paper, this becomes hard copy.

Abass & Abimbola (2007) divide a working computer into three parts namely: the Hardware, Software and Human ware parts represented in the chart below:

#### Parts of a functioning Computer System.



(a). **Hardware**: These are the physical parts of the system which define the collection of electronic devices such as keyboard, CPU (System Unit) and the printer.

(b). **Software**: These are set of instructions (or programs) which enable the hardware component of a computer to carry out certain functions. Abass, O.A. (2007) says, “the software activates the hardware and subsequently put the hardware into functional stage”.

©. **Human ware (User)**: Abass, O.A (2007) is of the view that quite a large number of computer knowledge contributors have ignored the human ware in their discussion, and this he considers very important because before the computer can be made to function, there must be a user to give it command. And like most people have commented, computer is garbage in, garbage out, whatever you feed into it, it takes and whatever you remove, it deletes.

It is important that this basic information be included in Islamic Studies education programme of the Nigerian institutions because it will enhance students’ knowledge of computer appreciation and it will remove the phobia which most of them have.

#### Basic Rudiments of Computer Knowledge

Some basic rudiments should be understood to enable Islamic Studies educators appreciate the use of computer in this age of scientific and technological advancement. A survey conducted within the Department of Islamic Studies, Tai Solarin University of Education, Ijebu-ode, Ogun State, Nigeria in 2009 among the lecturers and students indicated that they had phobia for computer knowledge, and they seemed not to see any need for the knowledge of computer because they were in religious studies. Students were given questionnaires to fill; lecturers were interviewed using semi – structured approach.

Fifty (50) students, 300 and 400 levels were involved in the survey.

	QUESTIONS	YES	NO
1.	Do you have any knowledge of computer studies?	2	48
2.	Do you have an idea of what the key components of a computer system are?	2	48
3.	Have you on your own ever done any work on the computer?	2	48
4.	Can you operate a computer system?	2	48
5.	Have you ever done any assignment which requires searching on the computer?	45	5
6.	Do you have any knowledge of browsing on the internet?	4	46
7.	Do you think computer knowledge is relevant to your Islamic Studies discipline?	5	45
8.	Do you intend to study computer knowledge at all?	5	45
9.	As a potential Islamic Studies Educator, do you think a teacher of Islamic Studies can function well without any knowledge of computer?	46	4
10.	Is there any Computer Appreciation course included in your Islamic Studies curriculum programme?	0	50

The responses gathered on each of the items were further analysed and discussed thus:

**Question 1:** Two out of the fifty respondents (4%) answered positive while 48 (96%) responded that they did not have any knowledge of computer. If 48 students out of 50 (96%) confessed that they did not have any knowledge of computer. There is no doubt that if they graduate, they will have difficulties in teaching their pupils using computer tools and so on. A similar experience was observed among their lecturers. Majority of them were not exposed to any computer knowledge in their school days. Hence, they have difficulties in using computer, working on the computer system, how much more of teaching their students how to use computer in their learning.

**Question 2:** As regards having the idea of the key components of computer system, two students answered positive while 48 responded negatively. This confirms responses to the first question on computer knowledge. There is no doubt that if 48 (96%) responded by saying they did not have any knowledge of computer, then the second responses corroborate the fact that one who does not have any knowledge of computer cannot of course have the knowledge of key components of a computer system based on a simple analogy.

**Question 3:** Question 3 was based on doing assignment on the computer, 48 (96%) again responded that they had never done any assignment on the computer on their own. This is simply because they do not know how to use the computer. Therefore, it would have been contradictory for them to respond otherwise.

**Question 4:** As to the knowledge of how to operate the computer system, 48 (96%) of the students confessed that they could not operate the computer system at all. They claimed that, they saw it as a big task perhaps because they were ignorant about it. They stated that they looked at computer system as a very fragile object.

**Question 5:** The fifth question asked whether they had done assignment requiring the use of computer system or not. 45 of them (90%) answered in the affirmative but added that they asked their friends or operators to help them do the searching because they did not have any knowledge of how to go about it. 5 of them (10%) responded that they had done the assignment by themselves. When further asked how they did it when they did not have any knowledge of the computer. It was discovered that 3 out of the 5 did not understand the question because their response negated the question. It was however observed that only 2 actually had the knowledge and ability to search on the computer by themselves.

**Question 6:** When asked whether these students had any knowledge of browsing on the internet? 4 (8%) answered positive while 46 (92%) answered negative. There is no doubt that one who does not have knowledge of computer may not be able to do browsing because there is positive correlation between the knowledge of computer and browsing on the internet.

**Question 7:** As to whether computer knowledge was relevant to Islamic Studies discipline or not. Only 5 students (10%) responded positively while 45 (90%) of them responded negatively. This only shows their ignorance of the usefulness of computer education because at this age no field of study can thrive without any knowledge of computer appreciation.

**Question 8:** When asked whether they had any intention to study computer education. 45 of the students (90%) responded negatively. This is perhaps because they did not know the importance of computer education. Whereas computer knowledge is useful in all ramifications of life. It is useful in solving academic matters fast in all disciplines, it is useful in writing researches, scanning for literature in relevant areas, and it is useful in analyzing findings and sorting references. It is also useful in social and economic matters. It is believed that if these students were exposed to inexhaustible benefits of computer knowledge and appreciation, they would have responded otherwise, this shows more reason why computer knowledge appreciation course is to be included in the Islamic Studies education programme.

**Question 9:** Asking whether the teacher of Islamic Studies education could function effectively without the knowledge of computer. 46 (92%) responded positively and this further portrays their ignorance of the uses of computer education in modern approach to learning.

**Question 10:** Question 10 was based on whether the undergraduate curriculum of the Islamic Studies students contained any course on computer knowledge. All the respondents (100%) answered negatively indicating that the curriculum did not contain any course on computer knowledge. This was not unconnected with the fact that lecturers too did not have any knowledge of computer and so, they did not want any such course for fear of who to teach it.

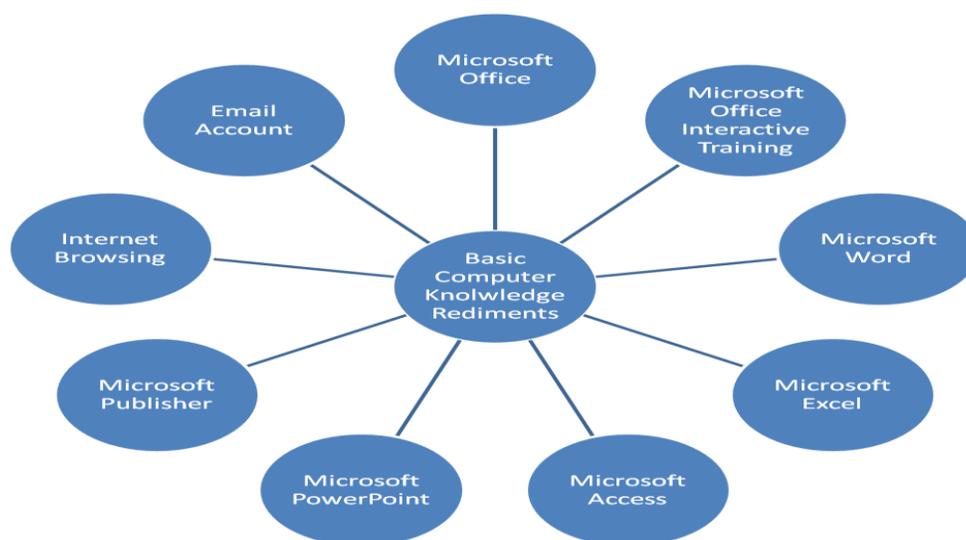
With this, it is crystal clear that the curriculum is faulty, little wonder why the students' reactions to computer knowledge is negative and of the feeling that it has no relevance to their course of study. This justifies the need for this study - Appreciation of computer knowledge in the teaching and learning of Islamic Studies to show the relevance of computer knowledge to Islamic learning and its other uses.

Hence, because majority of the students who were the focus in this study were novices in the knowledge of computer, there was the need to discuss briefly the basic rudiments of computer knowledge.

The learning centre for computer, North Coast Institute (2009) has identified the following as the basic rudiments of computer knowledge:

- (a).Microsoft Office (b) Microsoft Office Interactive Training (c) Microsoft Word (d) Microsoft Excel (e) Microsoft Access (f) Microsoft PowerPoint (g) Microsoft Publisher (h).Internet Browsing (i) Email Account

### Basic Rudiments of Computer Knowledge



**Microsoft Office:** contains computer programs for word processing, spreadsheet, database, publicity documents and presentation creation.

**Microsoft Word program:** is a word processor which can be used to produce typed documents such as letters, essays and reports. Pictures and other graphics can be inserted into the typed document. Word can format your work into columns, tables and simple diagrams. It is also possible to insert links to internet pages. Colour documents can be created and there are also page formatting options to change the look of your document. Word has a spell-checker thesaurus and grammar-checker to help ensure that your writing is error free. Word processing involves the use of a mouse and keyboard.

**Microsoft Excel:** is used to create spreadsheet (tabulations of data). It is used for financial statements, or compilations of statistics, or other figures. Excel uses the automatic calculation features known as formula, and complex calculations can be done automatically and will recalculate automatically if the figures in the spreadsheet are changed. On excel, graph can be produced in a wide range of styles.

**Microsoft Access:** Database program which allows one to create inventories lists, catalogues or registers. The database features can be used to generate reports which extract data from your database and print it out in the form you require. There are import and export features which are available to read other database formats or save one database into other formats.

**Microsoft PowerPoint:** creates audio visual presentations (projected “slide shows”) for meetings or seminars. PowerPoint is an effective way to present project results and comes with numerous templates for a quick start.

**Microsoft Publisher:** is a powerful, versatile tool to produce documents for publication. Page formats supported include folded brochure, banners, greeting cards as well as flyers (single page documents) and multiple page documents (booklets or newsletters).

**Internet Browsing:** Wolfinger, Anne (2007) expresses the opinion that the internet works by allowing you a passage in which to link to a provider. The internet services allow one to connect to many data banks and access their knowledge. According to Carthy Wright (2002) “the links you connect through send your request to many different points around the world to obtain the information you have requested in a search”. This also allows for communication by e-mail.

**E-mail:** is a way to correspond to someone by sending a message by computer or through what is called electronic media which appears instantly on the other user’s computer. Messages sent through e-mail can be photographs or scanned images sent in a link. To Cathy Wright, “the internet connection is a very important tool for a student or the curious minded because it allows communication to find all sorts of information.” To send e-mail, one needs an email account. Just as one needs a letterbox to receive letters, an e-mail account gives one an e-mail address. The use of (ICT) information and Communication technologies has become the order of the day. This goes along with computer knowledge and use of internet browsing. Ilana Snyder, Anne Jones and Joseph Lo. Bianco (2005) have described (ICT) as the transfer of literacy by electronic communication to achieve globalisation of knowledge.

### **Appreciation of Computer Knowledge and its Importance**

The use of computer in this age permeates all aspects of lives and all fields of disciplines. It may not be an exaggeration to say that one who does not have any knowledge of computer is a dead person. Even though such a person is breathing, he has live in him but his inability to gain access to information near him and around the world makes him a dead person because the use of computer and internet has turned the world to a global village. Joseph Brochin (2007) is of the opinion that for acquiring promotion in this modern technological era, one is required to keep the pace of the growing world by having sound knowledge of computers by basic computer training. In his words, “it is a fact that for becoming a computer savvy, you need to firstly acquire the basic knowledge of computer. Once you acquire it, you are provided with a platform necessary for enhancing yourself with the technological advancements that are continuously coming up. The tools provide the basic knowledge in computers which is always going to be helpful to you in all spheres of life”.

The view expressed by Joseph Brochin is very much relevant in this situation. For instance, when our institution the then Tai Solarin College of Education Ijebu-Ode transformed into a university of education about ten years ago, all the staff were made to attend diploma courses in computer education particularly those who did not have any knowledge of computer at all prior to that time.

It was not restricted to a particular department because computer would be used to carry out many assignments such as settings of questions, computations of results, writing of papers etc.

Irrespective of whether one is in Islamic Studies or not, you would need the knowledge of computer to do such things apart from even making researches. Presently, efforts are on in the university to cancel out courses relating to typing, shorthand and typewriting and to replace them with more useful computer courses. From the minute of the 34<sup>th</sup> Senate Meeting of the University, the Senate had resolved to meet with the Nigeria University Commission (NUC) to inform NUC of such changes.

Computer training according to Joseph B (2007) creates a platform for acquiring the training related to the current technological advancements in all disciplines. Olowu, F.A (2005) lists other uses of computers as to check the credit status of customers and transfer funds electronically. It can also be used to regulate flow of fuel, increasing fuel economy if the tiny ones are installed into automobiles. In education, computers are used mainly for researches, coding and decoding, computer can be used to block information from intruders gaining unlawful access to such information with the use of passwords.

In Islamic Studies, teachers and students as depicted from the little study conducted in this paper were hardly coping with the task of incorporating the use of new technology in their teaching and learning. The obstacles responsible for this were lack of computers and available resources, lack of training, shortage of time and the pressure of a heavy syllabus and examination – centred learning. M.I Hamzah, A.Ismail and M.A Embi (2009). According to them, “many researchers have found that teachers were fearful to change and more comfortable with the present conditions”. Computer knowledge is of immense importance to Islamic Studies. There are Arabic alphabets which have been put on keyboards. One will expect that experts in Islamic education will be the ones to make use of these items and alphabets in learning.

But if the teachers and learners of Islamic Studies are ignorant in computer knowledge, who else will make judicious use of these items. More so, on the internet, we have a lot of write ups, and information written in Arabic language which will serve as primary source of information for those in Islamic Studies education on one hand and also for those in Arabic education on the other hand. With this, it is proved beyond every reasonable doubt that the knowledge of computer education will further widen the horizon and research capabilities of the students and lecturers in the field and it will make them improve in their delivery and outputs. It will also make it easy and feasible for students who may wish to pursue online education or distance learning in Islamic Studies to do so.

### **Internet Search Engines**

Closely related to internet browsing are the different search engines through which one can make browsing on the internet. For the students of Islamic Studies and a few of the lecturers who are completely ignorant of computer knowledge and who have no knowledge of internet browsing, one may need to allay their fear by giving them a little information on what they will expect and how they can easily overcome the fear of change which is for the better and to further improve them and enhance their productivity in terms of research and delivery.

About 15 of these channels (search engine list 2013) very popular for linking the internet exists which are called search engines. Some of them are Yahoo Search Engine, Google Search Engine, Bing Search Engine, The Opera Search Engine and Mywebsearch Engine to mention a few. These are illustrated in the chart below:

### Internet Search Engines



Yahoo search engine is linking the internet through the yahoo. This seems to be the oldest and first search engine to come into existence. Improvements are made on it on daily basis to make it serve people effectively. However, in Nigeria it seems the yahoo is over congested these days and a few difficulties are encountered by users when trying to access information, e-mail or other important documents through the yahoo.

Google search engine is the second best that is widely used in Nigeria and probably the best in the world now. This is another search engine through which one can link the internet to access information, view email messages, download attachments and pictures. This seems to be working better presently for it provides other linkages like https and hotmail that could be explored which could facilitate the browsing more effectively. Google search engine makes provision for the Nigeria local languages being Hausa and Yoruba which people have found to be working fine. It is easy to switch from one language to another on the Google search engine with ease.

Myway is another search engine used to link the internet. Few people in Nigeria use it to link the internet may be because it is sometimes slow and always breaking while in use.

Opera is another search engine used in linking the internet. It is sometimes faster and responding well. One advantage of opera is that when one is browsing through it and there is a break, any other time you connect to the internet, it will lead you to the previous page instead of restarting all over from the beginning. This has its advantages and disadvantages. It will save time, make user remember the last point of call but may be dangerous because if other users use the system, it may expose what the initial user is trying to protect. Aside, there are some functions which user may easily perform on the internet through the opera search but which may not be possible through other search engines. For instance, to download acrobat reader, and adobe flasher player, opera conforms better than other search engines.

Freedom search engine is another link to the internet. There are some programs which one can get from this search engine but which may not be easily gotten from other search engines. The bottom line of discussion here is to introduce a novice in computer and internet to a little information which can guide him or her to acquire at least little knowledge that may make him search for any information conveniently on the internet without stress.

## ***Conclusion***

Islamic Studies as a course of study cannot be taught or learnt in isolation of other realms of studies. It has been established that even though, it is a religious subject, there is positive relationship between its teachings and what people encounter in their different ways of life. The need for computer knowledge and use, and its application to Islamic Studies education programme in Nigeria has not been fully implemented. In fact the (NPE) Nigeria National Policy of Education portrays Islamic education like a subject which is not related to science and technology. This is because while grouping the school subjects into three namely: Sciences, Commercial and the Arts, Islamic Studies is grouped among arts based subjects.

As a result, when preparing the timetable, Islamic studies is stroked with another science subject not creating room or space for students in sciences who may want to offer Islamic studies in addition to his science picked subjects. At times, some school authorities will even go as far as unequivocally telling the students who are in science class that they cannot offer Islamic studies along with science subjects.

This is the extent of damage which the Nigeria government and some school authorities have done to the discipline. This consequently sends wrong signals to the students of Islamic studies who come out with the feeling and impression that Islamic studies is a purely religious subject which may not be taught or acquired using modern technological advancements. This perhaps was discovered to be what was responsible for the high percentage negative responses recorded by the students to the questions given them on the use of computer knowledge and acquisition of Islamic learning.

## ***Recommendations***

At this juncture, one hereby points out the need to change the orientation of Islamic studies students and a few lecturers and teachers who hold the perception that Islamic studies cannot be taught or learnt using modern technological equipment. The quick and fastest way of achieving this is by introducing Computer Appreciation as a course in all the Islamic studies curriculum at all the levels of Nigeria educational systems. Teachers of Islamic Studies should also be taught basic elements of computer knowledge which will afford them the opportunity of handling this course in their subject area. However, where no teacher of Islamic studies can handle it, they should not deny the students of this opportunity. The Computer Appreciation course should be added to Islamic studies courses and a lecturer from outside the department could be sourced to handle the subject. This if done will change the perception and orientation of Islamic Studies students and will be of immense benefits to the students who will eventually graduate and be teaching the young ones in another setting.

In this case, they will be better than their teachers who were not able to teach them this, and it will expose them to various opportunities available at their disposal. There is a saying that what you do not have, you cannot give but in their case, they would have acquired computer knowledge along with their Islamic courses and will be in a better condition to disseminate the knowledge they have acquired.

**References**

- Abass, O. A. & Abimbola, B. L. (2007), Introduction To Computer and Electronic Data Processing, Published by Over to God Press, 22, Bonojo Street, Ijebu-ode, Ogun State.
- Boye Jokotoye, (2004), Welcome to Computer Studies, Published by Davies Igwe Consulting, Abeokuta, Ogun State, Nigeria.
- Cathy Wright, (2002), Hoe the Internet Works, [www.internetpolicy.org/briefing/12-99-story.html](http://www.internetpolicy.org/briefing/12-99-story.html), assessed 30/12/2012.
- Dawley, Lisa, (2007), Tools for Successful Online Teaching, Publication: Hershey IGI Pub.
- Hamzah, M. I., Ismail, A. and Embi, M. A. (2009), The Impact of Technology Change in Malaysia Smart Schools on Islamic Education Teachers and Students, [www.waset.org/pwaset/v37-74.pdf](http://www.waset.org/pwaset/v37-74.pdf) assessed 25/01/2013.
- Ilana Snyder, Anne Jones and Joseph Lo Bianco, (2005), Using Information and Communication technologies in adult literacy education: New practices, new challenges, [www.never.edu.au/research/proj/nd3L](http://www.never.edu.au/research/proj/nd3L) assessed 25/01/2013.
- Joseph Brochin, (2007), Basic Computer Knowledge- The First Step Prior to Acquiring Basic Computer Training, [ezinearticles.com/?Basi-Computer---Knowledge.](http://ezinearticles.com/?Basi-Computer---Knowledge.) 25/01/2013.
- Lambropoulos, Niki; Zaphiris, Panayiotis, (2007), User- centered Design of Online Learning Communities, Publication: Hershey, PA Idea Group Publishing.
- Levy, Yair, (2006), Assessing the Value of E- Learning System, Publication: Hershey, PA Idea Group Publishing.
- Meeting of Senate, (2009), 34<sup>th</sup> Minutes of Senate Meeting of Tai Solarin University of Education, Ijebu-ode, Nigeria, held on 29<sup>th</sup>, April 2009.
- Nassiry, A. & Kardan, A, (2009), Grid Learning: Computer Grids Joins to E-Learning, [www.waset.org/pwaset/v37-55.pdf](http://www.waset.org/pwaset/v37-55.pdf), assessed 30/01/2013.
- Nettelbeck, David, (2005), Computers, Thinking and Learning: Inspiring Students With Technology, Publication: Camberwell, Victoria Australian Council for Education Research.
- Olowu, F. A. (2005), Educational Technology- A Conceptual Guide, Published by Gondalom Books, 24, Onanuga Street, Ijebu-ode, Ogun State, Nigeria.
- Politis Dionsyios, (2008), E – Learning Methodologies and Computer Applications in Archaeology, publication: Hershey, PA IGI Publishing.
- Search Engine List (2013), [www.theseenginealist.com](http://www.theseenginealist.com), assessed on 07/02/2013.
- The Learning Centre, North Coast Institute, (2009), Introduction to Email Accounts, [www.ncistudent.net/Study/TechnicalSkills/Email.htm](http://www.ncistudent.net/Study/TechnicalSkills/Email.htm), assessed 05/02/2013.
- The Learning Centre, North Coast Institute, (2009), Microsoft Office Contents, [www.ncistudent.net/Study/TechnicalSkills/Email.htm](http://www.ncistudent.net/Study/TechnicalSkills/Email.htm), assessed 07/02/2013.
- Wolfinger, Anne; Gordon, Rachel Singer, (2007), Best Career and Education Web Sites: A Quick to Online Job Search, Publication: Indianapolis, IN Jist Publishing.