

**Effect of Information and Communication Technology on Senior School Islamic Studies
Students' Achievement in *Fiqh* In Ilorin, Nigeria**

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ABSTRACT

Information and Communication Technologies (ICTs) are generally accepted as modern educational tools that enable educators to modify teaching methods in order to improve students' performance. This study investigated the effect of Information and Communication Technology on Senior School Islamic Studies Students achievement in Fiqh in Ilorin, Nigeria. It examined the significant differences in the post-test performance scores of students taught using Information and Communication Technology tools (videotape) and those taught using conventional classroom instruction. The research design that was adopted for this study is the Quasi-experimental design. The sample consisted of 104 Secondary School (SS II) Students drawn from two equivalent secondary schools within Ilorin metropolis. The Islamic Religious Studies Performance Test (IRSPT) was administered to the students as pre-test and post-test. The results of the students were analysed using Analysis of Covariance (ANCOVA). The finding shows that the students taught using videotaped instruction performed significantly better than their counterparts taught using the normal classroom instruction, and that gender has no influence on students' performance in Fiqh aspect of Islamic Religious Studies when videotape instruction was used. Based on the finding of the study, it was recommended among others that Islamic Religious Studies teachers should be resourceful enough to look for relevant videotape programmes that can be used to enhance their teaching so that behavioural objectives set for instruction can be achieved.

Keywords: Achievement, Effect, *Fiqh*, ICT, Islamic Studies, Students

Introduction

The current age is the information age, which requires having information and making relation to get required information (Block, Ostam, Otter, Overment, 2002). Many researchers view information society as multi-structural and multi-dimensional in which all layers and levels require information (Jenks & Springer, 2003). ICT and its application have become a topic of discussion in the technological arena in different sectors and particularly in education. Information and Communication Technologies (ICTs) are generally accepted as modern educational tools that enable the educators to modify the teaching methods employ them in order to improve students' performance. In this 21st century, many factors of ICT in education and contemporary trend suggest large scale changes in the way education is planned and delivered as a consequence of the opportunities and availability of ICT.

It appears the society has so far undergone three phases in its socio-economic development. The first phase was the agricultural revolution, the second was industrial revolution and the third phase is the current Information Technology revolution. According to Daniels (2002), ICTs have become, within a very short time, one of the basic building blocks of modern society. Many countries now regard understanding ICT and mastering the basic skills and concepts of ICT as part of the core of education, alongside reading, writing and numeracy.

The emergence of Information and Communication Technology (ICT) has revolutionised the existence and activities of contemporary man especially in the milieu of globalisation (Evey, Emmanuel, Joseph, Dennis & Asinde, 2010). Attempts have been made to establish the relationship between Information and Communication Technology and human behavior Ibe-Bassey (2000) and Inyang-Abia (2004) have noted that media mediate in between stimulus response learning and cognitive learning to concretise ideas, concepts and facilitate learning. This reveals that ICT is capable of facilitating the collection, preparation, presentation, storage, retrieval, conveyance and dissemination of information. Ibe-Bassey (2000) and Inyang-Abia (2004) in their various studies identified ICT media to include radio, television, computer and internet facilities, computer game console, DVD player and recorder, digital camera, scanner, among others. In recent times, there has been intense advocacy both nationally and internationally for the application of ICT in the teaching and learning process.

According to UNESCO (2002), Information and Communication Technology (ICT) may be regarded as the combination of 'Informatics Technology' with other related technologies, specifically, communication technology. The kinds of ICT products available and having relevance to education such as teleconferencing, email, audio conferencing, television lessons, radio broadcasts, interactive radio counseling, interactive voice response system, audio-cassettes and CD ROMs etc., have been used in education for different purposes (Bhattacharya & Sharma, 2007).

Education in Islamic perspective is a process of transferring moral values or knowledge that develop the whole potential of human nature, physically and emotionally with solid and balanced individuals that are able to carry out their responsibility as God's caliph on the earth. With the advance development of Information and Communication Technology (ICT), Muslim educators need to equip themselves with ICT skills especially multimedia in order to cater for the growth of students in all aspects: spiritual, intellectual, imaginative, physical, scientific, linguistic, both individually and collectively. If this is fulfilled, then there will be balanced students, spiritually, physically and mentally.

Education in Islam, is in two folds: acquiring intellectual knowledge (through the application of reason and logic) and developing spiritual knowledge (derived from divine revelation and spiritual experience). According to the worldview of Islam, provision must be made equally for both in the process of education. Acquiring knowledge, in Islam, is a means to stimulate a more improved moral and spiritual consciousness, leading to faith and righteous actions (Nasr, 1984).

Religious education is an educational system encompassing all aspects of life needed by mankind's to increase their religious internalisation and practice in their society, religion, nation and state. Religious education is the cultivation of human mind and a key to good governance in the religious activities in Nigeria (Oko, 2015:299). Religious education is also a form of guidance for students so they can understand, live and practice the teachings of Islam and make it as their world view in living their life in the world and in the hereafter (Arief, 2002).

The word *fiqh* is an Arabic term meaning "deep understanding" or "full comprehension". Technically it refers to the body of Islamic law extracted from detailed Islamic sources (which are studied in the principles of Islamic jurisprudence) and the process of gaining knowledge of Islam through jurisprudence. The historian Ibn Khaldun describes *fiqh* as "knowledge of the rules of God which concern the actions of persons who own themselves connected to obey the law respecting what is required (*wajib*), sinful (*haraam*), recommended (*mandūb*), disapproved (*makrūh*) or neutral (*mubah*) (Wikipedia, 2021).

Academic achievement has been defined as the scholastic standing of a student at a given moment (Adeyemi, 2010). Students performances especially at the secondary school level is not only a pointer to the effectiveness of the school, but also a major determinant of the future of youths in particular and the nation in general. According to Aremu and Sokan (2003), the medium through which the attainment of individuals and the nation's educational goals can be achieved is learning. Therefore, learning outcome has become a phenomenon of interest to all and this accounts for why scholars have been working hard to unravel factors militating against good academic performance. Academic achievement of learners has attracted the attention of scholars, parents, policy-makers, planners and other stakeholders (Federal Republic of Nigeria, 2013).

Adeyemo (2001) opined that the goal of the school is to work towards the attainment of academic excellence by the students. The school may have other peripheral objectives, emphasis is always placed on the achievement of sound scholarship. Besides, everybody concerned with education place premium on academic performance of children. At the outset of an activity, students differ in learning as a function of their prior experiences, personal qualities and social supports. The later includes the extent that parents and teachers encourage students to learn, facilitate their access to resources necessary for learning and teach them strategies that enhance skill acquisition and refinement.

The role of gender in the teaching and learning cannot be over emphasized. Gender is one of the key factors influencing students' academic performance. Horny (2006) defined gender as male or female. According to Ogunjuyigbe (2008), gender differences refer to social or environmental differences that are observed between the sexes. In Nigeria and perhaps the whole of Africa, gender bias is still very prevalent. Gender roles are somewhat rigid in Africa, particularly in Nigeria, where gender differences are recognized in the day-to-day activities of boys and girls, as males and females enter the educational system with different sets of behaviours, attitudes and values. Ndura (2004) stated that the perception of gender bias would have impact on students' academic and professional choices. This is because female students view males to be

professional in sophisticated technological tools, excellent in building and fixing things, which need to be repaired. On the contrary, female always seem to be cooking, knitting and tending babies, which are perceived as smooth, rather than the energetic roles.

Onuah and Ugwu (2009) explained that gender constitutes students' characteristics and it is also an important factor influencing students' academic performance. Ibikunle (2010) stated that gender generalizations are manifest in the type of vocations and professions in which boys and girls are involved. Some fields such as medicine, engineering and architecture are traditionally regarded as male areas, while fields like nursing, catering, typing and arts are regarded as female fields.

Statement of the Problem

The importance of instructional materials in any teaching and learning cannot be over-emphasized. This is for the fact that such materials, enhance, facilitate and make teaching and learning easy and concrete. The objectives of the Federal Government of Nigeria in the National Policy on Education in recognizing the importance of preparing students at the secondary school level, to think critically, analytically and independently about moral issues, with the fear of God and to become independent moral agent may be an illusion unless the teachers of religious subjects change from the use of conventional teaching methods of chalk and board to the use of instructional materials. Instructional materials not only augment teaching and learning but also attract students' interest, thereby increasing their enrolment for the subjects.

Many researchers have carried out studies on Information and Communication Technology in teaching and learning in Nigeria secondary Schools, at different times, in different locations, subjects and areas of interests. Researchers such as Aduwa-Ogiegbaen and Iyamu(2005) worked on the using information and Communication Technology in secondary schools in Nigeria: problems and prospects The result of his findings revealed that the high cost of computer hardware and software; weak infrastructure; lack of human skills and knowledge in ICT and lack of relevant and appropriate software appropriate are factors inhibiting the utilization of ICT in secondary education in Nigeria. Moreover, Olokooba, Abdullaiaand Omosidi, (2014) worked on the impact of Information and Communication Technology (ICT) on the management and performance of secondary school teachers inKwara State, Nigeria. The findings of their study revealed that Information and Communication Technology is essential for efficient running of school and learning.

Although the abovementioned previous studies were focused on ICT tools in different school subjects at different levels of education and location, to the best knowledge of theresearchers, none of the previous studies on ICT has focused on students' achievement in the *Fiqh* aspect of Islamic Studies. This perhaps institutes the gap which this study was set to fill and consequently constitutes the problem of the study.

Purpose of the Study

The general purpose of this study was to examine the effect of Information and Communication Technology on senior school Islamic Studies students' achievement in *Fiqh* in Ilorin, Nigeria. Specifically, the study examined the:

- a. general academic achievement of secondary school students in Islamic Studies;
- b. difference in the secondary school students' achievement in *Fiqh*aspects of Islamic Studies of those taught using ICT and those taught via conventional method, and

- c. Influence of gender on the secondary school students' achievement in *Fiqh* aspects of Islamic Studies of those taught using ICT and those taught via conventional method.

Research Questions

Three research questions were formulated to guide the study:

1. What is the general academic achievement of students in Islamic Studies?
2. Is there any difference in the secondary school students' achievement in *Fiqh* aspects of Islamic Studies of those taught using ICT and those taught via conventional method?
3. Will gender have influence on the secondary school students' achievement in *Fiqh* aspects of Islamic Studies of those taught using ICT and those taught via conventional method?

Research Hypotheses

The following null hypotheses were tested in this study:

Ho₁: No Significant difference exists in the achievement in *Fiqh* aspects of Islamic Studies of Secondary School Students taught using ICT and those taught via conventional method.

Ho₂: Gender has no influence on the secondary school students' achievement in *Fiqh* aspects of Islamic Studies of those taught using ICT and those taught via conventional method.

Methodology

This study focused on the effect of Information and Communication Technology on senior school Islamic students' achievement in *Fiqh* in Ilorin, Nigeria. Specifically, the study concentrated on Salah and Hajj aspect of the *Fiqh*, Video tape recording of Salah and Hajj were used for the study. There are three Local Government Areas in Ilorin metropolis, which include: Ilorin-East, Ilorin- South and Ilorin–West. The total population for the study comprised all senior secondary students in Ilorin metropolis, while the target population was all senior secondary school (two) students in Ilorin. The Purposive sampling technique was employed to select intact classes in 2(two) secondary schools within the metropolis both for the experimental and control group. An Islamic Studies Performance Test (ISPT) having 60 questions, drawn from the topics in Islamic Studies scheme of work, was used to determine the academic achievement of students. The percentage was used to describe the bio-data of the respondents. The two corresponding hypotheses were tested using Analysis of Covariance (ANCOVA) at 0.05 level of significance

Results

The data collected was analysed using descriptive and inferential statistics. Demographic data and research questions were answered with descriptive statistic of frequency, mean and standard deviation. While the formulated hypotheses were tested using analysis of covariance (ANCOVA) at 0.05 level of significance.

Table 3: Distribution of Students with Respect to the Experimental and Control Groups and Gender

Group	Male	Female	Total
Experimental	42	24	66
Control	22	16	38
Total	64	40	104

Answering the Research Questions

Research Question 1: What is the general performance of students in Islamic Studies?

Table 4: Students' Performance in Islamic Studies

Grade	Frequency	Percentage (%)
A	22	18.3
B	39	39.4
C	31	26.0
D	12	11.5
E	2	1.9
F	3	2.9
Total	104	100.00

Table 4 shows that academic performance of the students in Islamic studies was very high, this is as a result of the use of instructional materials in the studies.

Research Question 2: Is there any difference in the secondary school students' achievement in *Fiqh* aspects of Islamic Studies of those taught using ICT and those taught via conventional method?

Table 5: Mean Scores of Experimental and Control Groups

Groups	N	Mean	Std. Deviation
Experimental	66	14.82	1.831
Control	38	9.53	2.679
Total	104	12.88	3.354

Table 5 shows the mean scores of students in experimental group who were taught Islamic Studies with Information and Communication Technology with (M=14.82; SD=1.83) while the control group were taught using conventional method (M=9.53; SD=2.68). The results indicate higher mean score for experimental group.

Hypotheses Testing

H₀₁: No Significant difference exists in the secondary school students' achievement in *Fiqh* aspects of Islamic Studies of those taught using ICT and those taught via conventional method.

Table 6: Analysis of Covariance (ANCOVA) of the Performance of Experimental and Control Groups

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	791.719 ^a	2	395.859	108.973	.000	.683
Intercept	1877.713	1	1877.713	516.901	.000	.837
Pre-test	116.395	1	116.395	32.042	.000	.241
Treatment	752.116	1	752.116	207.044	.000	.672
Error	366.896	101	3.633			

Total	18424.000	104
Corrected Total	1158.615	103

a. R Squared = .683 (Adjusted R Squared = .677)

Analysis of Covariance (ANCOVA) was used to determine the difference between students taught *Salah* and *Hajj* using Information and Communication Technology (ICT) and those taught with conventional method. The result shows that there was a significant difference in favour of those taught using ICT as the p-value .000 was less than 0.05 alpha level. Thus, hypothesis 1 was rejected. This implies that students taught Solat and Hajj using ICT method performed better than those taught using conventional method.

H02: Gender has no influence on the secondary school students' achievement in *Fiqh* aspects of Islamic Studies of those taught using ICT and those taught via conventional method.

Table 7: Analysis of Covariance (ANCOVA) of the Achievement of Experimental based on Gender

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	71.391 ^a	2	35.695	15.358	.000	.328
Intercept	2539.307	1	2539.307	1092.529	.000	.945
Pre-test	28.358	1	28.358	12.201	.001	.162
Gender	30.369	1	30.369	13.066	.081	.172
Error	146.428	63	2.324			
Corrected Total	217.818	65				

a. R Squared = .328 (Adjusted R Squared = .306)

Table 8 shows the of Analysis of Covariance (ANCOVA) which was used to determine the difference between students taught Islamic Studies using Information and Communication Technology (ICT) based on gender. The result shows that there was a significant difference in favour of those taught using ICT as the p-value .81 was greater than 0.05 alpha level. Thus, hypothesis 2 was not rejected. This implies that male and female students had similar performance when taught Islamic studies using ICT.

Discussion of Findings

The findings revealed that there was a significant difference in favour of secondary school students taught Islamic studies using ICT as against those taught using conventional method. This maybe as a result of the practical approach used in demonstrating *Salah* and *Hajj* which allows students to watch how *Salah* and *Hajj* are being performed and what was required at every point of action while showing the videos. Also, students showed a lot of enthusiasm in watching the video. This enhanced home understanding of the concepts, hence, their performance was improved after all. This result agrees with the findings of Yusuf (1997) and Harwood and McMahon (1997) who respectively found that the students taught using videotape and those taught using slide-tape performed significantly better than their counterparts taught using normal classroom instruction. It is also in line with Agommuoh (2013) who also confirmed that videotaped instruction does not only enhance communication between learners and teachers but also aids retention.

Finally, it was also revealed from the findings that the performance of senior secondary students was improved, irrespective of their gender type. This indicates that Information and Communication Technology was not gender bias, as both male and female students, on a daily basis, perform Salah and wished in future to also visit the house of Allah in Makkah to perform Hajj. Thus, ICT technique is a viable tool to teaching and learning *Salah* and *Hajj* as they are practical orientated topics in Islamic Studies. This is similar to the findings of Issa and Alfa (2014) whose findings recorded no significant difference in the performance of male and female students exposed to graphical instructional package. It is also congruent to the findings of Ajidagba, Abdur-Rafiu & Fasasi (2016) whose findings established gender did not influence performance of male and female students in Islamic Studies when exposed to concept mapping instruction.

Conclusion and Recommendations

The study examined the effect of Information and Communication Technology (ICT) on achievement of senior school Islamic studies students in Kwara State, Nigeria. Based on the findings highlighted in the preceding chapter and the foregoing discussion in this chapter, it was concluded that Information and Communication Technology (ICT) strategy was more effective for teaching Islamic studies than conventional method when specifically used as video tape for teaching *Salah* and *Hajj*. Also, students' achievement on the basis of their gender were similar when taught Salah and Hajj using video-tape as ICT tool. In the light of the findings and conclusion of the study, the following recommendations are put forward:

1. Islamic studies teachers should regularly employ Information and Communication Technology (ICT) to teaching practical oriented topics, such as: Salah, Hajj, and any other related topics;
2. Religious organisations and school administrators should avoid discriminating against any gender type in teaching any Islamic studies topics as both male and female students responded well to using ICT for learning *Salah* and *Hajj*.
3. Islamic Religious Studies teachers should be resourceful enough to look for relevant videotape programme that can be used to enhance their teaching so that behavioural objectives set for instructions can be achieved.
4. Seminars, Workshops, and in-service training should be organised for teachers to enable them acquire the necessary skills and also update their knowledge about the development and proper use of instructional materials for classroom instruction.
5. School administrations or representative of government should support Islamic Religious Studies teachers financially to enable them attend professional conferences and workshops regularly to develop their skills in instructional materials development.
6. The Ministry of Education should liaise with resource centres at higher institutions of learning for the production of instructional media packages.
7. Educational technologists should be encouraged to develop videotaped instructions on topics outlined for students in primary schools Islamic Religious Studies.
8. Students are advised to use the advantage of ICT to enhance better understanding of their studies.

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