

Deployment of Information Communication Technology (ICT) for Effective Security Management in Nigerian Educational System

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ABSTRACT

The educational institutions require various resources for the implementation of their programme. Information communication technology have been adopted as one of such greatest resources for effective school administration, supervision, planning and security. Many developed countries across the world have deployed ICT for school security. However, in Nigeria, with the rate of educational institutions attack by Bandits, insurgents and Boko haram, many scholars have called on the government to deploy ICT for security management in the country especially in the educational institutions. This paper examined the deployment of ICT for effective schools management. ICT facilities that can be deployed and the challenges hindering effective deployment of ICT for effective schools management in Nigeria. The paper concluded that making some recommendations for sustainable ICT deployment for school security management in Nigeria. Secondary data were used to support the various points raised in the paper. The secondary data were sourced from print and online published and unpublished papers.

KEYWORDS: *Education, Institutions, Insecurity, ICT Facilities, Problems.*

1. Introduction

The Nigerian educational system is made up of the Basic education (nine years), senior secondary school and tertiary education. These educational institutions are facing a lot of challenges. One of the crucial of these challenges is the security problems. Emmanuel (2018); Imhonopi and Urim (2012); Onifade, Imhonopi and Urim (2013); Joda and Abdurashed (2015) in different time have discussed issues of insecurity in Nigerian state and in the educational institutions. Specifically, Ogunode and Kolo (2021) looked at the effects of insecurity on Basic education in Northern Nigeria and pointed out that insecurity is threatening the development of education in Nigeria. Basic schools, secondary schools and higher institutions are under attack. The continuous attacks on the educational institutions have adverse effects on the school administrators, teachers' job performance and student's learning. They went further to observe that the Basic education is one of the educational

system mostly affected by the insecurity problem in Nigeria. They outlined the negative effects to include disruption of school administration, learning loss due to school closure, low enrolment, retention and completion rate of Basic school programme, reduction in manpower, disruption in academic calendar of Basic school, killing of students, delay in development or progress of girl's child education and delay in development of Basic education were identified as the effects of insecurity on administration of Basic schools in Northern Nigeria.

At the secondary schools, Ojukwu, (2017) did a study that investigated the effect of insecurity of school environment on the academic performance of secondary school students in Imo state, Nigeria. Major findings revealed that insecurity of school environment significantly affects the academic performance of secondary school students while students' gangsterism, smoking of Indian hemp, abusing other hard drugs, cult and related violent activities were some of the factors that constituted insecurity of the school environment which eventually cause boys to leave school and join trading while leading girls to drop out and settle for marriage.

At the level of girl child education level, investigation on the effects of insecurity on females' education in Nigeria was done by Sanni, (2015) where he pointed out that concerned about the possible adverse effects insecurity and its attendant challenges might have on Nigeria's goal of enhancing females' education throughout the country. He identified the diverse manifestations of insecurity in different geo-political zones in the country, and established some criteria to select which of the manifestations to study. Boko-Haram insurgences in the Northeastern Nigeria best met the set criteria. The study revealed that Boko Haram, that classified education a 'forbidden thing' has tried vigorously to eradicate Western education in the region: hundreds of teachers have been killed; thousands of students have either been killed or wounded; hundreds of schools have been damaged and/ or burnt; hundreds of female students have been kidnapped in their various hostels and on their ways to and from school; female teenage hostages have been turned suicide bombers; parents have been forced to keep their daughters away from schools, majority of which have been forced to close down for more than two years. The paper concluded that females' education in the region, that ranked least before the insurgences, have been worsened by the insurgences.

In another development, Ogunode, Ahaotu and Obi-E, (2021) discussed "the effects of insecurity on school administration in the Nigerian educational institutions". This paper identified unemployment, poverty, illiteracy, marginalization, political factors, international influence, and communal crisis as the bane of insecurity in the Nigeria. They also identified loss of manpower in educational institutions, poor quality of education, destructions of infrastructural facilities, brain-drain, closure of educational institutions, discouragement of educational pursuit by children, internal displacement of learners, reduction of private investment in education and inadequate funding of education as the impact of insecurity on school administration in Nigeria while Nwosu, Ukwunna, Ebokaiwe, Ukwunna (n.d) observed that in recent times, Nigeria school system has come under violent attacks that range from kidnapping of both the faculties and students to outright suicide bombing which usually claim lives and destroys properties. The effect of these attacks has further exacerbated the fragile school system which is antithetical to sustainable and national development. Several measures have been implemented to tackle this menace but there are still frequent attacks being experienced in the school environs. If these incessant attacks are not proactively dealt with, it will portend a longer term danger to quality of labour force and human capital needed to drive a sustainable economy. This study, therefore, focused on the issues of school threat and suggests that the frequent attacks on the school system should be securitized and placed on red-alert for the state actors to devote adequate attention and resources towards ameliorating this menace.

James, Bitrust and Lami (2016) observed that the climate of insecurity has seriously retarded, and in places even stopped, the crucial task of educating Nigerian children. Looking at the situation in the

north-eastern part of the country, where a new rash of suicide bombing and targeting of teachers and schools has directly put schools in the line of fire, insecurity has cast an even more serious pall. Yet it is impossible to gauge the exact impact of insecurity on education because no one including the government and the United Nations has a comprehensive view of the schools and other educational setting in the area affected by insurgency at any given moment except the case of the Chibok school girls on April 14, 2014 that attracted national and international interest. The security systems in most Nigeria schools are not integrated rather function as International individual entities and as a result lack the desired intelligence to deal with emerging security issues. James, Bitrust and Lami (2016) and Wargo (2004) also submitted that the existing security frameworks and practices in many of Nigeria's schools are not designed to defend against the threat posed by an armed intruder. There is lack of smart security system in many schools and organizations to secured critical assets. James, Bitrust and Lami (2016) observed that most schools in Nigeria uses an array of human quads positioned at the gates, bugler proof door and windows, and perimeter wall. Human guards are charged with the responsibility of checking staffs, visitors and student before entry into the school compound, registering and issuance of gate pass, maintaining surveillance along the school perimeter fence and in the compound.

To address these insecurity challenges in Nigeria and specifically in the educational institutions, scholars like Auyo, Idris, Mato and Ibrahim (2020); Wale and Temitope (2019); James, Bitrust and Lami (2016) and Onyesi and Onu (2013) have recommended the deployment of information communication technology facilities school security management. Also, Obasanjo (2016) suggest the use of technology to tackle insurgency in Nigeria. For the government and National Security agencies to restored security they must rise to their responsibilities and take back control of their Cyberspaces and the transmissions that go on here and there, As the user-base and new technology keeps evolving where more sophisticated and enhanced devices keep emerging, it becomes imperative and inductive that the National Security forces implement technology or ICT applications proactively in order to manage the new trend of events and data transmission nationwide. The security should be nationwide not only implementing it in areas affected by crimes. It is against this background that this paper examines the deployment of ICT for effective management of security in educational institutions in Nigeria.

2. Concept of Information Communication Technology

Information and Communication Technology has been defined by different scholars, such as Wale and Temitope (2019) who see Information and communication technology as a term used in describing a process of giving and getting information through the use of technologies like computers, internets, mobile phones and other communication networks. It includes all the technologies that help in disseminating and using information by individuals and institutions while World Bank (2007) defined that Information Communication Technology (ICT) as the use of hardware, software, networks, and media for the collection, storage, processing, transmission, and presentation of information (voice, data, text, images, etc) as well as related services. Adelakin (2009) Information and Communication Technologies are those items which includes equipment known as (hardware) and programmes, known as (software) that allow people to access, organize, manipulate, retrieve, store, share and present information through electronic means. Chrisita and Shoko (2010) defined information and communication technology (ICT) in a library context to mean the application of various technologies such as a computer, retro-graphics, audio-visuals, and other electronic devices for storage, reproduction, and dissemination of information in a library environment. The place of Information Communication Technology (ICT) in the school administration cannot be underestimated. Information Communication Technology (ICT) are essential for the realization of the educational institutions objective and programme.

The roles of ICT in school security management cannot be underestimated. Auyo, Idris, Mato and Ibrahim (2020) submit that information and Communication Technology (ICT) plays a very important role in the maintenance of security and national development. Educators, researchers and other schools apply ICT as a necessity which has become a way of life toward efficient organizational management. Abdulkadir, Adamu and Abdulrahman (2016) submit that technology is one of the platforms that cannot be ignored, especially when it comes to insecurity where by a lot of instruments can be deployed to tackle, improve vigilance of all the organizational activities. Information and communication technology is one of the resources that can be employed to fight insecurity in educational institutions across the country. Information and communication technology can be used to monitor, detects and track bandits and insurgents in the country.

Abdulkadir, Adamu and Abdulrahman (2016) observed that ICT can be a great tool in detection and identification of citizens, their interaction and communication, movement, education and so on. When we look at Nigeria in particular, Nigeria is a country that has a lot of issues that can contribute to the insecurity such as poverty, illiteracy, corruption, unemployment and so on. Any country with any of the above can be at risk of increase in the level of violence or crimes e.g. robbery, kidnapping, rape, and even terrorism.

Auyo, Idris, Mato and Ibrahim (2020) cited Gibson (1978) who posits that ICT encompasses the systematic application of people, ideas, materials and equipment to the solution of educational problems and security. ICT tools include computer hardware and software, television set, radio and close circuit television (CCTV) among others.

James, Bitrust and Lami (2016) observed that ICT usage in security can aid the following:

- a. It provides real opportunities for security personnel.
- b. It strengthens and provides opportunities for connection among the countries of the world.
- c. ICT provides opportunities for security personnel to communicate one another through e-mail, SMS, radio phone, web etc. so as to provide information concerning security situation in the country.
- d. It also provides quicker and easier access to more extensive current information that can be used to carry out security operations.
- e. It provides security operatives with a steady avenue for the dissemination of security reports and findings.

The roles played by ICT toward a better tertiary institution and by extension the entire society according to Auyo, Idris, Mato and Ibrahim (2020) and Adeoye (2013) include;

- i. Providing real opportunities for monitoring all activities at ease by security personnel.
- ii. Strengthening chances and providing opportunities for easy flow of information and new ideas within and outside the school system.
- iii. Providing opportunities for security personnel to communicate with one another through using up to date technologies such as the use of e-mail, SMS, radio phone, CCTV, etc. so as to provide information concerning the security situation in the schools.
- iv. It also provides quicker and easier access to more extensive current information that can be used academically, administratively or to carry out security operations at appropriate time.
- v. Providing security operatives with a steady avenue for the dissemination of security reports and

findings.

3. Information Communication Technology (ICT) Facilities for Effective Management of Security in Nigeria

Close Circuit Television (CCTV), Explosive Device Detectors, Automatic identification and access control system, GPS Driver's License and sim card registration will be discussed as ICT facilities for effective school security management facilities. In a study, Yakubu, Mohammed and Abdulkadir (2018) listed these ICT facilities that can be deployed for effective security management to include close Circuit Television (CCTV), Surveillance cameras, Detecting Devices, Geographical Positioning System (GPS)-enables devices, Satellite Imagery, Automated Personal Data Bank, Data Mining and Database Tracking Systems and so on.

3.1 Close Circuit Television (CCTV)

This is an information communication technology device that is designed to monitor events such as crime committed, or about to be committed and for investigation purposes. Close Circuit Television (CCTV) can be deployed to all the Nigerian educational institutions to help manage the insecurity problems. The government should ensure all primary schools, secondary schools and tertiary institutions across the country are provided with adequate fund to invest in Close Circuit Television (CCTV) installation within the school environment, staff quarters and students' hotels. Close Circuit Television (CCTV) can be used to track down perpetrator crime within and out the school environment. Auyo, Idris, Mato and Ibrahim (2020) cited Adams, Kerry and Jenyo (2016) who noted that Close Circuit Television (CCTV) cameras currently used largely in developed countries like United Kingdom and United States and presently coming into developing nations like Nigeria can be used to discover wrongdoing and other criminal activities. The instrument can be made to be available in public offices, private offices and individual premises to monitor abnormal behavior. Abdulkadir, Adamu and Abdulrahman (2016) observed that social perceptions and attitudes towards security have changed and over time society has become increasingly security conscious. This change has also been as a result of the mass media coverage on crime. People have changed their views as a result of terrorism, gun crime, child abductions, etc. And have adopted a more proactive role in ensuring their own safety. One way this has been achieved is through investment in CCTV systems. Security is now considered essential for the protection of both people (e.g., within businesses and for the general public) and their property. With the rise in crime in Nigeria especially in the North East and South-South where terrorism and kidnapping are issues disturbing the peace of the region. There is need for CCTV to be deployed. Advance countries like USA, Germany, China and UK have adopted such device in their educational institutions. McCahill and Norris (2003) submitted that CCTV plays a significant role in protecting the public and assisting the police in the investigation of crime. The UK is one of the most watched countries in the world.

3.2 Explosive Device Detectors

The security apparatus of educational institutions used the various explosive device detector in the school gate and entries into educational institutions to detect insurgents or bandits with dangerous explosion within the schools. Security agents within the schools should be provided with adequate explosive device detector this will help to detect underground people with the aims of bombing schools facilities across the country. Abdulkadir, Adamu and Abdulrahman (2016) pointed out that nowadays a lot of attention is being paid to the development of methods and instrumentation for the detection of explosive devices. Initiated explosives have already killed thousands of people and injured several tens of thousands worldwide not only Nigeria, Infrastructural facilities, like railway stations, airports, undergrounded railways, security offices, electricity, water supply, etc. are preferred targets involving up to thousands of people. Assuming, the methods will be found to early

detect explosives by means of sensors. New forms of bomb attacks are more sophisticated, more dangerous, using remote control of Improvised Explosive Devices (IED); initiation by mobile phones permits terrorists to initiate a bomb immediately. Therefore, detection systems with a reliable detection efficiency used in broad range of IEDs are important. An IED is an improvised explosive charge, equipped with a non-standard (home-made) or a professional detonator. But, an Improvised Explosive (IE) may be any chemical or mixture capable of an explosive reaction.

3.3 Automatic identification and access control system

Automatic identification and access control system is another ICT device that can be deployed to manage insecurity problems in the Nigerian educational institutions. Automatic identification and access control system have the capacity to prevent intruders, bandits and insurgents from entering educational institutions across the country. Automatic Identification and Data Capture (AIDC) refers to the methods of automatically identifying objects, collecting data about them and entering that data directly into computer systems (i.e. without human involvement). James, Bitrust and Lami (2016); Wen (2010) Identification of persons is always important in places like Airports, railway stations, theatres, School environment etc. Identification can be made automatic using Auto-identification. James, Bitrust and Lami (2016) submitted that Automatic identification and access control system has become necessary to overcome the security threats faced by many schools and organizations in North-East Nigerian due to insurgency. By installing the system at the entrance will only allow the authorized persons to enter the organization. The system can also be installed at various points inside the organization to track the person's movement and to restrict their access to sensitive areas in the organization. In such a way, suspicious persons can be caught which will surely improve the security level and early warning in the organization.

3.4 GPS Driver's License

Another technology available to track down bandits, insurgents and criminals in the country is the adoption of Global Positioning System which can help to track down criminals and kidnappers who are using vehicle and Machines to move their victims from one location to the other. Global Positioning System can be deployed to track kidnapped students and teachers within the country. Global Positioning System can be used to track bandits and insurgents terrorizing the country. Abdulkadir, Adamu and Abdulrahman (2016) observed that GPS tracking unit is a device that uses the Global Positioning System to determine the precise location of a vehicle, person, or other asset to which it is attached and to record the position of the asset at regular intervals. The recorded location data can be stored within the tracking unit, or it may be transmitted to a central location database, or internet-connected computer, using a cellular (GPRS), radio, or satellite modem embedded in the unit. This allows the asset's location to be displayed against a map backdrop either in real-time or when analyzing the track later, using customized software. A GPS tracking system uses the GNSS (Global Navigation Satellite System) network. This network incorporates a range of satellites that use microwave signals which are transmitted to GPS devices to give information on location, vehicle speed, time and direction. So, a GPS tracking system can potentially give both real-time and historic navigation data on any kind of journey. A GPS tracking system can work in various ways. From a commercial perspective, GPS devices are generally used to record the position of Objects e.g. vehicles as they make their journeys. Abdulkadir, Adamu and Abdulrahman (2016) submit that some systems will store the data within the GPS tracking system itself (known as passive tracking) and some send the information to a centralized database or system via a modem within the GPS system unit on a regular basis (known as active tracking). GPS tracking System is one of the most rapidly growing technologies around the world. Most developed countries have focused on the GPS technologies in resolving some of their inherent security problems. Abdulkadir, Adamu and Abdulrahman (2016) cited Michae and McNamee (2006) who posited that Global Positioning

System (GPS) is increasingly being adopted by private and public enterprise to track and monitor humans for location based services (LBS). A location-based service (LBS) is information or entertainment service, accessible with mobile devices through the mobile network and utilizing the ability to make use of the geographical position of the mobile device. LBS can be used in a variety of contexts, such as health, indoor object search, entertainment, work, personal life, etc. LBS include services to identify a location of a person or object, such as discovering the nearest banking cash machine or the whereabouts of a friend or employee. LBS include parcel tracking and vehicle tracking services.

3.5 Sim Card Registration

Sim registration is another way to prevent and manage security problems in Nigeria and in the educational institutions. Criminal used their phones to call for ransom payment. Sim card registration can be used to track down the criminal through GPR. The incidence of Niger, Kaduna state and Abuja where Kidnappers were using phone to communicate with parents and guardians of their abductees can be reduced if all the sim in the country have been registered. Unregistered sim have been used to perpetrate crime in Nigeria by insurgents, bandits and Boko Haram members. Vanguard News Paper (2016) reported that that President Buhari said as cited by Abdulkadir, Adamu and Abdulrahman (2016) “You know how the unregistered GSM are being used by terrorists. “And between 2009 and today, at least 10,000 Nigerians were killed by Boko Haram”. Abdulkadir, Adamu and Abdulrahman (2016) observed that the objectives of SIM Registration exercise were: to assist security agencies in resolving crime and by extension to enhance the security of the state, to facilitate the collation of data by the Commission about phone usage in Nigeria, to enable operators to have a predictable profile about the users on their networks and to enable the Commission to effectively implement other value added services like Number Portability among others.

4. Challenges Preventing Deployment of ICT for Effective Security Management in Nigerian educational institutions

Inadequate funding, Inadequate ICT manpower, poor capacity development of school security officer, poor maintenance culture, high ICT of security ICT facilities, high cost of maintenance and corruption.

4.1 Inadequate Funding

Inadequate funding of educational institutions is a major problem preventing full deployment of ICT facilities for the management of security problems in the schools. The budgetary allocation to all forms of education in Nigeria is inadequate and below the recommendation of UNESCO 26 % percentage. The funding of education in Nigeria have been described as inadequate to implement education programme by Ogunode (2020). The funding of education during that period of implementation fell below the UNESCO 26% recommendation for developing countries. The educational funding from 2010, 2011. 2012, 2013, 2014, 2015 had N293 bn (7.19%), N393 bn (9.31%), N453 (9.15%), N499 (10.15%), N494 (10.54%), N434 (10.71%) and 2016, 2017, 2018, 2019 and 2020 with N4.31 (7.52%), N551 (7.41%), N605.8 bn (7.04%), N620.5 bn (7.02%) and N671.07bn (6.7%). From the above it is clear that education funding in Nigeria is poor and is affecting the development of education and ICT education. Ogunode and Madu (2021) pointed out that poor funding of education in Nigeria is responsible for the following; inadequate infrastructural facilities, inadequate professional teachers, shortage of instructional materials, poor quality of education, poor capacity development, poor supervision and strike actions. Auyo, Idris, Mato and Ibrahim (2020) cited Gbadamosi (2006) who noted that inadequate funding is a major challenge because it has negatively affected many areas of security in Nigeria. Areas it has affected include funding of ICT projects, training and retraining security personnel, the provision of technological

infrastructure and the development and maintenance of software packages and electricity. The problem of inadequate funding and bad utilization of fund can be seen as the key factors, which mean inadequate money to purchase the necessary equipment and gadgets needed to pursue the security challenges in the country.

4.2 Inadequate ICT Manpower

Shortage of ICT manpower in the country and especially in the educational institutions is another challenge hindering effective deployment of ICT facilities for effective security management in the schools. Many schools in the Country do not have professionals in ICT that can manage the ICT security facilities for effective security management in the schools.

4.3 Poor Capacity Development of School Security Officers

Poor capacity development of school security officers is another big challenge to effective security management in the educational institutions in Nigeria. Some schools have procured modern ICT facilities to combat insecurities problems in their respective schools but the security men and women lacks the capacity to used such ICT facilities because of poor training.

4.4 Poor Maintenance culture

Poor maintenance culture of school administrators, teachers, students and security officers have also affected the effective deployment of ICT for management of school security. ICT facilities installed in the strategic areas within and outside the schools to help prevent and monitor events are been spoiled and mishandled and damaged by the various stakeholders in the schools. Various

Close Circuit Television (CCTV) that have been installed in our streets, school environment, staff quartz and hotels have been removed by streets boys because of poor management culture.

4.5 High Cost of Security Gadgets

The high cost of purchasing ICT security gadgets is high and unbearable for many school managers and administrators due to high prices. ICT facilities like close Circuit Television (CCTV), Surveillance cameras, Detecting Devices, Geographical Positioning System (GPS)-enables devices, Satellite Imagery, Automated Personal Data Bank, Data Mining and Database Tracking Systems are very expensive and needs huge financial investment to procure some facilities for educational institutions used. With the poor budgetary allocation, many schools administrators cannot afford to buy such for installation in their schools.

4.6 High Cost of Maintenance and Corruption

The maintenance cost of these facilities like close Circuit Television (CCTV), Surveillance cameras, Detecting Devices, Geographical Positioning System (GPS)-enables devices, Satellite Imagery, Automated Personal Data Bank, Data Mining and Database Tracking Systems is very high. Constant electricity is needed to sustain their functions. The high cost of maintaining these ICT facilities is a very big problem preventing the deployment of the facilities for school management in the schools across the country.

4.7 Lack of Uninterrupted Power Supply:

Lack of Constant power supply is a great and current problem affecting ICT usage for national security. Ohiwerei, (2013) and Auyo, Idris, Mato and Ibrahim, (2020) argued that Nigeria being a developing nation cannot boast of a twenty-four-hour electricity supply to its citizens. The schools are directly connected to Power Holdings Company of Nigeria; it is a sad note that some of the schools cannot afford a generating set, such that it can power for the entire community.

4.7 Corruption

Corruption in the educational institutions in Nigeria is another factor hindering effective deployment of ICT facilities for school security management. Corruption have penetrated almost all the institutions in the country (Ogunode, & Atiga 2021). Fund released for such ICT security development projects and programme in schools are ended been looted and mismanaged. Auyo, Idris, Mato and Ibrahim, (2020) and Fukayama (2013) posit it as inability of the government to make and enforce rules, and to deliver services regardless of whether that government is democratic or not. Corruption, according to Transparency International: "involves behavior on the part of officials in the public sector, whether politicians or civil servants, in whom they improperly and unlawfully enrich themselves, or those close to them, by the misuse of the public power entrusted to them." Nigerian leaders have not been able to do anything on the high levels of corruption in heart, which affected ICT and security in institutions particularly the present-day government has not been able to do much in in term of fraud.

5. Suggestions

In line with the identified problems in this study, the following were suggested:

- a. The federal government and state government should establish department of school security in the ministry of education. The department should be in charge of school security across the federation.
- b. The government should increase the budget of education in the country and ensure all ICT facilities needed for school security management are provided.
- c. Security men in the educational institutions should be trained and retrained on the use of modern ICT facilities for security management in the schools.
- d. School administrators, teachers and students should be charged to protects and report any one found destroying ICT facilities installed within and outside the schools environment
- e. The government should ensure budgetary allocation for procurement of ICT security facilities are used for that purpose and all anticorruption agencies in the country should be used to monitor the usage of the funds to prevent mismanagement and looting of the funds.

Conclusion

The paper discussed deployment of information communication technology (ICT) for effective schools management in the Nigerian educational institutions. The paper listed information communication technology (ICT) facilities that can be deployed and the challenges hindering effective deployment of ICT for effective schools management in Nigeria. The paper concluded by listing various strategies to improve the school security management in Nigeria.

References

1. Abdulkadir A. S, Adamu,. H. & Abdulrahman. A. M (2016). Effective use of ICT tools to combat insecurity menace in Nigeria. *International Journal of Modern Trends in Engineering and Research (IJMTER)*. 3, (5), 357-362
2. Adams, O.K, Kerry, P., H & Jenyo O., G (2016). The Role of Information Technology in National Security: "A Case Study of Nigeria". *International Journal of Mathematics and Computer Science* Vol 10 No.8 P45
3. Auyo, S.G.,1, Idris A.,2 Mato,I.,3 & Ibrahim,A.A. (2020). A Review on the Use of ICT as a means of Security within Tertiary Institutions in Nigeria *Dutse Journal of Pure and Applied Sciences (DUJOPAS)*, Vol. 6 No. 4

4. Adeoye, Y.M. (2013). Appraising the Role of Information Communication Technology (ICT) as Change agent for Higher Education in Nigeria *Journal of Educational Administration and Policy Studies* Vol 5(8), pp 177-183, December 2013
5. Buhari (2016, March 8). March 8/03/2016, 2016, from Vanguard News Paper <http://www.vanguardngr.com/2016/03/mtns-reluctance-to-register-sim-cards-caused-10000-lives-buhari/>
6. Fukayama, F. (2013). What is Governance *Centre for Global Development*: Washington DC.
7. Gbadamosi L (2006). Challenges of E-Teaching Profession and Way Forward *International Journal of Computer Science and Mathematical Theory* Vol 8 No7 P86
8. Gibson, M.D. (1978). Quoted by Onyesi, C.M & Onu, T.C. (2013), the Role of Information and Communication Technology Education Toward Promotion Security in Nigeria *Journal of National Association of Women in Colleges of Education* Vol. 2(1) Pp. (579-581)
9. Emmanuel, U. W. (2018). Security Challenges of Attacks on Schools in Nigeria: The Role of School Administrators, Staff, Parents and Students
10. Imhonopi, D. & Urim, U. M. (2012). The Spectre of Terrorism and Nigeria's Industrial Development: A Multi-Stakeholder Imperative. The paper was prepared for the Nigerian Anthropological and Sociological Association (NASA) Conference with the theme " Theoretical and Conceptual Issues on Social Values, Corruption and Security" held at the Nnamdi Azikiwe University, Awka, Anambra State, between November 5-9, 2012.
11. Joda, F.M. & Abdulrasheed, O. (2015). 'Effects of Insurgency on Girls Education in North Eastern Nigeria' *European Journal of Education and Development Psychology* ,3(1), 44-50,
12. Nwosu C., A., Ukwunna, J, Ebokaiwe C. & Ukwunna G., C. (n.d) Insecurity and the Nigeria school system: the securitization option for sustainable development.
13. Ogunode, N., J. & Ahaotu, G. N. (2021). The Effects of Incessant Closure of Schools on School Administration in Northern Nigeria. *International Journal of Innovative Analyses and Emerging Technology* 1(4), 98-103
14. Ogunode, N., J. Ahaotu G. N. & Obi-E., U. (2021). Effects of Insecurity on School Administration in Nigeria. *Middle European Scientific Bulletin*, VOL 13.P:94-102
15. Ogunode N. J.& Fatima Kolo (2021). Effects of Insecurity on Basic Education Administration in Northern Nigeria. *International Journal of Discoveries and Innovations in Applied Sciences*. 1(7), 1-8
16. Ogunode N., J. & Madu C., O. (2021). Education Financing In Nigeria: Problems And The Way Forward. *International Journal of Development and Public Policy*,1(5),P:162-174.
17. Ogunode, N., J. & Josiah, H., F (2021). Nigerian Educational System: Problems and Way Forward *Central Asian Journal Of Social Sciences And History* VOLUME: 02 (08),P:24-34
18. Ogunode, N., J. & Atiga ,T. (2021) Educational Administration in Nigeria: Challenges and the Ways Forward. *American Journal of Social And Humanitarian Research* 2(6), P:10-24
19. Onifade, C., A. Imhonopi, D. & Urim U. M. (2013) Addressing the Insecurity Challenge in Nigeria: The Imperative of Moral Values and Virtue Ethics. *Global Journal of HUMAN SOCIAL SCIENCE Political Science*. 13 (2) p:53-63.

20. Ogbobo, W. (2014). 'Insecurity Threatens Girl-child Education in Nigeria – UNICEF' Leadership Newspaper, — Jun 15, 2014 4:43 pm
21. Obasanjo. (2016, March 8). *Government*. Retrieved March 8/03/2016, 2016, from Today News Paper: [https://www.today.ng/news/national/89544/obasanjo-suggests-use-of-technology-to-fightinsurgentswww.metrology.pg.gda.pl.\(2012\).](https://www.today.ng/news/national/89544/obasanjo-suggests-use-of-technology-to-fightinsurgentswww.metrology.pg.gda.pl.(2012).) *SENSORS AND SYSTEMS FOR THE DETECTION OF EXPLOSIVE DEVICES* –. Warsaw: METROLOGY AND MEASUREMENT SYSTEMS.
22. Ohiwerei (2013). Technology and possible approach *Journal of Computer security* Vol 3 No 3 P8
23. Sanni, O. B. (2015) Effects of Insecurity and challenges on females' education in Nigeria. *African Journal for the Psychological Study of Social Issues*. Vol.18 No.3
24. Wargo, J. (2004). The World Health Organization's information series on school health: The physical school environment. New Haven Connecticut: Yale University.
25. Wale, S. & Temitope, R. (2019). Availability and Utilization of ICT Facilities for Enhancing University Campus Security in South-South, Nigeria. *International Journal of Computer Science and Mathematical Theory*. Vol 5. No. 2, 35-45