Chapter 8
Nigerian Undergraduate Students' Computer Competencies and Use of Information Technology Tools and Resources for Study Skills and Habits' Enhancement

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ABSTRACT

Information technology (IT) policy implementation by higher educational institutions is geared towards innovative teaching and learning delivery. This chapter investigates undergraduate students' computer and IT tools and resources competences and use in enhancing study skills and habits. The study adopted ex-post facto research design and involved a total of 450 undergraduate students from three universities in Rivers State, Nigeria. Five research questions were answered using three duly validated instruments and data was analyzed using descriptive and inferential statistics. Findings revealed that undergraduate students in Rivers State, Nigeria were technologically capable and are competent in the use of IT tools and resource. The study also establishes the fact that undergraduate students perceived themselves to possess information literacy skills. It was suggested that undergraduate students should use IT tools towards their studies and research.

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INTRODUCTION

Many educational institutions have adopted policies favoring the implementation of modern technology prompted by Information and Communication Technology (ICT). Modern technologies like the Internet, mobile tele-communication and World Wide Web (www) has become innovative tools that could engage students in continuous learning across homes, classes, campuses, offices, e.t.c. Thus, the role of technology using the Internet, cloud computing and networked computers in teaching and learning is turning teachers from providers of information to become facilitators of learning. As a result of technology-driven learning approaches there is a transition of teaching and learning communities from teacher-focused with traditional approaches to student-centered learning which is largely Technology-driven through the use of tools and resources that surpasses any other previous technology. Consequently, Davis (2010) affirms that technology integration within and outside the classroom is modifying the learning environment from teacher-centred to learner-centred with opportunities for personalized learning experiences. Bodys (2005) also reported that ICT tools and resources allowed students to be more individually active in the learning process and become more independent in making decisions about how and what they need to learn using electronics learning resources.

Globally, different types of Computer-Based teaching and learning approaches have been developed to achieve the desired learning objectives and outcomes. Examples of computer technology applications, tools and resources for teaching and learning that cuts across all educational levels include; computer-assisted instruction (CAI), computer-assisted learning (CAL), e-learning, interactive video, multi-channel learning, virtual learning, virtual fieldtrips laboratories, virtual libraries, web conferencing, web chatting, digital story-telling, asynchronous online discussion (AOD) flip learning, e-mail communication and other forms of electronics and mobile learning among many other emerging learning technologies. Any of the listed technologies could be combined diversely into 'Learning Management Systems' (LMSs).

BACKGROUND

ICT integration among higher institution students particularly in Nigeria has attracted attentions through various studies. For example, Odusanya and Bamgbala (2002) reported ICT uses among final year students at the University of Lagos-Nigeria; Jagboro (2003) reported on postgraduate students' use of the Internet to search for academic materials at Obafemi Awolowo University, Ile-Ife, Nigeria. Similarly, Ajuwon (2003) reported high rate of regular use of the Internet by medical and nursing students at the University College Hospital, Ibadan, Nigeria and Bello, Arogundade, Sanusi, Ezeoma, Abioye-Kuteyi and Akinsola (2004) also reported that a lower percentage of respondents demonstrated good knowledge of computers and IT at Obafemi Awolowo University Teaching Hospital, Ile-Ife, Nigeria. Ezekoka and Nwosu (2010) also reported that ICT has been found to be very useful in the teaching and learning processes among Nigerian students because of the extensive capacity to store and manipulate information as well as its unmatched ability to serve simultaneously many individual students in different locations as supplementary to classroom instruction. While writing of ICT policy framework, Adomi and Kpangban (2010) observed that the National Policy on Education (Federal Republic of Nigeria, 2004) recognizes the prominent role of ICTs in the modern world and advocated for its integration into the Nigeria educational system especially at the post primary and higher education levels.