# THE ROLE OF MULTIMEDIA IN ENHANCING THE TEACHING AND LEARNING PROCESS IN NIGERIA: A NECCESSITY FOR REFORMING EDUCATION IN NIGERIA

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## Abstract

*The study examines the role of multimedia in enhancing the teaching and learning process in Nigeria: the concepts of information and communication technology have been highlighted. It also highlighted the importance of multimedia to education, Procedure for using multimedia are identified, the major challenges associated with the use of multimedia in the teaching and learning are discussed. Lack of stable power supply, lack of adequate skills to use multimedia, lack of internet facilities and high cost of ICT tools, are some of the challenges facing the use of multimedia in Nigeria. The paper will be useful to Educational Administrators, Teacher Educators, solution to problems of large classes in Nigeria, and facilitating of effective learning. The provision of internet facilities in the schools and regular supply of electricity are some*

## Introduction

Advancements in information and communication technology are dramatically changing the teaching and learning processes and providing new learning opportunities and access to educational resources beyond those traditionally available. According to Gray (2001), multimedia technology is increasingly flooding the educational arena worldwide, and many colleges and universities are moving towards the use of digital technology to enhance the teaching and learning process of both students and educational practitioners.

Multimedia has been considered as effectives for enhancing the teaching and learning process. This new tool, with its various forms,

*O*f the recommendations made to improve multimedia usage in the teaching and learning process in Nigeria.

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i s now common to find in many schools, from the elementary to the university. In the opinion of Cuban (2014), the word of multimedia is relatively new and can be defined as the combination of different media such as text, sound, image and video to convey information. To be more precise, Neo (2008) states that multimedia is the field concerned with the computer controlled integration of text, graphics, drawings, still and moving images (video), animation, audio, and any other media where every type of information can be represented, stored, transmitted and processed.

## CONCEPT OF MULTIMEDIA

According to tegedor (2006), multimedia implies the integration of multiple forms of media. This includes text, graphics, audio and video. Putney (2008) observed that multimedia is a technique for expressing ideas in which several media are employed. In a generic sense, multimedia simply refers to the use of more than one media element: text, graphics, animation, sound and video.

## Empirical studies on comparative research on multimedia influence on students' performance

A number of researchers have reported that Multimedia improved students performance and retention as compared to "traditional" lectures or study materials that do not use multimedia (Siskos, Antoniou, Papaioannou and Laparidis, 2005; Igbafe, 2011; Gambari, Gbodi & Olumba, 2012). For instance, Siskos, Antoniou, Papaioannou and Laparidis (2005) reported that the Greek primary pupils taught physical education using multimedia computer-assisted instruction (MCAI) performed better than those that used the traditional approach. Igbafe (2011) investigated the use of audio, as well as audio and print media modes of instruction in distance learning and found that a combination of audio and print media mode of instruction is more effective than the audio or print mode alone. Similarly, Gambari, Gbodi & Olumba (2012) reported that students' taught using computer-assisted

instruction performed better than those taught with video instructional package.

**Empirical studies on comparative effects of multimedia on gender influence on students performance**

Comparative effects of technology on gender influence was reported by Gambari, Ojiaku, Fagbemi, Wushishi and Ughovwa (2016) who found no significant difference in the biology mean achievement scores between male and female students exposed to Picture + Audio, Picture + Text; Picture + Audio + Text Packages.

Gambari and Zubairu (2008), Gbodi and Laleye (2006), Obinna and Nnena (2008) reported no significant difference in the mean achievement scores between males and females students taught primary science, integrated science, social studies, and history using video instruction.

**CONCEPT OF INFORMATION AND COMMUNICATION TECHNOLOGY**

Obadeyi (2009) explained that communication technology is an umbrella term that includes any communication device or application, encompassing: radio, television cellular phones, computer and network hardware and software, satellite systems and so on, as well as various devices and applications associated with them, such as videoconferencing and distance learning. Akunyili (2010) views information and communication technology as an umbrella term that covers all technical means processing and communicating information. In her view, the convergence of information technology (IT) and telecommunication technology gave birth to ICT, Sanga (2007) defined information and communication technology as any technology that facilitates communication and assists in capturing, processing and transmitting information electronically.

**IMPORTANCE OF MULTIMEDIA TO EDUCATION**
- They cater for individual differences.
- They allow students participation
- They help to educate the whole students at a time.
- They enable access to education more possible.

## PROCEDURE FOR USING MULTIMEDIA

According to Barde (2010), stated that the followings are the procedures for using multimedia:

### 1. Teacher Preparation

    a. Teacher prepared himself adequately before hand. He should try the media before coming to class.

    b. He must be physically, mentally and psychologically fit to carry out his job

    c. He must be knowledgeable.

    d. He must be down to earth, resourceful and methodical.

    e. He must possess the operational know how in operating media.

### 2. Prepared the environment

    I. The environment should be adequately ventilated adequately lighting with comfortable sitting arrangement.

    II. The environment should be free from extraneous noise and bad dour.

    III. Environment should also be free from excessive heat.

    IV. Any facility required should be making available and adequately provided.

### 3. Prepared the lesson

The student must be well arranged, well sited and free from all hindrances.

### 4. Utilize the Media.

Any media selected should confirm to the instructional objective and should be introduced at the most appropriate time so that learning could be effective such media can be used in the beginning middle or end of the lesson. The media should be used to the one of the following

    1. Motivate learners

    2. Clarity ideas

    3. 3.Pass and explain information

    4. Widen students' horizon

    5. Pass information and explain

    6. Clarify learning and teaching (Barde, 2010).

## THE CHALLENGE TO THE USE OF MULTIMEDIA IN THE TEACHING AND LEARNING PROCESS IN NIGERIA

In spite of the numerous benefits derivable from the use of multimedia in teaching and learning in Nigeria, the integration of multimedia in that is still being faced with a lot of challenges (Awasthi, 2014):

- Poverty can be seen as great obstacle to the adoption of multimedia.
- High cost of multimedia devices, such as smart phones and laptops.
- Unstable electricity supply in the country and high cost of alternative sources.
- Internet facilities are either unreliable expensive.
- Lack of adequate skills to use multimedia in teaching and learning.
- Poor maintenance culture is a great challenge to the sustainability of multimedia devices.
- Lack of required infrastructures. Most school may not have technological resources, both hardware and software, that are required for using multimedia in learning.
- Effective use of multimedia devices require constant supply of electricity, this is problems in Nigeria, especially in remote areas.
- As technology rapidly evolves, compatibility between different devices can also be a problem when trying to move or play multimedia content.

## CONCLUSION

The use of multimedia in enhancing the teaching and learning process in Nigeria is very crucial.

The study highlighted the importance of multimedia to education, Procedure for using multimedia in the teaching and learning. It has portrayed the tremendous contributions that multimedia can offer to the development of teaching and learning processes in Nigeria. The study has also identified the major challenges associated with the use of multimedia in the teaching and learning. In order to overcome the identified challenges and gain maximum benefits from the use of multimedia the following recommendations were given:

## RECOMMENDATION

i. Multimedia devices, such as computers should be provided to schools for learning in the schools and laptops for teachers.

ii. Internet facilities should be provided to schools.

iii. State and federal government should recruited competent instructors.

iv.     Professional bodies; bodies like Mathematical Association of Nigeria (MAN), Science Teachers Association of Nigeria (STAN) and Nigerian Educational Research and Development Council (NERDC) should organized workshops and seminars for teachers to improve their productivity.

v.     Government should enhance electricity supply.

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