

# [Embracing ict in nigerian secondary schools education essay](https://assignbuster.com/embracing-ict-in-nigerian-secondary-schools-education-essay/)

Aim: The aim of this literature review is to describe the current state of ICT development in Nigerian Secondary Schools, discuss the problems of ICT development in Nigerian Secondary Schools, suggest possible solutions and highlight the importance of embracing ICT in education in Nigerian Secondary Schools.

Introduction: The Federal Republic of Nigeria is a country located in the western part of the African Continent with an approximate land mass of 923, 768. 00 sq kilometres, lying between Latitude 40 & 140 North of the Equator, Longitude 30 and 140 East of the Greenwich meridian bordered on the west with the Republic of Benin, on the north with the Republic of Niger and on the east with the Federal Republic of Cameroun. The topic of ICT integration into the Nigerian economy is very crucial however , for the purpose of this literature review the importance of integrating ICT into Nigeria’s Secondary School Environment will be discussed.

Information and Communication Technology (ICT) involves the use of all forms of Computer, Communications, Software , Network and Mobile Technologies to process, maintain and mediate information. Communication Technologies include all media such as; Cable, Satellite, Fibre Optics, Wireless (radio, Infrared, Bluetooth, wi-fi) employed in transmitting audio, video, data or multimedia. Network Technologies include Personal Area Networks (PAN), Campus Area Networks (CAN), Intranets, Extranets, Local Area Networks (LAN), Wide Area Networks(WAN), Metropolitan Area Networks(MAN) and the Internet. Computer Technologies include all removable media such as optical disks, disks, flash memories, video books, multi-media projectors, interactive electronic boards, and continuously emerging state-of-the art PCs. Mobile Technologies comprise Mobile Phones, PDAs, Palmtops etc.(Illoanusi, O. N., Osuagwu, C. C. 2005). ICTs have become part of our very existence as a matter of fact, it affects all of human activities. Over the years, ICTs have created significant impact on the way we live. Significant improvements and developments have occurred in various fields as a result of ICT integration to those fields. The field of education is not excluded as ICTs have undoubtedly affected learning, teaching and research methods.(Yusuf 2005) cited by (Adomi, A. E., Kpangban, E. 2010). The impact of ICT on education has improved educational standards in developed economies, however this impact is still to be felt in developing economies such as Nigeria.

## Current Situation of ICT development in Nigerian Secondary Schools

ICT in education involves embracing major components of ICT to enhance teaching and learning methodologies in institutions of learning. Presently, the integration of ICT in Nigerian Secondary Schools is minimal. In 1988, in an attempt to keep pace with development in computer education , Nigeria enacted a policy on computer education. According to Okebukola(1997) the plan was to implement this innovation first to some selected federal government colleges and thereafter spread this innovation to other secondary schools and later to primary schools, unfortunately this project was never successful as intended because beyond the distribution and installation of computers in federal government colleges this project never took off ground.(Aduwa-Ogiegbaen, S. E. , Iyamu, E. O. S. 2005).

The Federal Republic of Nigeria has no specific policy on ICT in education. The Ministry of Education created its ICT department in February 2007 more so, several government agencies and other stakeholders in the private sectors have initiated ICT-driven projects and programmes to impact all levels of the educational sectors.(Agyeman, O. T. 2007). At School level, the use of ICT aided instructional materials is minimal or rather not encouraging. This could be attributed to the fact that majority of Nigerian Secondary School teachers do not see the importance of improving their professional practice using ICT and are consequentially, less eager to adopt the use ICT in their teaching practice. If however the secondary teachers in Nigeria perceive the importance of integrating ICT in teaching methods they are more likely to embrace the use of ICT in their professional practice.

A study which investigated teachers’ self efficacy in implementing computer education in Nigerian Secondary Schools found that most teachers in Federal Government Colleges in Nigeria lack experience in the use of computers for educational or industrial purposes , most teachers in Federal Government Colleges cannot use common computer software because they lack knowledge of basic computer operations.(Yusuf 2005) cited by Ololube, N. P (2006). Students on the other hand are embracing ICT however not in the right manner . Nigerian Secondary School Students are yet to maximise the benefits of the internet in research and learning. This is evident in the use of Internet by these students who stay long hours on the internet chatting on social networking sites such as facebook and yahoo messenger.

## Problems of ICT development in Nigerian Secondary Schools

Various factors are responsible for the problems of ICT development in Nigerian Secondary Schools. Nevertheless, the most significant amongst these factors are; Lack of adequate ICT infrastructure, Low percentage of teachers with ICT skills, Absence of National policy on ICT in education , Low access to the Internet and Cost of acquiring ICT facilities where available.

Lack of adequate ICT infrastructure in Nigeria seems a major issue. Though the International Telecommunication Union(ITU) has rated Nigeria’s Telecommunication Sector as the fastest growing in Africa, majority of Nigerians still have inadequate access to the Internet.(Aduwa-Ogiegbaen, S. E Iyamu, E. O. S 2005). Information, data, audio, video and multimedia are meant to be transmitted on reliable networks supported by adequate ICT Infrastructures unfortunately, these infrastructures are lacking in most Nigerian Secondary Schools. Inadequate funding and lack of technology budget exacerbate the problems of ICT infrastructures (Illoanusi, O. N Osuagwu, C. C 2005). Moreover ICT equipments were made to function with other infrastructures such as electricity (Aduwa-Ogiegbaen, S. E Iyamu, E. O. S 2005) the irregular and unstable supply of electricity in Nigeria poses a major difficulty in the proper functioning of ICT equipments even when they are acquired . There are recorded cases of electrical home appliances damaged due to lack electrical power supply over period of months. The absence of electric power grids in most parts of the country even where adequate telecommunication facilities are available contribute to the irregular power supply.(Agyeman, O. T 2007).

The percentage of Nigerian Secondary School Teachers with basic computer skills is low compared to their counterparts in developed economies. Nigerian Secondary School teachers attach little importance to IT literacy . Consequently, the use of ICT aids in teaching is minimal. Additionally there is widespread ignorance and misconception about ICTs among Nigerians (Ighoroye and Ajayi. n. d) cited by (Adomi, E. E., Kpangban, E. 2010). Secondary School teachers in Nigeria need to be trained on educational technologies and the importance of integrating computers into classroom teaching.(Aduwa-Ogiegbaen, S. E., Iyamu, E. O. S. 2005).

Presently, there is no existing National Policy on ICT in education. Although the Nigerian Federal Government policy in 1988 introduced computer education in high schools(Okebukola 1997) cited by (Adomi, E. E, Kpangban, E. 2010). This policy was not successful as the only implementation was distributing computers to Federal Government High Schools which were never used for computer education of the students (Adomi, E. E, Kpangban, E. 2010). The Nigerian Federal Government have on several occasions revealed plans to integrate ICTs into school systems and provide infrastructure to schools, yet actions are still to be taken on these plans. In 2001, Nigeria started implementing its ICT policy which led to the establishment of the National Information and Technology Development Agency(NITDA) the purpose of establishing NITDA was to help Nigeria become an ICT capable country in Africa and a major player in the information society by 2005. This vision is yet to be fulfilled even few years after the set time for achieving this vision.(Agyeman, O. T., 2007)

Major development of ICT in education depends largely on access to the adequate ICT infrastructures especially the internet. Access to computer equipment, internet and other accessories in most Nigerian Secondary Schools is low.(Agyeman, O. T. 2007). Underfunding and inadequate financial capacities lead to this problem. Irregular electricity supply exacerbates this problem. The availability of computers in few Nigerian Secondary Schools located in urban areas is in the ratio of 5 computers to 1 student on the contrary, the case in rural areas is absolutely not encouraging. Some rural areas still face total absence of power supply. Secondary Schools in Nigeria are not adequately funded to provide furniture, requisite books, laboratories and adequate classrooms let alone being given adequate funds for computers and internet connectivity.(Aduwa-Ogiegbaen, S. E, Iyamu E. O. S. 2005).

The High cost of acquiring ICT facilities even when they are available cannot be overlooked. The cost of purchasing computers in Nigeria is high not so many can afford it. Moreover, monthly internet rates are exorbitant and the charges are unaffordable for most people in Nigeria consequently, it is difficult for secondary schools to acquire and install ICT facilities for the use of teachers and students (Adomi, E. E., Kpangban, E. 2001). Additionally, the high cost of computers still make most secondary schools unable to acquire these facilities.

## Suggested Solutions to ICT development problems in Nigerian Secondary Schools

The integration of ICT in education in Nigerian Secondary Schools will produce sustainable development in the secondary school system.. However, if the effort to integrate ICT into Nigerian Secondary Schools will be successful then it is pertinent that the Nigerian Government ensure ICT policy statements in education are translated into reality. Furthermore, the Federal Ministry of Power and Mines should work towards stabilising electricity power supply in Nigeria(Adomi, E. E., Kpangban, E., 2010). Additionally, stakeholders in Nigerian ICT industry must help spread the knowledge and usage of ICT amongst Nigerian Secondary School Teachers and students in the best way possible. The Federal Ministry of Science and Technology most importantly must ensure the NigComSat-1R which is meant to be a replacement of the failed NigComSat1 and the SAT3 submarine cable is delivered as scheduled in the fourth quarter of 2011 as this will immensely reduce telecommunication and internet connection rates. Adequate funding and budgets for ICT integration in secondary schools should also be made possible by the Federal Ministry of Education.

## The Importance of Embracing ICT in Education in Nigerian Secondary Schools

ICT integration in Nigerian Secondary Schools system will gradually transform the quality of the Nigerian Secondary Educational System (Osuagwu, C. C., Illoanusi, O. N., 2009). The successful integration of ICT in Nigerian Secondary Schools will enhance teaching, learning and research methods moreover, significant development in Nigeria’s secondary educational system will occur. There is no doubt that teachers and students in secondary schools in Nigeria will have incredible resources at their disposal with reliable access to the internet.(Aduwa-Ogiegbaen, S. E., Iyamu, E. O. S., 2005).

## Conclusion

There is no doubt what significant improvement successful ICT integration will bring in the Nigerian Secondary Educational System however the Nigerian Government must make adequate efforts to implement National policies on ICT in education, stabilizing electrical power supply, and provide adequate funding to secondary schools for the acquisition of ICT facilities if this goal of Integrating ICT in Nigerian Secondary Education System will become a reality.