



# POTENTIALS OF E-LEARNING FOR NATIONAL SECURITY

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## ABSTRACT

The use of e-learning to support teaching and learning has expanded learning opportunities within the traditional education setting, yet e-learning is not free of challenges. There is increasing awareness on the use of Information and Communication Technologies (ICTs) in teaching and learning in Nigeria. E-Learning in Nigeria educational institutions are challenged by the new technologies in terms of availability and use. This study sets out to examine e-learning support at the Civil Defence Academy, Nigeria.

The study presents the diverse learning technologies used at the Civil Defence Academy, Nigeria for teaching officers and men using two learning management systems (LMS) and new classroom technologies. A desk study was conducted into solving and achieving the research problem and objectives. This study used a combination of existing literature studies and direct in-depth primary research.

The study established that, e-learning is in its elementary stage and for it to succeed in any Nigeria educational institution; it must be built on solid infrastructural background with highly effective and efficient internet connectivity.

*Keywords: E-Learning, Civil Defence Academy, Information and Communications Technology, Virtual Learning Environment, Learning Management Systems*

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## 1. INTRODUCTION

Information and Communication Technologies (ICTs) are now worldwide phenomena that have implications for various forms of educational institutions. Digital technologies such as e-learning are catalysts to enormous changes in instructional process because of the effect they have on information source, knowledge acquisition, classroom interactions, time, place and pace of teaching and learning. Hence; electronic learning has become the focus of global attention (Colbeck, 2003). Universally, the use of e-learning to support teaching and learning has expanded learning opportunities within the traditional education setting, yet e-learning is not free of challenges.

E-learning is the use of technology to enable people to learn anytime and anywhere. Horton (2001) argued that, e-learning gives learners an opportunity to broaden their knowledge because they can learn on their own and that increases learners' level of confidence and independence.

The Civil Defence Academy was established to achieve the vision to train and develop men and officers of the Nigeria Security and Civil Defence Corps (NSCDC) to be proactive in the discharge of their duties and to demonstrate high level of discipline, commitment and humility in service delivery to the nation. The essence was to restore the needed level of confidence among the Nigeria populace on issues related to security of lives and properties. To achieve this objective, Civil Defence Academy was established with the primary objective of equipping the men and officers of the Corps with modern knowledge about Information Technology. This was matched with the establishment of E-Learning Unit and other Information and Communications Technology (ICT) related units for officers and men of the Corps.



## 2. STATEMENT OF PROBLEM

Information and Communication Technologies (ICTs) are having a radical impact on educational methodology globally. Studies have indicated that there is inadequate supply of trained teachers for e-learning, lack of facilities, infrastructures and equipment (Jegede and Owolabi, 2003). Further challenges of e-learning in Nigeria include; high cost of bandwidth access, inadequate skilled manpower, inadequate fund of the educational system, resistance to change from traditional means and method of teaching by lecturers, resistance to change from traditional means and method of learning by students, amongst others.

E-Learning in Nigeria educational institutions are challenged by the new technologies in terms of availability and use. In lieu of the above, the study is carried out to determine the extent of availability and use of e-learning materials in Civil Defence Academy and Nigeria at large.

## 3. RESEARCH OBJECTIVES

The general objective of this study is to address and analysis the state of Information and Communications Technology (ICT) infrastructure supports towards e-learning in Civil Defence Academy.

The specific objectives are as follows:

1. To examine the availability of e-learning materials in Civil Defence Academy.
2. To examine the extent of application and use of the available e-learning materials by staff, students, administrators and faculties.
3. To provide the strategies for improving e-learning application in Civil Defence Academy.

## 4. METHODOLOGY

A desk study was conducted into achieving the research objectives through primary and secondary data with quantitative analysis. This study obtained primary data with quantitative analysis from E-Learning department of Civil Defence Academy, Abuja. The main purpose for using primary data with quantitative analysis is for a rich subset of information, higher accessibility and validity. The secondary data with quantitative analysis was obtained from combination of existing relevant academic journals and valid online resources. The study population for this study is Civil Defence Academy E-Learning, Abuja, Nigeria.

## 5. E-Learning: Definition and Conceptualisation

Technology has helped to strengthen education and social interactions. With the advent of computer and internet technologies, e-learning is widely accepted and practiced. E-learning has been a subject of discussion among educationists, scholars, technologists and scientists around the globe.

Kamba (2009), e-learning is self-paced, provides consistent content, faster and works anywhere and at anytime for learners.

Kirsh, (2002) maintained that, e-learning can improve retention, provide immediate feedback and allows learners to customize learning materials to meet their individual needs.

Sloman (2001) describes eLearning as the learning technology that takes advantage of connectivity and learning delivered or received mainly through the internet, intranet, extranet or web.

Rosenberg (2001), defined e-learning based on three fundamental criteria:

- a. It is networked, capable of instant updating, storage/retrieval, distribution and sharing of instruction and information.
- b. It is delivered to the end-user via a computer using standard internet technology.
- c. It focuses on the broadest view of learning. Learning solutions that go beyond the traditional paradigm of training.

This paper will define e-learning as the use of computer, network and internet technologies to deliver a broad arrangement of solutions to enable learning and improve performance.



## 6. NIGERIA's e-READINESS

The followings are e-readiness initiatives by the Nigeria government on the use of Information and Communication Technologies (ICTs) in teaching and learning:

1. Federal Ministry of Communications Technology
  - a) Technology Innovation Programme (Techlaunchpad)
  - b) Student Computer Ownership Program
  - c) Incubation Centre Program
  - d) Innovation Fund
  - e) Skills & Capacity Development
  - f) Open Government/ Open Data Initiative
2. National Policy on Computer Education
3. National Policy on Information Communication Technology
4. National Information Technology Development Agency (NITDA).

The key players in the development of ICT in Nigeria are:

1. Federal Ministry of Communications Technology
2. Nigeria Communication Commission (NCC)
3. National Space Research and Development Agency (NASRDA)
4. Nigeria Communications Satellite (NigComSat)
5. Galaxy Backbone
6. Nigeria Internet Registration Association (NIRA)
7. The private telecommunication companies

## 7. E-LEARNING SUPPORT APPLICATION AND INFRASTRUCTURAL FACILITIES IN CIVIL DEFENCE ACADEMY

The management subscribed to two learning management systems (LMS) and these are:

- a) Moodle
- b) Edu 2.0

The above provide total solution with what the Civil Defence Academy E-Learning needs in implementing e-learning in their environment. Access to these learning management systems packages is through the Civil Defence Academy portal. In addition to the learning management systems, the management provides one main well equipped virtual learning room with latest computers and other peripherals at the virtual learning environment (VLE) rooms located at the College of Peace and Disaster Management, Katsina and College of Security Management, Abeokuta.

Aside this, the Academy has a 64-seater complete computer laboratory fully furnished, dedicated broadband internet facility, intranet, ICT building, virtual learning environment rooms, training of all staff on computer literacy, amongst others.

The vision of the Academy towards ICT is to effectively and efficiently be an e-system driven Security Agency in Nigeria and in the globe at large through which the Academy would be transformed to an Information Technology driven system and thereby facilitate the development of Information Technology based relationship among sisters agency, staff, students, administrators and faculties.

## 9. PROBLEMS OF E-LEARNING IN NIGERIA

E-learning is becoming relevant in Nigeria educational institutions. Despite this, there are hindrances affecting the acceptability and effective use of the technology in Nigeria. Some of these hindrances are:

- a) High cost of hardware and license software.
- b) Low level of skilled manpower.
- c) Low level of internet access.



- d) Computer technology illiteracy among the students.
- e) High cost of acquiring equipment required for e-learning.
- f) Incessant Power Supply
- g) Lack of affordable dedicated/specialised e-learning centre.

## 10. CHALLENGES OF E-LEARNING IN CIVIL DEFENCE ACADEMY

The major problems facing the proper implementation of e-learning in Civil Defence Academy in particular are as follows:

- a) High cost of Internet Connectivity.
- b) Inadequate information technology education knowledge of the students.
- c) Lackadaisical attitude of the student towards e-learning platform
- d) High cost of license software
- e) Maintenance and Technical Support
- f) Epileptic power supply.
- g) Digital gap between the staff and the students
- h) Lack of Internet accessibility to the students

## 11. HOW TO MAKE E-LEARNING EFFECTIVE IN CIVIL DEFENCE ACADEMY

The provision of the following points will improve E-learning effectively:

- a) Availability of cloud computing based e-learning solutions
- b) Faster and reliable Internet connectivity/improved bandwidth
- c) Appropriate policies favouring e-learning
- d) Provision of technical support for e-learning at a range of scales
- e) Lower prices for connectivity
- f) Availability of reliable electricity
- g) Awareness on the value of e-learning
- h) Improved training for teachers in e-learning.

## 12. CONCLUSION

The significant roles of e-learning and Information and Communication Technology in education cannot be under-estimated. It is evident that e-learning is in its elementary stage and for it to succeed in any Nigeria educational institution; it must be built on solid infrastructural background with highly effective and efficient internet connectivity. More so, to guarantee effective learning system it is, therefore, fundamental to implement self-sustaining Internet and computer training, which will eventually allow staff and students to keep pace with latest development. The Academy should provide them access to technological and academic information, as well as Internet training at various levels. It also draws upon relevant literature to review the current status, barriers and enablers of the e-learning space in Nigerian educational institutions.

## 13. RECOMMENDATIONS FOR PROSPECTIVE AND EFFECTIVE E-LEARNING

Based on the findings of this study, the researcher provides the followings to improve e-learning usage in Civil Defence Academy and Nigeria at large:

1. There is an urgent need for educators and policy makers in Nigeria to improve basic ICT literacy and to make education ICT based.
2. The curriculum for all levels of education should be supported with digital content to reflect changes in the educational system and curriculum.
3. Lecturers, instructors and facilitators should be well trained in the use of electronic devices to enhance teaching.



4. The Academy should liaise with key players in the development of ICT in Nigeria for reliable internet services for lectures and students.
5. The Academy should deploy cloud computing based e-learning solutions
6. Adequate or alternative power supply should be provided within the Academy complex to ensure use of electronic devices for teaching and learning.
7. Adequate awareness of the e-learning courses among officers and men of the Corps should be encouraged.

In addition Nwana, S. (2012), the following recommendations are required for prospective and effective e-learning:

1. All classrooms and auditoriums in Nigeria should be connected to the internet in order to enhance web-based instruction.
2. Videophone, teleconferencing and multimedia systems e.g. multimedia computers and multimedia projectors should be provided in adequate quantities by the government of Nigeria for effective e-learning in secondary education.
3. The government of Nigeria should employ technologists and technicians to take care of internet facilities and equipment and to carry out routine repairs within education facilities.
4. The government of Nigeria should embark on a massive computer literacy training program nation-wide particularly for teachers and learners at all levels.
5. Teachers in Nigeria should be motivated and encouraged to develop and use multimedia courseware and software relevant to teaching and learning. The government should motivate teachers through provision of adequate funds for courseware development.
6. The government of Nigeria should provide digital libraries in every educational institution. The library is the highest reservoir of knowledge and no educational institution can do without it. Ensure that each digital library has a server for storage, retrieval, uploading and downloading of information.

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