



Settling Digital Divide on Students of Ebonyi State University, Abakaliki-Nigeria

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Abstract

The study on the implications of digital divide on Students of Ebonyi State University, Abakaliki, was carried out to determine the level of Information and Communication Technology (ICT) knowledge and access among the students in the system. Previous studies carried out in the developed nations such as United States of American, United Kingdom, and Canada and alike had shown that innovative use of ICT facilities has the potentials to effect students teaching/learning. However, literature search of similar studies in the developing nations of the world seems scanty. In order to have a good foundation upon which the study rests, technological determinism theory as propounded by Lievrouw and Livingstone (2006) was adopted. The major interest of the theory is to elucidate the irresistible power of ICT to propel human actions socially and economically for development. Flowing from the assumption of the theory and its focus, the implication of digital divide on students in Nigerian University emerged. The study adopted content analysis approach and reviewing of extent literature. Consequently, the study recommended repositioning the online teaching/learning among students of Ebonyi State University should be made a priority to increase ICT knowledge and access.

Keyword: Digital Divide; ICT Usage; knowledge and access; inequality; ICT facilities.

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Introduction

The term “digital divide” was introduced by the former US Assistant Secretary of Commerce for Telecommunications and Communications in the mid-1990s in order to focus public attention on the existing gap in access to information services between those who can afford to purchase the computer hardware and software necessary to participate in the global information network, and low income families and communities who cannot (Boje & Dragulanescu, (2003 cited in Ali, 2011). Digital divide is fundamentally about social differences and similarities in usage of inadequate Information and Communications Technology (ICT) facilities. Digital

divide is simply an unparallel access and usage to technological equipment amongst people. According to Wikipedia Website (2007) the digital divide refers to the gap between people with effective access to digital and information technology and those with very limited or no access at all. It may include the imbalance both in physical access to technology and resources and knowledge needed to effectively participate as a digital citizen. Digital divide seems to be the troubling gap between those who use computers and the internet and those who do not.

Lucky and Achebe, (2013) posit that some have used the term to refer to gaps in broadband network access. The term can mean not only having unequal access to computer hardware, but also inequalities between groups of people in the ability to use information technology fully, (Anthony: 2004). The assumption that continued deployment and usage of Information and Communication Technologies (ICT's) inequality among students in our tertiary institutions has attracted widespread attention and evoked debate among professionals and in the research Community (Onwe, and Ezekwe: 2014). ICT is presented to the world as the panacea for numerous problems by increasing access to economic strategies, increasing citizen's participation and enhancing individual well-being. While wealthier individuals take access to technology for granted, exclusion, lack of up to date technology and the inability to afford Internet services increasingly threatens the chances of many people to find good jobs and participate in the affairs of the broader society (Goslee: 1998). Cavusa and Kanbulb (2010) cited in Ezekwe, Onwe and Udu (2014) posit that some of the benefits of using e-learning platforms are; for sending and receiving mails/exercises; providing immediate feedback in tests; communicating with teachers and other colleagues; accessing training information and carrying out collaborative works.



The acceleration and development of Nigerian tertiary institutions has been made possible based on collaborative efforts of both the government and the private sector in the provision of tertiary institutions in the country. Tertiary institution is a place where teaching and learning process occurs following the completion of secondary education and provides academic credits and competencies that lead to the award of certificates, diplomas and degrees from Universities, University Colleges, Monotechnics, Polytechnics, Community Colleges and Schools of Health Technology. The students are expected to acquire certificates in their chosen fields of study. They are equipped with skills and competencies that they require to work at the end of their study (Idialu and Idialu: 2012).

It has been observed that out of four annexes of Ebonyi State University, Abakaliki, only the College of Agricultural Sciences (CAS) Campus, where the administrative Headquarters is cited has what could be possibly called ICT centre with inadequate ICT facilities which do not cover the entire CAS Annex. The three other campuses have no access to ICT facilities and students from those campuses come to queue at CAS ICT centre to verify their results, register courses, print admission letters and do other ICT related works. The practice has made some of the students to engage the private ICT providers for their official and unofficial assignments in the school (Onwe & Ezekwe: 2014, Ali: 2011). Thus, the situation tends to suggest that students do not have easy access to the systems at will and the initiation of ICT facilities has been variously seen as being important for students and the society as it is one of the socio-economic development in areas of research and community development, (Ezekwe, Onwe and Udu, 2014).

Digital know-how and expertise are less visible among students in Nigerian tertiary institutions. Institutions are increasingly judged by the quality of the students and scrutinized closely by prospective students and their parents. The inadequate ICT facilities have made many users to be reluctant to visit the ICT centres available in their localities. The managers of University ICT centres have not found it necessary to constantly upgrade the portal thereby providing obscure information to the students. It is expected that Ebonyi State University should have sufficient modern telecommunication facilities that will enable both the staff and students to access their e-mail, social networks, search engines at will or when necessary. Absence of this may affect the level of ICT access and knowledge amongst the University students and the



level of network within the environment and other tertiary institutions around the globe and as well reduces the extent of publication, research and teaching, (Onwe and Ezekwe, 2014). With this approach, ICT usage among students should be given the priority it deserves, thereby making accessibility and usage less difficult and competency in its usage will therefore be enhanced. The digital gap of technical competence is one of the greatest challenges facing the Nigeria University communities.

Consequently, the inadequate ICT facilities such as telephones, personal computers and the internet are increasingly critical to economic development and personal advancement. There is a gap separating the world's information "Have" and "Have nots" which is what is now

mostly called the digital divide - the divide between those with access to new information-communications and those without. To UNESCO (2008), digital competence comprises mastery or the ability of students to search, select, analyze and evaluate information rather than just technical operation of technological equipment. This means that they must be creative and efficient at using digital tools, communicate and collaborate with other people, and produce and publish materials and information. They must also be able to solve problems, make decision through technology, be responsible and contribute to enriching the knowledge society. However, it is conceptualized that digital divide centres on inequality to access ICT facilities when needed or as a result of technical incompetence. The Organization for Economic Co-operation and Development (OECD, 2001), sees the concept of digital divide as the inequality of access to ICTs among geographic areas and people from different socio-economic backgrounds.

The Inequality of ICT knowledge among students in the University system may be seen as significant difference in the access to technological experience based on categories such as income, race, gender, location, or education. It is easy to have conversations about why there is a digital divide, the need for more funding, and the creation of ideal learning environments (Ezekwe, Onwe and Udu, 2014). It is assumed that learning is an internal, cognitive activity which can be facilitated by contact with others and by taking part in purposefully designed learning activities. Indeed, the role of ICT in education may need reassessment in this 21st century.



Ebonyi State University, Abakaliki adopted online practice to enhance student information dissemination in the system between the administration and academic staff relationship for overall career development. With the use of these technologies both the lecturers and students seem to be witnessing effective performance in the academic activities. Though the adoption is characterised with challenges that manifest in poor network, inadequate social network, difficulty in uploading and checking of mails/results, course registration, obscure portal information and online supervisor and supervisee relationship. (Abdul Rahman, Balogun and Yahaya, 2013). The unequal access to and utilization of ICTs have been accepted as one of the prevalent issues of our times (Sciadas: 2005). It is worrisome and challenging considering the inequality among the students in tertiary institutions in Nigeria to meet up with needed

access up-to-date knowledge and information in developing countries. It is against this background that this study is to explore the implications of the digital divide among tertiary institution students in Nigeria, with special reference to Ebonyi State University with the view to suggesting ways of bridging the gap.

Tertiary institutions in Nigeria are faced with insufficient presence of ICT facilities despite its usefulness and need. There is general paucity of ICT provisions caused by socio economic inequality in Nigerian tertiary institutions. The digital divide has made majority of Universities not to have state of the art ICT facilities for the training of their students let alone rendering community and consultancy services. Nigerian tertiary institutions are at different levels of development, and are still faced with difficulties in finding funds to purchase computers and relevant educational softwares, install internet, develop content, and most critically, train students in the application of ICTs in the classrooms. This is compounded by inadequate information on what is happening in other parts of the world and the extent to which the students in tertiary institutions can network their ideas is jeopardized.

The few Institutions that have ICT facilities do not have sufficient modern telecommunication facilities that enable both the staff and students to access their e-mail, social networks, search engines, at will or when necessary. This affects the way University communities' network within her environment and communicate with other universities around the globe; and as well reduces the extent of publications, research teaching and ICT aided learning is seriously played down. Other problems are inadequate hardware, in-appropriate software, and lack of personal



access to the use of computer by teachers and students (BECTA: 2004). Nigerian Universities do not yet possess high-level skills in the areas of ICT technical competence and where skills exists, adequate funds are not available. Institutions are increasingly judged by the quality of their students' technological experience, as inadequate ICT facilities are detrimental to students' level of knowledge and experience.

Against this background, the main objective of the study is to examine the implication of settling digital divide on Ebonyi State University students, Nigeria. The specific objectives of this study are:

To examine the usage of ICT social network and information dissemination on students of Ebonyi State University, Abakaliki.

- To ascertain the degree to which inadequate ICT technical personnel has deepened the digital divide on Students in Ebonyi State University
- To establish the implications of inadequate funding in procuring ICT facilities in Ebonyi State University, Abakaliki.

Significance of the Study

The present study will help the researchers in the University community to increase ICT knowledge and online practice. Secondly, the study will be beneficial to the Nigerian University system to incorporate internet curriculum into the students' course programmes and ensure timely bridging of the digital gap in the system. The study will equally assist to reposition the online teaching/learning in Nigerian University system. Findings from this study will be relevant to Ebonyi State University top management and ICT centre.

Literature Review

Ezeliora (2003), posits that inadequate ICT facilities and socio-economic factors is one of the most contending issues facing Nigeria tertiary Institutions in 21st century. The ICT challenges, according to him, ranges from knowledge and usage, sustainable structure, insecurity and inadequate power supply. Thus, going by the highlighted challenges from the researcher, it



may be necessary to assert that most of the Nigerian Universities (not only the Ebonyi State University) are confronted with the situation. To a reasonable extent, it is the digital divide that is hampering the adoption of ICT facilities and installation of appropriate infrastructure needed in the system.

Owston (2000), assumed that ICT has the potentials to promote learning because it is appealing to students' learning mode, provides for dynamic learning and enable new kinds of learning. He further posits that ICT has opened numerous opportunities for access to education for those unable to attend school or college for economic or cultural reasons. To support the assertion, it is interesting to know that today, distant education is all over the web or internet which is

participating in using Open University and not only that, it brings people in another environment closer to your settings.

Ferlander and Timms (1999) states that the convergence of communications and information technology brings threats to existing forms of community and creates new forms of social exclusion that threaten integration of the poor. The researchers emphasized that communities are associated with cooperation and collective contribution to the common good (Ferlander and Timms, 1999). The existing ICT infrastructure prevents an equal flow of communication between people and social structures. This factor alone severs the social fabric that holds communities together. Unlike wealthier groups, the poor do not share benefits associated with previous goods in the market let alone newer developments. Many people in marginalized communities are yet to have access to telephone lines let alone ICT. As Koss, (2001) states, one third of the world's population are yet to make a phone call let alone see a computer. In line with the discussion and review of the literature, the digital gap may extend beyond economics towards broader concerns for social cohesion.

Parsons & Hick, 2008 asserts that, Education, knowledge, ownership and access are key factors that determine the levels of exclusion or inclusion in accessing and adopting new technologies. The researchers believes that rapid advancement in electronic communication tools, resources, programmes and capacities requires individuals to own or have access to the use of a computer, software and connection to Internet services and without continuous access and frequent use,



transferring and acquiring knowledge, advanced skills are limited or can lead to skills atrophy. The researchers also believes that the significant number that comprise the populations living in poverty are unable to afford quality education, own a computer, and purchase the programmes and tools to use it effectively, let alone have access to disposable income to connect to the Internet.

Theoretical Framework

Theory is sine qua non to any empirical study because it provides the latitude for analysis aimed at predicting the phenomena of any research. This study is anchored on Lievrouw and Livingstone (2006) technological determinism theory.

It is the assumption of the theory that ICT's have an irresistible power to propel human actions for development, socially and economically. Similarly, technological determinism theory presupposes that the ability of the

organizations to face environmental challenges and progress depends largely on the extent such organizations embrace ICT. The theory emphasized in this study posits that the use of ICTs brings about changes that would lead to sustainable development in Nigeria tertiary institutions. In line with the objective and philosophy of the National Universities Commission (NUC) on quality assurance programme of Nigerian Universities, government and individuals should join hands to ensure that this gap is bridged.

The relevance of technological determinism theory to this study is beyond doubt as it provides the hub on which the study rests upon and that ICT has the potentials to increase the students' academic performance and productivity, if the gap is adequately bridged in Nigerian tertiary institutions. The knowledge of the theory will assist the policy makers, various stakeholders, and practitioner/professionals to be better equipped in bridging the digital divide and make adequate provision for students to have the need for ICT facilities, and secure global competitive advantage. It is indeed that every practice is anchored on theory, it is pertinent that digital divide in Ebonyi State University, Abakaliki, Nigeria be bridged through constant students orientation and training.



Methodology

Content analytical approach was adopted for the paper. Data were collected using information from official document, direct observation, media commentaries and from scholarly writings on elections and democratic consolidation in Nigeria.

Discussions

Persaud (2001) believes that the knowledge gap is ten times the income gap. According to the researcher, the penetration and distribution of ICT like many other goods and services fail to reach the most vulnerable and disadvantaged groups. To him, this digital disparity has widened the distances in privileges and opportunities between groups in society, creating the information rich or information haves and the poor who are defined as information poor or information have-nots. Although this distinction is important, defining the digital divide according to disparities in ownership and access between the haves or have-nots touches the tip of the iceberg in understanding all the factors that contribute to digital exclusion.

Luboobi (2007) corroborates that African continent do not have continent world-wide broadband optical fibre network. According to him Makerere University Kenya and University of Jos, Nigeria have inadequate computer infrastructure, and that, it is not linked to national databank, ICT. Thus, to a reasonable extent, most Nigerian tertiary institutions are underfunded and therefore not able to sustain and maintain the needed ICT infrastructure for teaching, research and learning in this 21st century.

Ali (2011) posits that there is a difference between developed and developing countries in terms of accessing and using ICTs. The International Telecommunication Union (ITU), has it that, approximately 72 % of the population is Internet user in developed countries, this ratio is 21 % in developing countries. The number of fixed telephone lines per 100 inhabitants in developed countries is estimated about 41, but, it is 12 in developing countries (ITU: 2010).

Abdul-Rahman, Balogun, and Yahaya, (2013) reviewed the impact and the implication of using the ICT facilities in the University of Ilorin and they concluded that the ICT is capable of improving the students' academic performance. They observed that there is significant



relationship between the have and have not in the University system in the conduct of the examination and academic performance. The researcher's evidence sort to improve the learning environment of the institution and overcome the challenges of implementation of e-learning in order to position student results and facilitate its technical know-how and reduce the implication of using the technology to barest minimum. The study of Waycott, Bennett, Kennedy, Dalgarno and Gray (2010) identified the differences in the use of technology in higher education and in the daily lives of teachers and students in Australia. They justified such differences based on individual motivations and social norms that promote the use of ICTs. Similarly, Most of the literature failed to address the issue of culture, race, gender, power, environment and the same are still the issue that is taking the Nigerian institutions anti-clockwise or leap-frog. To a reasonable extent, if the highlighted is not given concern by the relevant stakeholders, the academic performance and quality learning is in doubt.

However, it will be useful to bare these factors in mind when considering the degree to which the implication of the Digital divide is a problem that influences both academics and students across the globe to a reasonable extent. The investors, researchers and scientists have tried to analyzed the concepts at different levels of developments among students life in an attempt to realize the fundamental problems and give answers and possible solutions. The numerous literature reviewed show that most of the literature were done in western world and few in developing nation which Nigeria is included. The study of Waycott, Bennett, Kennedy, Dalgarno and Gray (2010) identified the differences in the use of technology in higher education and in the daily lives of teachers and students in Australia. They justified such differences based on individual motivations and social norms that promote the use of ICTs. Similarly, Most of the literature failed to address the issue of culture, race, gender, power, environment and the same are still the issue that is taking the Nigerian institutions anti-clockwise or leap-frog. To a reasonable extent, if the highlighted is not given concern by the relevant stakeholders, the academic performance and quality learning is in doubt.

Conclusion.

It is the conclusion of the study that ICT has the potentials to increase student's academic performance and productivity because computer applications provide tools to support student centred learning. Obviously, adequate ICT facilities, Knowledge sharing, academic grades



social interaction among the students of Ebonyi State University and around the world, greatly will positively accelerate the achievement the academic objectives competitively. Settling digital divide in Ebonyi State University on students, the short-coming like, inadequate software and hardware, inadequate ICT knowledge and access, urgently require adequate provision by the relevant stakeholders and will ensure that bridging the existing unacceptable gap of the present day experience in the Institution. Bridging digital divide will enhance collaboration in research, teaching, knowledge sharing and learning within the universities, will place Ebonyi State University in the global map of the citadel of leaning.

Recommendations.

From the findings of this study, the following recommendations will help in repositioning digital divide:

1. Repositioning the online teaching/learning on students of Ebonyi State University should be made a priority to increase ICT knowledge and access
2. Adequate provision of ICT facilities to bridge the digital gap among students in Ebonyi State University, Abakaliki.
3. Training and re-training of all Ebonyi State University students on the use of ICT in teaching/learning.

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