1. Introduction
E-learning though not new in Nigeria has been gained much prominence of recent. Many Nigerians have benefited through the open (correspondence) of rapid college and exam success correspondence (Aginam 2006). In fact, e-learning in Nigeria tertiary institutions has recently continued to grow at unprecedented rate but with a lot of challenges.

Today, the advances in communication and computer technologies have culminated in the supplementation and near phase-out of traditional educational delivery system. These new technologies allow for more flexibility in learning and a wider reach for education in many countries world-wide (Salawudeen, 2010).

In recent times, the issue of mobile learning which means the use of wireless electronic technology to deliver and receive knowledge and skill has been raised and is practiced in the developed nations of the world (Ayodele 2010). Nigerian tertiary institutions however can be said to be behind in the adoption of these technologies as there is evidently an extremely low rate of diffusion of e-learning and as a consequence, a low rate of usage. The reasons for this are not far fetched as Nigeria, apart from being a developing country and having inadequate education finance policy, is also highly deficient in the area of engineering and technological development (Salawudeen 2010).

1.2 Concept of E-Learning
E-learning is defined by various authors according to their personal knowledge and perspectives, but they all seem to agree that e-learning comprises all forms of electronically supported learning and teaching which are procedural in character and aim to effect the construction of knowledge with reference to individual experience, practice and knowledge of the learner. This definition is supported by Ravichandra (2005), who said that E-learning in the broadest sense concerns itself with learning that occurs on line through the internet, off the using the CD-ROM or other facilities such as radio, television and telephony.

E-learning encompasses learning at all levels, both formal and non-formal that uses an information network, the internet, an intranet (LAN) or extranet (WAN), whether wholly or in part, for course delivery, interaction, evaluation and facilitation which Salawudeen (2010) explained, uses network technologies to create, deliver and facilitate learning any time, and anywhere.

1.3 Origin of E-Learning in Nigeria
The development of e-learning in Nigeria could be traced back to the development of telecommunication which began in 1886 when e-cable connections was established by the colonial masters between Lagos and the colonial office in London to transmit information and receive feedback. By 1893 all government offices in Lagos were provided with telephone services for easy communication and later, other parts of the country were provided with telephone services (Ajadi et al., 2008). They further stressed that in Nigerian schools, the commonest type of e-learning adopted was in form of lecture notes on CD-ROM which can be played when the learners desire. The challenge of this method is that number of students per computer was unattractive as compared to when lectures are being received in the classrooms.

1.4 The Federal Government’s E-Learning Initiative in the Education Sector
As part of the FME’s commitment to enhance creation and delivery through the application of ICT, and also to meet up with the national, regional and global developmental goals in line with the Roadmap as approved by the Federal Executive Council, constituted an exploratory Committee to look at the possibility of deploying e-learning across the Nigerian education sector through Public-Private Partnership.

1.5 National Policy on e-Learning
The FME has produced policy on E-Learning. This has been approved by the National Council on Education but up till now it is yet to be officially launched. It is hoped that the policy will be widely publicized once it is launched sine advocacy strategies will be employed to enhance public participation.

1.6 Advantages and Disadvantages of E-Learning
E-Learning can provide benefits for organizations and individuals in the following ways:
Increased access: Instructors of the highest caliber can share their knowledge across borders, allowing students to attend courses across physical, political, and economic boundaries. Recognized experts have the opportunity of making information available internationally, to anyone interested at minimum costs.

Convenience and flexibility to learners: In many contexts, E-Learning is self-paced and the learning sessions are available always as learners are not bound to a specific day/time to physically attend classes. They can also pause learning sessions at their convenience. High technology is not necessary for all online courses. Basic internet access, audio, and video capabilities are common requirements. Depending on the technology used, students can begin their courses while at work and finish them at an alternate internet equipped location.

1.7 Other advantages of E-learning
- Class work can be scheduled around personal and professional work.
- Reduces travel cost and time to and from school.
- Learners may have the option to select learning materials that meet their level of knowledge and interest.
- Learners can study wherever they have access to a computer and Internet.
- Self-paced learning modules allow learners to work at their own pace.
- Flexibility to join discussions in the bulletin board threaded discussion areas at any hour or visit with classmates and instructors remotely in chat rooms.
- Different learning styles are addressed and facilitation of learning occurs through varied activities.
- Development of computer and Internet skills that are transferable to other facets of learner’s lives are facilitated.
- Successfully completing online or computer-based courses builds self-knowledge and self-confidence and encourages students to take responsibility for their learning.

1.8 Disadvantages of e-Learning
- Unmotivated learners or those with poor study habits may fall behind.
- Lack of familiar structure and routine may take time getting used to.
- Students may feel isolated or miss social interaction.
- Instructors may not always be available on demand.
- Slow or unreliable Internet connections can be frustrating.
- Managing learning software can involve a learning curve which may be difficult for new learners.
- Some courses such as traditional hands-on courses can be difficult to simulate.

It is important to know the merits and demerits of e-learning to enable learners make decisions with learning software selection as well as on line distant learning programs structure and selection (Aginam 2006).

1.9 Challenges of Integrating E-learning in Tertiary Institutions in Nigeria
E-learning in Nigerian tertiary institutions is still a dream because of poor ICT infrastructure and other socio-economic reasons. Due to very high primary cost of infrastructural development and to increase public access to internet and other ICTs, the developing countries are still far behind from getting benefit from the e-learning. The major problems facing the proper implementation of e-learning in Nigerian tertiary institutions according to Salawudeen, (2010) in general are as follows:
- Inequality of access to the technology itself by all the students.
- The cost of a personal computer (PC) and Laptop are still very high in Nigeria considering the income level of an average worker in the country. Few students that are privileged to have a PC/Laptop are not connected to the internet as this do attract extra cost which they cannot afford.
- Technophobia: Most of the student have no computer education background, hence they are afraid of operating one, some go to the extent of hiring expert at a cost to fill their admission, registration and other documents meant for them to fill online. However, the very few who have access to the computer do not know how to use it and maximize it usage.
- Internet Connectivity: The cost of accessing internet is still very high in Nigeria. Most Students make use of Cyber Café who charges between #100.00 and #150.00 per hour despite their poor services and slow rate of their server.
- School Curriculum: Most of the students admitted have no information technology/computer education knowledge because it was not entrenched in the curriculum at their elementary and secondary education level. Not until recently when computer education is been introduced at elementary level and it is not yet a compulsory subject at the secondary level of our education.
- Attitude of Students: ICT give room to independent learning and most students are reluctant to take responsibility for their own learning, but they preferred to be spoon-fed at all times.
- Software and License cost: It is very expensive to get some of the softwares because they are not developed locally, they are developed in Europe and other developed countries to suit their own system and make their own living. The cost and even the interpretation some of the software’s put off some of the students who showed interest.
- Maintenance and Technical Support: There are few technical staff to maintain the system. This makes it very expensive for students that have PCs to maintain when a technical problem is noticed.

- Electricity: The perennial problem in Nigeria is the problem of electricity instability which has been a major setback for our technological development. Some of the students that reside in cities and towns are faced with the problem of epileptic supply of electricity, while majority of them live in rural areas that are not connected to the national grid.

1.10 E-learning and persons with special needs

E-learning approach is fast growing not only in the advanced countries but in the Third world countries including Nigeria. E-learning is gradually becoming popular in Nigeria's tertiary institutions especially in Colleges of Education, and Universities. Most Colleges and Universities have satellite campuses where distance learning or remedial programs are run for students who were not programmed for full-time studies. Persons with disabilities as well as non-disabled persons were beneficiaries of e-learning approach. The program afforded learners who were Gainfully employed in the labor market to attend to both programs. It is obvious that lectures received by these students within few months of lecture contacts would not be adequate. In some Universities, Radio stations were established where lectures were broadcast to concerned students all over the state. Persons with low incidence disabilities benefit immensely in the program. The deaf and hard-of-hearing students benefit in television broadcast through sign language interpreters.

1.11 E-learning equipment and materials in Nigeria's tertiary institutions

Most tertiary institutions in Nigeria were cognizant of the special educational needs of learners with disabilities in their institutions. E-learning has been encouraged for the purpose of making learning easier for students with special needs. Closed circuit television (CCTV), overhead projectors, slides, transparencies and magnifiers were made available to students for reading purposes. Computers with special devices for operating complex functions were made available to students and staff with visual impairments in Departmental and College offices.

1.12 How adequate were the e-learning equipment and materials?

- The major problems of e-learning faced by students in Nigeria's tertiary institutions were:
  - Inadequate supply of e-books to enhance their studies. After listening to lectures through radio broadcast, e-books should complement the lectures. Students with visual impairments particularly require e-books.
  - Universities and Colleges of education in most cases do not have enough computers and special reading devices for students to use.
  - Tertiary institutions in Nigeria were yet to incorporate Television conferencing. In most Continents like the USA, Europe and Asia, lectures and examinations may be arranged and conducted on-line. Examination results are released to individual students almost immediately. Nigeria's tertiary institutions are not yet there.

2. Recommendations

- The tertiary institution administration should discard the idea of providing for e-learning alone. They should go into public and private partnership such as the one existing with AFRIU3, Socket Works and should expand to include NIIT because of their success story in Asia, where they partnered with the government of Karnataka State in India to equip 700 schools with ICT laboratories in 45 days. By bringing in private sectors, the tertiary institutions can meet their e-learning objectives, through the provision of cost-effective means of increasing access equity, and quality in both formal and vocational education.
  - The Nigeria tertiary institutions should put in place an effective ICT board that will oversee the implementation of e-learning, and facilitate increased access to capital. Introduce market discipline in decision making, introduce private sector knowledge and management skills to public sector. The education administration should also support private sector e-learning initiatives. This should include the provision of e-learning instruction for pre-service and in-service professional development of teachers and training of students and contracting with the private sector in financing, equipping and maintaining the computer laboratories in tertiary institutions.
  - The tertiary institutions administration through their liaison offices should liaise with multinational agencies such as the USAID, to help provide the Digital Opportunity.
  - The tertiary institutions should form a consortium to purchase bandwidth.
  - The tertiary institution administration in conjunction with the government should put in place modalities to enable undergraduate students acquire their personal computers.

3. Conclusion

In Nigeria's present state of growing recession, degrading education system and sharp cut in cost and expenditure, there are many reasons to take a hard look at e-learning regardless of the type or rhetoric spawned by its proponents and commercial vendors. E-learning has greatly matured over the last couple of years and many valuable lessons
have been learnt along the way. Nigeria has up till now refused to comply with the UNESCO recommendation that at least 26 percent of every country’s annual budget be spent on education. She spends less than 7 percent of her budget on education. (Okecha, 2010).

However, a glimmer of hope shines through with the growing telecommunications revolution. The mobile phone is starting to look like a favourable medium that many help kick start e-learning revolution on a wide scale. More and more people have access to mobile phones, thus having access to information hosted on the internet, which means that they have the opportunity to participate in e-learning programs. E-learning in Nigeria’s tertiary institutions should be embraced and fully implemented since the learning approach is a common phenomenon globally. Nigeria’s tertiary institutions, particularly where students with learning difficulties and those who require special educational needs were included in regular program should be well equipped with necessary electronic equipment and materials.

References