

## TEACHING AND LEARNING WITH MEDIA TECHNOLOGY

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### ABSTRACT

Over the centuries, there has been remarkable and mind-blowing improvement in innovations by man. This includes a rapid improvement in information and communication technology (ICT); which provides unique and inventive opportunity for improvements and changes in teaching and learning. The rapid growth in ICT has brought remarkable changes in the twenty-first century, as well as affected the demands of modern societies. ICT is becoming increasingly relevant in our daily lives and in our educational system. To aid and improve teaching and learning, various medium is employed to achieve the needed results and improvements. This is to say that the application of media technology in teaching and learning is a necessary and a welcome innovation in the educational system of any society. This paper reports the place of media technology in aiding and improving teaching and learning at all levels. The various medium of technology shall be discussed with the view to x-ray their roles. The research elicits data from textbook, journals, and library. Internet would form the secondary source of data collection. Results show that many instructors and learners have not acquired basic and professional development on the use of media technology for teaching and learning. Result also revealed negative attitude of both parties towards the use of media technology. It is recommended that instructors should acquire the needed skills through workshops, conferences, short courses, seminars and so on, in order to meet the growing demand of contemporary societies.

**KEYWORDS:** ICT, Media Technology, Innovation, Learning and Teaching etc.

### INTRODUCTION

The rapid growth witnessed today globally in information and communication technology has brought about remarkable and unprecedented changes in the 21<sup>st</sup> century, thereby affecting the demand of modern societies. ICT is becoming increasingly relevant in almost all human endeavours ranging from oil and gas to agricultural sector. The educational system however has not been left out as there is a growing demand on utilization of information and communication technology (ICT) in learning new skills and knowledge needed for the 21<sup>st</sup> century. This is necessary as the effect of technology in our everyday life cannot be overemphasized as today's educational institute tries to reconstruct their curricula, and educational media to meet up with the increasing demand ICT has brought on our societies. The gap existing in the use of ICT and ICT-related tools in teaching and learning situation can therefore be workout by training and retraining instructors on the use of these ICT-related technologies.

The place of an instructor is unarguable the most outstanding and significant factor in education delivery the world over. Educational media having been considered as veritable tools have, however assume new innovation in teaching and learning situation in our classroom. An effective educational delivery in the 21<sup>st</sup> century is to incorporate media technology into teaching and learning as against the traditional approach. Obviously, technology has Improve performance in learning educational skills and content in ways impossible in the traditional classroom setting. Instructor/educators can most effectively taken advantages of

technology by introducing students/learners to activities in which contents are taught more actively and meaningfully (Berson 2009). The utilization of information and communication technology (ICT), in the classroom by instructors will attract improve performance in learning and they should be made available and accessible. These available media resource will motivate and induce learners to acquire knowledge easier at different capacity and level.

## TEACHING

Teaching has been conceived from different angles despite the different conception of teaching and by implication been the teacher's task, teaching should encompass both instructions in procedure, a process to guide students to information, they will need and challenging them to engage in thinking about concepts they construct in their minds. All these processes is needed in order to teach students to become fully functional thinks. Dewey (1916:89) stated that teaching consists of assisting the learner during the process of reconstruction or reorganization of experience which adds to the meaning of experience and which increase the ability to direct the course of subsequent experience. From Dewey's position, it is ascertain that fetching equip a learner with the much needed experience to construct and organize experience thus increasing his ability to meet up life changes which form part of the subsequent experience. In teaching the learner becomes focal point.

Teaching consist of leading the learner through a sequence of statement and restatement of a problem or body of knowledge that increase the ability to grasp, transform and transfer what he is learning(Burner 1966:4). This definition place the learners\ ability to be transformed on the sequences or sense of knowledge, mental engagement, activities he is made to go through. This is to say that learning is feed by teaching. However, not work by is the fact that learning can take place without teaching and since this happen, teaching can be regarded as a guide to the learner to facilitate learning. In order word, teaching is just like the computer been human aided machine can be regarded as learner's aided process. In the 21<sup>st</sup> century, self effort and experience in learning is highly advocated. Hence the need for teacher to use discovery and inquiry mode of teaching which are to greater extent I.C.T based.

## LEARNING

This process has assumed different meaning to different people including non-scholar outside the field of teaching and learning. There are various definition and learning. Each depends on the psychological school of thought. Before we talk about the different schools, let consider some facts that make up learning. Teaching is an active process which the learner must be involved. This is a pointer to the fact that without a learner, learning cannot take place. Learning is facilitated if the learners is actively involved and understand what he is learning. Learning may be influence by the goals, values, motive aspiration of the learner in question.

Let now consider two schools of thought on the meaning of learning as follows, according to Hergenhah (1986:65) learning is "a relatively permanent change in behavior or in behavioral potentiality that result from experience and cannot be attributed to temporary body state or induced by illness, fatigue or drugs".

From the behaviorist viewpoint or assertion, learning result from behavioral manifestation after it has taken place. This is to say that the true evidence of learning is one's capacity to manifest or show abilities relating to his learning after learning had taken place or being thought.

To the cognitive schools of thought, learning is an active process of construction and reconstruction of meaning. Meaning according to the cognitivist is the interpretation given to be learner's experiences from the interactions with the physical and intellectual world. It is subject to consistent modification and the modification results to the new learning. They maintained that learning is internally and not externally gathered.

Against the behaviorists approach which ties learning to stimulus response connections, association or links, the cognitivist interpret learning in terms of insight, perception and cognitive operations. Learning is highly dependent on cognitive ability and previous knowledge and experiences. Learner's ability to learn is tie to his ability to interact with his environment on the basis of his cognitive structure. This implies that a learner's environment plays a key role in his effort to acquire knowledge, skills and ideas.

## **INFORMATION AND COMMUNICATION TECHNOLOGY (ICT)**

This is often used as an extended synonym or as an umbrella term for information technology (IT), but is a more specific term (that is, more broad in scope) that stresses the role of unified communication (James 2011:12-18) and the integration of telecommunications telephone lines and wireless signals), computer as well as necessary enterprise software, middleware, storage and audio-visual systems which enable users to access, store, transmit and manipulate information. ICT seems to have no universal definition as “the concepts, methods and applications involved in ICT are constantly evolving on an almost daily basis.” (ICT-what is it? www.tutor2u.net. Retrieved, 2015- 09-01). The broadness of ICT covers many products that will store, retrieve, manipulate, transmit or receive information electronically in a digital form. For example, personal computers, digital television, e-mail, robots. Therefore, one can say that ICT is concerned with the storage, retrieval, manipulation, transmission or receipt of digital data. With ICT knowledge, we can transfer and receive data respectively by use of media technology.

## **MEDIA**

The term media was first used to describe newspaper, television and radio more than two centuries ago. Today, media has assumed many different connotations. For instance, there are social, mass, print and even visual media. Media is a channel of communication. As media assume different connotation to encompassing social, mass, print, and visual media; undoubtedly, its applicability also has assumed a different status as effective teaching and learning can be enhance and sustained. Media technology is a collective communication outlets or tools that are used to store and deliver information data. Media technology has made communication increasingly easier. Today, students are encouraged to use media tools in schools and are expected to have a general understanding of the various technologies available. In fact, internet unarguably has become the number one and most effective media technology which affects all facets of human endeavour. In the light of this, electronic media now comes in forms of tablets, laptops, desktops, cell phones, mp3 players, DVDs, game systems, radios and televisions. In language laboratory situation for instance, television, radio, DVDs etc are utilized to teach and learn foreign languages like French, Hebrew, Spanish, Greek, and Russian. Other media tools like projector, electronic visual board can tremendously aid and enhance teaching and learning.

## **USING MEDIA TECHNOLOGY IN TEACHING AND LEARNING**

In recent years, the use of computers in institutions of learning has grown more diversified. The potential of learning with technology as a means for enhancing students reasoning and problem-solving abilities have been strongly linked to the increased availability to both students and instructors in schools and at home new information and communication devices which are in different sizes and affordable prices. Instructors and students are offered the new affordable chance for improving and meeting the demand of the new millennium skills. Media technology access is increasingly centered on the learner’s experience. Media tools, equipments, techniques and applications can support and integrate inquire-base learning. Learners can explore, think, write, read, research, solve problems, invent and experience the world in a way and manner hitherto unknown. It is this light that Marshall (2003), in reviewing existing evidence of technology’s impact on learning found strong proof that educational technology vis-à-vis media technology among other computer based technology “complements that what great instructors do naturally”, thus extending the students reach and broadening their experience beyond the classroom. To corroborate (Marshall 2003) assertion above; it is therefore necessary to state that; to have a fair knowledge and understanding that achieving unprecedented success in this direction or regard, the learner, the instructor, the content and environment involvement in which media technology is used remain unavoidable.

The recognition of the roles of new technologies including media in all fields of human endeavour including education as stated in the National Policy on Education shows an indication that no meaningful development and advancement can take place without their integration into education. Teaching is demanding in nature. It is changing and in many ways becoming a more complex job because of increasingly numerous contradictory expectations (Fox 2005).As the world is matching into a complex state, educational needs continue to shift from teaching and learning isolated skills and information with each content area to teach skill necessary for students to attempt and solve emerging complex challenges across many areas. Therefore, in view of this, developers of curriculum must as a matter of necessity prepare for a technology-rich future

and keep with changes by adopting effective strategies that infuse learning with appropriate technologies. Technology in this context refers to new machines, equipments, apparatuses and ways of doing things that are based on modern knowledge about science and computer. Undoubtedly, managing been the changes in teaching as they affect the implementation of technology use in institutions means dealing with students, parents and institutional high expectations in the students learning of high level skills and content that many specifics needed in the 21<sup>st</sup> century setup.

Marshall (2003) maintained that many of different types of technologies can be used to support and enhance learning. Everything from video content and digital movie-making to laptop computing and handheld technologies have been used in classrooms, and new uses of technology such as podcasting are constantly emerging. Teaching and learning resources or media has become increasingly important because they help a learner not to only see an object but to also manipulate them. By so doing, a learner is afforded more opportunities for understanding a message. Hence, the use of media technology such as projector, cameras, videos, microphones among others has become increasingly relevant in aiding and improving teaching and learning at any level of educational practice or involvement. These medium are computer induced. In addition to this list of instructional materials (media), there exists other known as the “newer media and techniques”. Materials that make up this list are equally important in teaching and learning in the new millennium range from simple tool-based applications like word processors to on-line repositories of scientific data and primary historical document, handheld computers etc. Even cell phones that are now within the reach of every student can be use to learn. In this, each technology is likely to play a different role in students’ learning as all technologies are not expected to be the same and their impact on learning processes varies exceedingly hence the need to know which technology and for what purpose. Many different types of technology can be used to support and enhance learning. In the light of this; two general distinctions are evident; (i) students learning “with” computer and (ii) students learning “from” computer. Learning “from” computers arises where technology is used essentially as tutor and serves to increase student’s basic skills and knowledge while learning “with” computer take place where technology is used as a tool that can be applied to a variety of goals in the learning process and can serve as resource to help developed higher order thinking, creativity and research skills (Ring staff & Kelly, 2002).

Murphy, Penuel, korbak and whaley (2001), described Discreet Educational Software (DES) programs as the primary form of students learning “from” computers. Example of such programmes are Integrated learning system (ILS), Computer Assisted Instruction (CAI) Computer-Based Instruction (CBI) and computer-bases instruction (CAI)and computer base instruction (CBI) these software applications are also among the most widely available applications of educational technology in institutions today among others like word processing software.

## CONCLUSION

On the basis of the discussion highlighted in this paper, some conclusions are drawn. Technology has become a very powerful and indispensable instructional tool for enhancing teaching and learning. When harness appropriately, it can acts as a catalyst for teaching and learning thereby increasing creativity, productivity and expected results even beyond the classroom. Technology remain an inevitable driver for educational renaissance or rebirth of any institution or nation, that if it is embraced. Technological implementation remain a primary step to training and retraining instructors to promote ICT usage in teaching and learning which in turn would facilitate and accelerate the much needed educational rebirth. Developing a technology vision and preparing for technology- rich future in education calls for collaborative effort and participation of all actors in the educational system.

## RECOMMENDATIONS

Given the conclusion above, the following are some of the vital recommendations to be considered in implementing and sustaining a technological oriented education.

- First, to start with, curriculum developers should review educational curriculum to incorporate new concepts, ideas, and knowledge relating to information and communication technology.
- Secondly, incentives should be employed to encourage instructors and learners’ participation in the use of media technology and other ICT based devices in teaching and learning.

- Thirdly, given the demand ICT has placed on our societies, greater percentage of funds should be allocated to ICT in educational budget of institutions by the government. This is to take care of ICT needs in educational sector.
- Lastly, workshops, seminars, conferences, short courses with ICT content should be organized for instructors to help them meet up with the contemporary demand on education.

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