

## **BRIDGING THE DIGITAL DIVIDE: THE RELEVANCE OF MARSHALL MCLUHAN'S MEDIA ECOLOGY THEORY**

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**ABSTRACT:** *Digital divide is the gap between demographics and areas that have access to modern information and communications technologies and those who do not have this access. This has affected a greater percentage of our 21<sup>st</sup> century learners in our classrooms today by disconnecting them from the current trends globally which has created a digital divide. This paper seeks to address an attempt at bridging the digital divide: the relevance of Marshall McLuhan's media ecology theory. This paper thus overviewed the concept of media ecology and Marshall McLuhan's ecology theory. It further discussed some strategies on bridging the digital divide, characteristics of digital native. Finally, conclusions and some recommendations were made.*

**KEYWORDS:** Digital Divide, Digital Native, Media Ecology Theory

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### **INTRODUCTION**

Globally, technology has influence our everyday activities by affecting the way we think, act and our attitude toward issues that affect lives. Technology divide is what demarcate the rich and the poor which excludes them from benefiting from the global offer. In the digital era communication is done through mobile phones, emails, social media outlets etc. Digital divide, rather than being a simple technological gab between the digital natives and the digital immigrant, is in facts a barrier between individuals which is an invisible wall that cannot be climb by humans which can paralyze the hope development. For this reason there is a need to bridge the gap of digital divide and eradicate digital divide by bringing down the invisible wall.

Marina (2013) opined that education plays a fundamental role in bridging the digital divide in the world. Information communication technology (ICT) has the potentials to link people across the globe using media technology as a medium. Therefore there is need to find synergies between all those concerned in bridging the digital divide among our 21<sup>st</sup> century learners. Marshall McLuhan's media ecology theory emerges as a proof that media plays a vital role between humans and technology and how this media affect the personality of mankind. Moscow (2001) stated that the future belongs not to those who have achieved today a high standard but to those who can induce new ideas in the field of high technologies in relation to man and his environment.

However, it is not all about the gap that divides but the differences in levels. The problem of digital divide has only now begun to be perceive by people in the society therefore there is a need to bridge the digital divide using technology as a tool.

### **Concept of Media Ecology**

Media ecology is a concept that analyzes the impact and alterations by media and communication technology on human nature. It is a concept that seeks for the interrelationship between the media and humans since media plays an important part in human interaction with his environment. Postman (2000) defined media ecology as a systematic process of how media (communication) affects human feeling, perception, value and understanding; and also how human interactions with media facilitate the chances of survival for humans. Postman believes that technology is a channel in which media grows in the society.

Carey (1989) opined that media ecology is the exploration of cultural consequences of how media changes which heads to the changes in human over time media ecology is different from communication studies since it focus is on the integration, interdependency and dynamism of media and technology in human activities. It is believe that the technological devices in which humans use to think with, interact with, and play with plays a vital roles on how to understand the realities of life. Carpenter (1960) defined media ecology as the study of complex communication system in an environment that seeks to integrate the consequences and collision of technology and culture of mankind.

Wikipedia.com define media ecology as a study of med, technology and communication and how they affect human activities in a particular environment. Media ecology believe that media plays the role of extensions of human senses using technology as a medium of transmission. Crowley (2011) opined that media ecology is the study of media, environment and their impact on human environmental changes in the aspect of feelings, perception, understanding and values, using technology as an approach with the reflection of critical thinking. The media itself consist of the message which in turn influences the activities of man in his immediate environment.

### **Marshall McLuhan's Media Ecology Theory**

Media ecology theory was propounded by Marshall McLuhan in 1960 but prominently published in 1962. The theory believes that all media and message communicated are regardless except a compelling force is introduce that influences the activities of man and the society. This influence is displays by equalizing the sensory balance through hearing, smell, touch, sight and taste. However technological innovations are advancement of human abilities and senses that interrupt the sensory balance. This interruption gives birth to a new society that create new technology to be use by humans.

Media ecology theory emphasized on the role of communication in media starting from the Stone Age to wooden age and to the technological age that we are into presently. McLuhan (1996) opined that in communication, the media we choose to use determines the type of message we sent. Therefore that there is a constant relationship between media and the technology use in communication. For instance the choice of phone over text in communication which the bases is on the selection of technology used in sending the message. Postman (2008) observed that media ecology involves the interaction between media and humans with the aim of sticking a balance in societal culture using technology.

Media ecology theory centers on the principles that technology controls and influences virtually all works of mankind including communications, perceptions, feelings and understandings. The theory claims that media defines society in four epochs which includes

tribal era, literate era, print era and electronic era. Media Ecology Association (2000) opined that media ecology theory has the following assumptions

- Media infuse every act and action in the society
- Media fix our perceptions and organize our experiences
- Media holds the world together and strengthen its actions
- Media turn the world to a global village.

McLuhan (1996) described the tribal era as an age where the senses of hearing, touching, testing and smelling were more prominent than the visualization ability of mankind. During this era hearing was believing which drives attention of most people to act according to what they hear in the society. After this stage was the literary era which was otherwise known as the visual era in which the sense of sight becomes so dominant. During this era hearing alone became irrelevant while seeing was believing; because people were able to read and write which brought about the invention of alphabet.

The print era focuses attention on mass production of products because of the invention of the printing press. During this era people were able to re-produce same text materials in to multiple copies like books which gave birth to printed materials where people can buy and read. During this age literacy rate started increasing in the society and libraries were created and maintained. The electronic era introduces instant communication into the society with immediate feedback including audio and visuals. During this electronic age technology plays a vital role in the communication process by facilitating the culture of communication of people. Technology became a medium where the message passes through to the destination. McLuhan classified media into hot and cold media. In communication hot media requires very little (low) level of participation from the audience. Example of such media include radio, photograph, porn, and public lecture. While cold media require high level of audience participation due to the engaging nature of the information release such as seminars, television programs, cartoons etc.

### **The Digital Natives**

Globally, in this 21<sup>st</sup> century several emerging features which are brought about by information communication technology (ICT) has help in transforming the world. Prensky (2001) classified people into three categories which are;

**Digital Natives:** These are group of individuals born after the widespread and adoption of digital technology in 1980s. Digital natives are individuals who interact regularly with technology like the internet, computers, smart phone, computer games and other digital devices. The digital natives are more familiar with the computer and also understand the digital languages in the digital world. Digital natives are multi-tasking in nature which helps them to operate quite different from other set of people. The digital natives believe and think differently due to the early exposure to the digital world. They spend most of their time on social media engaging either in one or two activities to keep them busy by connecting to their peers round the globe. Digital natives refuse to learn the same way others learn by confining themselves to a particular learning style, rather they upgrade their learning following the current trends and issues in the contemporary society.

### **Characteristics of Digital Natives**

Prensky (2001) highlighted the following characteristics of the digital natives as follows:

- Digital natives are creative thinkers
- They believe in knowledge creative and sharing of opinions
- Digital natives are job creators and not job seekers
- Digital natives believes in network connections
- They are technology driven in nature

**Digital Immigrant:** These are the class of people who were born before the widespread adoption of digital technology who were not exposed to the digital technology during their tender age. Lei (2009) describe digital immigrant as the set of individuals who believe to be less quick in response to adopt to the new technologies. Digital immigrant as the name implies are those people who are migrating from the use of less technology to the use of high technology. Prensky (2001) also describe the digital immigrant as a generation of people who did not grow up in the digital age of technology by learning to catch up with the digital natives by practicing the 21<sup>st</sup> century skills in all works of their lives. The immigrants are always eager to know the reasons why things is done the way they are irrespective of the cost implications. Immigrants operate by the principles of learning by doing due to their inability to master a particular concept at once.

**Digital Fugitive:** These are the class of people who does not belongs to the digital native and the immigrant class. Digital fugitive are those set of individuals that avoids the use of technology in their life, they find themselves being comfortable with the traditional ways of operation. Operations with the new digital devices to them is a punishment in which they feel reluctance in incorporating it in to their dialing dealings. For instance a fugitive prefers writing with pen and paper instead of typing with the computer, they prefer posting letters through post offices than sending mails, fugitives refuse to speak digital language but keep dwelling on the 19<sup>th</sup> and 20<sup>th</sup> century operations and practices.

### **Bridging the Digital Divide**

Digital divide refers to the discrepancy in accessing the information communication technology (ICT) by individuals. This has remain the truth that what leads to digital divide is the inability of people to have access to computer and internet. Wadi (2001) opined that it is not sufficient to provide avenues for information and knowledge but to empower individual's learners with the appropriate educational skills and tools which can be used in bridging the digital divide among learners.

In the 21<sup>st</sup> century which is knowledge-base driven century there are several innovations and changes which causes a paradigm-shift from the industrial phase to the Information Communication Technology (ICT) phase which is transforming every sector and individual ways of operations. For instance in educational sector information Communication Technology (ICT) has come to stay as a sustaining innovations to improve the system of operation. This has given rise to several teaching strategies/approaches in our todays classroom like collaboratory teaching strategy, flipped classroom learning, blended learning etc. The availability of the digital devices in our classrooms today has changes the way we learn. The use of interactive white board, projectors, computers recorder, interactive television etc in

learning with a flexible learning environment which has foster the learning abilities of the learners. The provision of these access to the use of these technological devices for learning helps our 21<sup>st</sup> century learners in the area of retention and in turn improve their academic performances in schools irrespective of their area of discipline.

Vikoo (2017) opined that the adoption of video technologies into education as social drivers helps to foster the understanding level of students which in turn promote problem-solving skills among them. Williams (2015) observed that when digital technologies is incorporated into classroom teachings. It gives students the opportunities of exploring vast into the content of their learning even without the present of the instructors. For instance the use of YouTube in teaching provides learners with the opportunities of seeing and hearing simultaneously irrespective of the individual learning styles. When this is practice continuously by teachers it helps break the barriers between the digital immigrant and the digital natives which will help both the teachers and the learners to speak the same digital language and flow with the same pace.

Thompson, (2013) opined that one of the ways of bridging the digital divide in our 21<sup>st</sup> century learning environment is the adoption of blended learning system which opportunities are given to learners to utilize their learning gadgets themselves by learning both online and in face-to-face. In blended learning the learners manipulate their learning environment to suit their learning, instructional content are delivered through technology as a medium while learners explore their learning content using any of the social media application.

## CONCLUSION

The fact remains that there is an existence of digital divide among humans due to different levels of communication using technology as a channel. This global issue has cut across every sector including educational sector. Thus there is need for increase and continues usage of digital technologies our daily activities in order to bridge the gap of digital divide among humans.

## RECOMMENDATIONS

Based on the issues discussed above, the following recommendations were made;

1. Instructors should always present learning content to the learners using appropriate technological media to aid comprehension and retention.
2. Both instructors and the learners should engage in the use of digital technologies for learning.
3. Media ecology should be taken into consideration by every individual as it relate to their physical environment.
4. Individuals' perception, feelings, attitude should be geared towards the type of technological media used in communication.

5. Bridging the digital divide should be every individuals concern and not only for the digital natives.

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