



UMYU JOURNAL OF EDUCATIONAL RESEARCH



A Publication of the

Faculty of Education, Umaru Musa Yar'adua University, Katsina, Nigeria

Open Access / ISSN: 2141-7881

Website: umyuujer.umyu.edu.ng; **DOI:** [10.70886/ujer.24124.009](https://doi.org/10.70886/ujer.24124.009); **Date Received:** 12/01/2024; **Date Accepted:** 13/04/2024

Impact of Printed and Audio-Visual Media on Students' Academic Performance in Secondary Schools in Katsina State

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Abstract

The study investigated the impact of printed and audio-visual media on students' academic performance in secondary schools in Katsina State. Two research objectives; to determine the Impact of Printed media on students' performance in Islamic Studies in Senior Secondary Schools in Daura Zonal Education Quality Assurance; Determine the Impact of Audio-Visual Media on students' performance in Islamic Studies in Senior Secondary Schools in Daura Zonal Education Quality Assurance. Two corresponding research questions as well as two hypotheses were formulated to guide the researcher. A quasi experimental pre-test, post-test design was used for the study. The study sampled 177 out of a total population of 10257. The study subjects in the experimental group were taught a variety of concepts that were designed to promote cognitive and intellectual abilities, This group was taught through the use printed and audio-visual media. The control group was taught the same content using the traditional method for a period of six weeks. One instrument was developed for data collection. The instrument titled Islamic Studies Academic Performance Test (ISAPT) was used to collect data on students scores based on topics related to ablution and prayer which was designed to measure cognitive and intellectual aspect of learning and the. t-test for independent samples was used to test the hypotheses raised in the study using SPSS package at 0.05 level of significance. The findings of the study revealed that there is a significant impact between the mean academic performance scores of students taught Islamic Studies using Printed Media and those taught using conventional lecture method among senior secondary schools and among others. The study generally concluded that the use of printed and audio-visual media seemed to be an innovation and radical approach in teaching Islamic studies, because most of the Islamic studies teachers in the schools have never used any of printed and audio-visual media in their classes due to non- availability of the materials, and where the materials are available, the teachers lack the techniques in using them during teaching-learning processes.

Keywords: Printed and audio-visual media, academic performance and secondary schools

Introduction

The use of Educational Media is essential for teaching and learning process. Media can be utilized in almost every discipline to enhance learning in class and out of class. Research suggests that people learn abstract, new and novel concepts more easily when they are presented in both verbal and visual forms (Guswami, 2020). These media resources are helpful among all cadres of learners, displaying different Learning Styles- visual, auditory and kinesthetic. They keep the learner focused and actively engaged during teaching learning process in classrooms. The use of Media implies a method of communication. Educational media refer to channels of communication that carry messages with an instructional purpose.

They are usually utilised for the sole purpose of learning and teaching ([Webcrawler 2020](#)).

Print media is used as a powerful information tool worldwide that helps to increase children's literacy through using the print media sources (Newspapers and articles, Magazines, Catalogues, Books, Journals, Pictures, Charts and Diagrams) as a teaching tool for them. Print media sources are used in a unique way that helps to motivate and teach students with a textbook as fresh as each day's news. It is also stated that through the use of daily news, editorial, features and even advertising, students at all grade levels can learn mathematics and cost comparison skills, geography and meteorology, history and current issues and how they shape our world, apart from improving reading habits, comprehension and meaning of different words. The media has also been targeting adolescents to capture their consumers of the future. A number of studies in the late Nineties have focussed on the effect of television and other media on adolescent's health and behaviour, especially the effect of television on children, the effect of films on violent behaviour and the like. The learners not only improve their reporting skills but are also enriched in new vocabulary, reading comprehension skills, particularly skimming, scanning, vocabulary and comprehension skills. Thus, as children grow up in a society in the midst of these mediums of print media, they are not immune to both the positive and negative effects of the media. Whereas the media has evolved as a vital entertainment and information tool, it has equally had great impact in education. These print media sources are very helpful. Hence this study is an attempt to know how the access print media sources by students are helpful in their academic performance ([Mitra, 2019](#)).

[Adamu \(2019\)](#) Confirmed that, audio-visual method is one device that can be used in the classroom to teach pupils of nursery, elementary and tertiary institutions. The method enables users to make effective use of both visual and audio media and permits the introduction of study materials. The improved access to electronic and multimedia technology has enabled more students to participate actively in the learning process. Audio-visual aids (Television, Computer Image Projection, Internet, DVD and Tape Recorder) make teaching and learning effective and useful. It is one of the best avenues through which knowledge and information can be disseminated. Utilization of audio-visual media such as television, video, movie, projector, computer in the classroom help in enriching students' understanding stimulates their interest and build a creative environment

Students learn easily from what they see or hear .Audio-visual media (Television, Computer Image Projection, Internet, DVD and Tape Recorder) appeal to the sense of seeing and hearing. Teaching without teaching aids discourages students' interest and participation in the teaching learning process. The effective utilization of audio-visual media will help in promoting students' understanding and academic performance ([Kim H. 2015](#)).

learn, so whatever the teacher is teaching them, they cannot assimilate easily ([Ojobor, 2020](#)).

Statement of the Problem

Thus, the problem of this study bears not only on a determination of the extent to which students' (males and females) pedagogical exposures to Islamic Studies through the aid of printed and audio-visual media have improved their performance in the subject in senior secondary schools but also to confirm the degree to which teachers are exploring and employing the use of printed and audio-visual media (Newspapers and articles, Magazines, Catalogues, Books, Journals, Pictures, Charts, Diagrams, Television, Computer Image Projection, Internet, DVD and Tape Recorder) in boosting and improving the academic performance among all cadres of students (whether males and females) in Daura Zonal Education Quality Assurance. It has also become vital to determine how this frame of thought

is impacting on students' level of performance in Islamic Studies based on gender as a result of exposures to pedagogical impact of printed and audio-visual resources in Islamic Studies in Daura Zonal Education Quality Assurance, Katsina State, Nigeria.

The need for exploring and employing the use of printed and audio-visual media for effective teaching and learning has been established (Mitra, 2019). These materials have a role to play in stimulating and revolving students' academic performance positively. Academic performance refers to how well a student is accomplishing his/her task studies. In educational institutions, success is measured by academic performance on how well a student meets standards set out by curriculum planners or policy makers or by the institutions itself.

Thus, the commitment of many schools to exploring methods and devices of measuring academic success in order to create forums for academic improvement among the sexes has also led these institutions into attempting to find ways and means of closing the gap.

However, the issue of gender has become vital in education especially with increasing emphasis on ways of boosting manpower for technological development as logical development as well increasing the population of females in science and technology fields (Ismail and Eka, 2015). Although gender bias is still very prevalent in Nigeria (Anwar, 2019), a number of researchers (Eeka, 2019 and Azuka, 2013) opine that there are no longer distinguishing differences in the cognitive, affective and psychomotor achievements of students in respect of gender and that girls are being encouraged and sensitized into developing positive attitudes towards education generally.

It is against the foregoing background that the investigator sought to experiment by exploring the pedagogical functions of printed and audio-visual media (Newspapers and articles, Magazines, Catalogues, Books, Journals, Pictures, Charts, Diagrams, Television, Computer Image Projection, Internet, DVD and Tape Recorder) in determining how these instructional materials could boost academic performance among students ((male and female) in Islamic Studies in senior secondary schools in Daura Zonal Education Quality Assurance, Katsina State. In spite of the relevance and popularity of Islamic Studies among Nigerian students in Katsina State of Nigeria, performance of students in the subject at the secondary level remains poor. The yearly mean percentage of the number of students (both males and females) who sit for Islamic Studies at WASC level and obtain credit pass in the subject is usually less than 35%.

Objectives of the Study

The study is set to:

1. Determine the Impact of Printed media on students' performance in Islamic Studies in Senior Secondary Schools in Daura Zonal Education Quality Assurance.
2. Determine the Impact of Audio-Visual Media on students' performance in Islamic Studies in Senior Secondary Schools in Daura Zonal Education Quality Assurance.

Research Questions

Based on the objectives of the study, the following research questions are raised to guide the study:

1. What is the impact in the mean academic performance scores of Students taught Islamic Studies using Printed Media and those taught using conventional lecture method in Daura Zonal Education Quality Assurance?

2. What is the impact in the mean academic performance scores of Students taught Islamic Studies using Audio-Visual Media and those taught using conventional lecture method in Daura Zonal Education Quality Assurance?

Research Hypotheses

On the basis of the fore going research questions, the following null hypotheses are formulated to guide the study and will be tested at 0.5 level of significance;

1. There is no significant impact between the mean academic performance scores of students taught Islamic Studies using Printed Media and those taught using conventional lecture method among senior secondary schools in Daura Zonal Education Quality Assurance.
2. There is no significant impact between the mean academic performance scores of Students taught Islamic Studies using Audio-Visual Media and those taught using conventional lecture method among senior secondary schools in Daura Zonal Education Quality Assurance.

Scope and Delimitation of the Study

The study examines impact of printed and audio-visual media on Islamic studies students' academic performance in senior secondary schools in Katsina state. The study comprises all students of Islamic studies of senior secondary school of Daura zonal education quality assurance comprises three local government, namely Daura, Mai'adua and Dutsi local governments.

The study comprises all SSII students' Islamic students in senior secondary schools in Daura Zonal Education Quality assurance, even though it was restricted to only three schools one senior secondary school was selected for the study from each local government. Printed media was used in experimental group 1, while audio-visual media was used in experimental group

Concept of Printed Media

Print media are one of the oldest and basic forms of communication. It includes newspapers, weeklies, magazines, monthlies, banners & graphics, posters and other forms of *printed* material. The contribution of *print media* in providing information and transfer of knowledge is remarkable. When we refer to development communication, it is about such communication that can be used for development. It is about using communication to change or improve something. The messages which are designed to transform the behaviour of people or for improving their quality of life can be termed as development communication and the messages used to change the socio-economic condition of people. Therefore, development communication can be defined as the use of communication to promote development. Media like print and electronic media play a significant role in development communication of a country. Even after the advent of electronic media-like radio and television, the print media has not lost its charm or relevance. Print media has the advantage of making a longer impact on the minds of the reader with more in-depth reporting and analysis (Dhanshri, 2011).

The contribution of print media in providing information and transfer of knowledge is remarkable. Now-a-days, print media is faster than ever before due to amazing advances in technology in recent years. Technical breakthroughs alter the way we perceive the universe and manner in which we communicate with one another. So it becomes important to study recent trends of print media-newspaper, magazines, booklets in the development of communication of a country and the world (Dhanshri, 2011).

Concept of Audio Visual Media

Many definitions of audio-visual aids such as Television, Computer Image Projection, Internet, DVS and Tape Recorder have been made. Most of such definitions are made in terms of equipment and materials and their use in the teaching and learning process [Ajelabi \(2018\)](#) in his illustrations defines audio-visual aids as teaching aids which are of two kinds-materials and verbal. The materials he called the hardware and software are used in teaching and these include objects, models, photograph, painting, drawing, diagram, films among others. Audio-visual materials is a combination of audio-visual materials which are used in instructional or learning process to facilitate teaching and learning. Audio-visual aids are supplementary devices by which teachers, through utilization of more than one sensory channel, are able to clarify, establish and correlate concepts, interpretations and appreciations.

[Adamu \(2016\)](#) defined instructional materials as aids to effective teaching and which aid effectiveness in classroom by evoking in the students the mental image as in the teacher, thereby making words less ambiguous. Instructional materials are all the things the teacher utilizes to interactively enhances, motivate and facilitate teaching and learning of concepts.

Furthermore instructional materials that may be used to convey meaning without complete dependence upon verbal symbols or language. The implication of this is that items such as text books or reference materials are not essentially audio-visual instructional materials but an illustration in a book. Audio-visual material is a type of instructional material that aids in making ideas or concepts clearer in instructional programmes, but they, on the other hand, should not be regarded as a substitute for good teaching ([Moronkola, 2019](#)). At times audio-visual aids, in the teaching learning process, may assume the form of dramatization of an event or a procedure. Audio-Visual Aids such as motion pictures require the use of specialized equipment to manifest their latent value, whilst activities like field trips and certain exhibitions, etc. do not require the deployment of specialized equipment. Depending on the information to be conveyed to the audience, there are a variety of applications that could be used, such as multimedia, lasers/holograms, DVDs and video imaging.

[Ngozi \(2012\)](#) opined that audio-visual aids encourage participation in dissemination of knowledge thereby stimulating interest, individualizes instructions thus, making learning permanent. Furthermore, [Samuel, and Isaac \(2012\)](#) revealed that audio-visual materials are very important and useful in education because, the normal learner gains understanding in terms of multiple impressions recorded through the eye, ear, touch and other senses. The most important effect of these materials is to assist in achieving the stated behavioural objectives when evaluation is conducted at the end of a lesson or programme.

Role of Audio-visual media in Teaching Islamic Studies

It is much easier to discriminate between media on the basis of access or cost than it is on the basis of teaching effectiveness. Audio-visual Media are flexible in that each medium can be used in a wide variety of ways. Differences within a medium may be greater than between media; for example, the differences between two television programmes may be greater than the differences between a face-to-face lecture and a lecture on a radio programme ([Moronkola 2019](#)).

Research Design

The research design used for this study was pre-test post-test quasi-experimental research design (Creswell, 2018). The study has three groups: two Experimental Group (EG) and one Control Group (CG). Both groups was pre-tested (01) to determine group equivalence before

the treatment. This method was employed because the study is interested in the outcome of academic performance of students who was taught with or without the use of printed and audio-visual media. After the treatment, the two groups has been post tested to determine if there is any difference in the academic performance between the groups.

Population of the study

The population of this study comprises of all Students in Senior Secondary Schools of Daura Zonal Education Quality Assurance Katsina State. Information available from Daura Zonal Education Quality Assurance indicated that there were twenty three (23) senior secondary schools located in three local government that made up the zone. The students’ population is put at ten thousand two hundred and fifty seven (10257). The major reasons for selecting this group (SS II) students were that they are already familiar with the school setting that is they were not new comers or fresh students in this category were not fully occupied with serious task.

A purposive sampling was used in drawing the sample for this study Bello (2013). The sample of this study covered a total of one hundred and seventy seven (177) SSII students selected from three public secondary schools offering Islamic Studies in the study area. The three schools are GSSS Kalgo with a sample population of 69 students, Adamu Baffale SSS with a sampled population of 58 SSII students and GSSS Kayawa with sampled population of 50 SSII students. GSSS, Kalgo and GSSS Kayawa constituted into Experimental Groups while Adamu Baffale SSS is constituted into the Control Group.

The table below shows the school and number of students for Experimental and Control Groups for the present research:

Table 4: Sample Schools for the Treatment in the Study

S/N	School Name	Group	Male	Female	Total
1	Adamu Baffale SSS	Control	29	29	58
2	GSSS Kalgo	Experimental	36	33	69
3	GSSS Kayawa	Experimental	29	21	50
Total			94	83	177

The proposed sampled students that formed the treatment school are GSSS Kalgo and GSSS Kayawa that is, Printed and Audio-visual Method was used in teaching them while those students in Adamu Baffale SSS was in control i.e., Conventional Lecture Method was applied in teaching them.

3.5 Instrumentation

The instrument titled Islamic Studies Academic Performance Test (ISAPT) was used to collect data on students’ scores based on topics related to ablution and prayer. The performance test was conducted under the ethics of a normal examination rules and regulation in the selected schools of the students. Total of sixty (60) marks has been awarded. Therefore, administration of the pre-test and post-test for both experimental and control group was done in six (6) weeks 3.10 scoring method.

Findings of the study

The information on the characteristics and proportional distributions of the respondents by experimental and control groups and gender is presented below.

Table 4.1 Distribution of Respondents in Experimental and Control Groups SS = Sum of Squares, MS = Means of Squares

Groups	Number of Respondents	Percentage
Printed and audio-visual Media (Experimental)	119	67%
Conventional lecture method (Control)	58	33%
Total	177	100

Table 4.1 showed that a total number of 119 students were exposed to printed and audio-visual media during the treatment; this covers 67% of the sample used in the study. The students exposed to Conventional lecture media which is the control group were 58 covering 33% of the total sample involved in the study.

Table 4.2 Distribution of Respondents by Gender

Groups	Number of Respondents	Percentage
Male	99	56%
Female	78	44%
Total	177	100

Table 4.2 showed the distribution of respondents by gender. Based on the information contained in the table, a total number of 99 male students were involved in the study, covering 56% of the sample and female students involved in the study numbered 78 which covers 44% of the total sample used.

Hypotheses Testing

There is no significant impact between the mean academic performance scores of students taught Islamic Studies using Printed Media and those taught using conventional lecture method among senior secondary schools in Daura Zonal Education Quality Assurance.

Table 4.3: Post-test t-test statistics on significant impact on the effect of Printed media method and Conventional lecture method SS = Sum of Squares, MS = Means of Squares

	N	Mean	S. D	t-value	DF	P-value	α -value	Decision
Printed media	69	55.43	20.99	2.43	52	.003	0.05	Sig.
Conventional lecture method	58	47.04	14.51					

Table 4.3 showed that the two means calculated implies that the students exposed to printed media method over those handled with traditional teaching method are 55.43 and 47.04, and standard deviations of 20.99 and 14.51, t-value calculated is 2.43 at the degree of freedom of 52. The p-value of .003 was obtained. Based on the analysed data there is significant impact in the higher performance of students exposed to the printed media method as opposed to low performance noticed with those taught in conventional lecture method. Hence the null hypothesis which earlier stated that; there is no significant impact between the mean academic performance scores of students taught Islamic Studies using Printed Media and those taught using conventional lecture method among senior secondary schools is hereby rejected.

H0₂: There is no significant impact between the mean academic performance scores of Students taught Islamic Studies using Audio-Visual Media and those taught using conventional lecture method among senior secondary schools in Daura Zonal Education Quality Assurance.

Table 4.4 showed that the means calculated by the students exposed to printed media method over those handled with traditional teaching method are 58.64 and 47.04, and standard deviations

of 17.20 and 14.51, t-value calculated is 3.68 at the degree of freedom of 52. The p-value of .0041 was obtained. Based on the analysed data there is significant impact in the higher performance of students exposed to the audio-visual media as opposed to low performance noticed with those taught in conventional lecture method. Hence the null hypothesis which earlier stated that there is no significant impact between the mean academic performance scores of Students taught Islamic Studies using Audio-Visual Media and those taught using conventional lecture method among senior secondary schools is hereby rejected.

Table4.4: Post-test t-test statistics on significant impact on the impact of audio-visual method and conventional lecture method

Variables	N	Mean	S. D	t-value	Df	P-value	α-value	Decision
Audio-visual method	50	58.64	17.20	3.68	52	.0041	0.05	Sig.
Conventional lecture method	58	47.04	14.51					

Discussion of the Findings

Hypothesis one of the study stated that there is no significant impact between the mean academic performance scores of students taught Islamic Studies using Printed Media and those taught using conventional lecture method among senior secondary schools but the finding of the study showed that there is a significant impact between the mean academic performance scores of students taught Islamic Studies using Printed Media and those taught using conventional lecture method among senior secondary schools. The finding is in line with that [Eze \(2019\)](#) who found that, printed Media in the classroom had greater impact on the students’ academic achievement than the Lecture method. [Eker \(2018\)](#) who detected that implementation of the printed and audio-visual media make statistically significant difference for the benefit of experimental groups on the level of academic achievement.

1. There is no significant impact between the mean academic performance scores of Students taught Islamic Studies using Audio-Visual Media and those taught using conventional lecture method among senior secondary schools. The finding also buttressed the fact that there is significant impact between the mean academic performance scores of Students taught Islamic Studies using Audio-Visual Media and those taught using conventional lecture method among senior secondary schools. The result agreed with that of [İsmail and Eker \(2018\)](#), who detected that implementation of the audio-visual materials makes statistically significant impact for the benefit of experimental groups on the level of performance and retention. [Eze \(2019\)](#), similarly the students exposed to activity-based teaching strategy demonstrated a higher performance ability index in the learning of basic concepts, as compared to their colleagues who were exposed only to the lecture method.

Conclusions

From the study conducted, the use of printed and audio-visual media seemed to be an innovation and radical approach in teaching Islamic studies, because most of the Islamic studies teachers in the schools have never used any of printed and audio-visual media in their classes due to non- availability of the materials, and where the materials are available, the teachers lack the techniques in using them during teaching-learning processes.

Lack or inadequate source of power is a great hindrance to effective use of these instructional materials in most of the schools. Looking at the importance of the subject there are some concepts or topics in the syllabus which those that are not experts cannot understand, not to talk of taking the pains in providing printed and audio-visual media. The way an expert in Islamic studies can presents a lesson is quite different from the way a non-Islamic teacher presents. Some students get confused or distorted, because such non Islamic teachers lack of

knowledge of what's printed and audio-visual aids can do in enhancing learning of the subject, because they never use or seen anyone before. However, what were commonly seen or known were chalk boards, text books, maps, pictures among others. It was in view of this that the study hoped to make certain recommendations and suggestions to remedy the situation, if Islamic studies is to enjoy its status among the subjects in the curriculum, supported and boost the interest of the students.

Recommendations

In the light of the findings of this study, the following recommendations are made;

1. There is ardent need for government and stake holders to provide printed and audio-visual aids in the schools to facilitate teaching-learning process of Islamic studies.
2. There is compelling need to secure a stable source of power in the schools to ensure sustainable use the instructional materials particularly audio-visual aids.
3. The school's management and parent's teachers association (PTA) should look into the possibility of repairing broken down models and other instructional materials in the schools with a view to reactivate them.

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