Chapter Ten

EMERGENT ISSUES IN CURRICULUM REFORMS, FUNDING AND INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) USE FOR QUALITY HIGHER EDUCATION IN NIGERIA

R. A. Olatoye
Department of Science Education,
Faculty of Science and Education,
Federal University, Dutsin-Ma,
Katsina State, Nigeria.
E-mail: rolatoye@fudutsinma.edu.ng

B. J. Ogunkola
School of Education,
The University of the West Indies,
Cave Hill Campus, Barbados
E-mail: drbeejay@hotmail.com

Abstract
Quality higher education is very crucial to national development. With the peculiarities of the higher education in Nigeria, this paper advocates for curriculum reforms, more funding and ICT integration in order to enhance quality higher education which will in turn lead to sustainable national development. Curriculum reforms should be a participatory type that embraces inputs from all stakeholders. Curriculum also should be relevant to the needs of the society. Private participation in establishment of universities should be encouraged. ICT use among lecturers and non-teaching staff will lead to development of quality research, collaboration and dissemination. Human resources being the driver of other resources (physical and financial) should be provided in adequate quality and quantity. There are however challenges of infrastructure development especially electricity. Practical strategies that will lead to improvement in quality of higher education therefore leading to achievement of the Millennial Development Goals are
Introduction

Higher or tertiary education is referred to as education given after secondary education in universities, colleges of education, polytechnics as well as those institutions offering correspondence courses. Every nation of the world wishes to have tertiary institutions that will among other things contribute to national development through manpower training, inculcate proper values for the survival of individuals and society and also promote national and international understanding and interaction. The importance of tertiary education in any nation cannot be overemphasized. This is because tertiary education is directly linked with production of quality manpower.

Harbinson (1973) noted that human resources, not capital, not income or even material resources constitute the ultimate basis for the wealth of nations. Capital and natural resources though also important, are passive factors of production. Human beings are the active agents, who accumulate capital, export natural resources, build social, economic and political organizations and carry forward, national development. Many countries are underdeveloped because the tertiary education has failed to equip the beneficiaries with needed skills necessary for economic, scientific and technological development. Any nation that will not open up for educational reformation by ensuring access, equity and quality in her higher education may not experience sustainable development in this computer and information technology age.

Tertiary Education in the Modern Global Context

All over the world, tertiary education is provided as the last level of education. Emphasis of tertiary institutions varies from one country to another. Babalola (2007) identified three broad strands within the modern university tradition. The first emphasizes the development of scientific knowledge, research and graduate study such as we have in the Humboldtian traditions of the German university. The second emphasizes professional formation best represented by the French grandes écoles. The third emphasizes liberal and critical education
represented by the universities of Oxford and Cambridge in Britain, and by the University of Chicago in the United States.

According to Scott (2005), these differences are tending to diminish as all higher education systems and institutions confront the global pressures of the modern society, and adopt similar organization strategies. Unified system in which market-led differentiation plays a bigger part in determining the fortunes of individual institutions is now replacing old systems. The differences in academic culture too, seem to be diminishing. As most nations develop mass higher education systems, these must incorporate the features of all three types identified above; the scientific, professional and liberal-critical strands within the university tradition. New subjects have entered the curriculum, some in response to scientific advances, but many to provide vocationally relevant outcomes. A new emphasis has been placed on responsiveness to students’ and employers’ needs.

The impact of new information and communication technologies on higher education is strong. This no doubt has improved teaching and learning. It has led to the success of the Open University and Distance learning in many countries. Information Communication Technology allows for sharing of ideas among professionals from different disciplines. There is now a shift from traditional departmental approach to interdisciplinary approach that recognizes research and training around the search for solution to complex socio-economic problems of our immediate community.

In order to address the issue of access to higher education, another modern innovation is the use of Open and Distance Learning (ODL) approach. UNESCO (2002) stated that ODL was stimulated in part by the interest of educators and trainers in the use of internet-based and multi-media technologies and by the recognition that traditional ways of organizing education require reinforcement by innovative methods, if the fundamental right of all people to learn is to be accomplished. ODL will facilitate the attainment of increased access to higher education by many disadvantaged groups, like rural dwellers, migrant fishermen or pastoralist nomads of northern Nigeria. Imhabekhai (2004) asserted that a well-organized ODL can assist in training adults who have sufficient and responsive knowledge. The role of ICT use in ODL cannot be overemphasized.

There is no way the development of a nation can be separated from the quality of her higher education. Therefore, higher education
should be development-oriented. According to Obanya (2003), development-oriented higher education means:

1. Total commitment to sustainable human development for the survival of humanity.
2. Knowledge generation, transfer, dissemination and application in the service of humanity.
3. Inculcating in students skills, knowledge and techniques that could be related with job requirements in specific fields of socio-economic endeavour.
4. Allowing students to lifelong, life-wide, learning skills, an analytical and creative mind and interpersonal skills to live meaningfully in the society.

This means that higher education will not simply feed the factories and the employers of labour. Instead, it would undertake that task as part of the more all-embracing one of serving the advancement of the entire society, by applying its critical and creative efforts to generating ideas, creating innovative mental and physical tools, and training the creative minds needed for the continuous regeneration of society. In another review of Obanya’s (2001) article on higher education, he identified essential elements or processes that are needed to enhance quality. The multi-dimensional nature of quality in higher education is presented in Table 1 below:

Table 1: The essential elements of quality education

<table>
<thead>
<tr>
<th>Input</th>
<th>Process</th>
</tr>
</thead>
<tbody>
<tr>
<td>Society</td>
<td>Participatory process of programme development, full societal acceptance and ownership of programme.</td>
</tr>
<tr>
<td>Policy</td>
<td>Democratic formulation and articulation of policy adaptability to local condition.</td>
</tr>
<tr>
<td>Management framework</td>
<td>Decentralization/devolution of power and initiative to the grassroots level; Empowerment and autonomous for operators down the lines.</td>
</tr>
<tr>
<td>Curriculum</td>
<td>Responsive to individual and societal needs and aspiration, comprehensive coverage adaptable to changing needs, time and conditions.</td>
</tr>
<tr>
<td>Teaching force</td>
<td>Qualitative, adequately educated and professionally prepared and well motivated.</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>Quantitative, aesthetically and spatially adequate,</td>
</tr>
</tbody>
</table>
Enhancing Quality in Higher Education through Curriculum Reforms

Over the years, curriculum in many countries of the world has undergone series of reforms due to the dynamic nature of curriculum itself and society as well as the constant quest for improvement of educational systems. There have been conscious efforts by many countries to make the beneficiaries of education especially at tertiary level to be employable, self-reliant and able to communicate effectively and display good morals. This has made curriculum reforms to be necessary for any worthwhile development to take place in the society. Any curriculum that will be productive should be relevant to the needs of the society so that it will attract students to learn.

The word ‘reforms’ has to do with transformation, re-building, redressing, amending and bringing a better life especially into a system in order to suit the individual and society. Reforms are usually predicated upon the need for orientation and repositioning of an existing status quo in order to attain an effective and efficient state (Ajayi, 2005). Reform implies meeting or becoming better, it indicates improvement or progress over what has been (Obasa, 2006).

Curriculum reform, therefore, connotes improvement particularly in the subjects or courses being offered in the educational system. According to Ajeyalemi (2008), the scope of curriculum reforms may cover all or some of the following:

1. Curriculum design and content (standards of knowledge, curriculum balance).
2. Pedagogy, methodologies and instructional programmes (teaching and learning).
3. Teaching and learning materials (textbooks and instructional resources).
4. Assessment frameworks and procedures (standards and qualifications).
5. Structures, constraints and options for progression (academic, vocational routes).

---

### Materials

<table>
<thead>
<tr>
<th>Learner- and teacher-friendly; integrated pedagogical space: classrooms, workrooms etc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantitatively adequate, user friendly, a judicious mix of print/text, audio, video, electronic teaching/learning facilities closely related to the goals of the curriculum.</td>
</tr>
</tbody>
</table>

The challenge in Nigeria is how to make curriculum content in the tertiary institutions relevant to the needs in the society so that the graduates will be employable and self-reliant. In Nigeria, there are many problems facing higher education such as underfunding, brain drain, decay infrastructure and lack of enough space for qualified applicants into the university.

Though government has made attempts in many areas to ensure reforms of higher education system in Nigeria, yet much still needs to be done especially in the area of ICT improvement and synchronizing the academic calendar. The remuneration given to university staff though better than what it was before 1999 during the military era, still lecturers in Nigeria are still paid below their counterparts in many parts of the world which has resulted in brain drain. Much still needs to be done to address labour crises resulting in incessant strike action by tertiary institution staff. In summary, while it cannot be denied that frantic efforts have been made to reform the Nigerian higher education, the evidence on ground shows that much still need to be done.

In Nigeria, during the pre-colonial era, traditional education was in place. People were trained in vocations like farming, pot-making, hunting, fishing, traditional medicine, trading, blacksmithing, drumming and dancing to mention a few. The major lesson here is that though education then was premature, yet it was relevant to the needs of the society. During the colonial era, Christian missions focused on religion and morals, reading, writing and arithmetic. After the colonial era (post independence period), there was a need to implement a curriculum that will be relevant to the needs of the society. The type of curriculum inherited from the colonial master was not able to meet some emergent needs in the society. Igwe (2000) identified inherent problems associated with curriculum implementation at this period. There was bias towards literary and academic subjects, lack of professionally qualified teachers, total British outlook of the curriculum content, lack of textbooks and imbalance in the entire school curriculum.

Today, higher education curriculum in Nigeria should target two broad goals. First to make the graduates employable by giving them enough theoretical knowledge and practical exposure that will make them relevant in the labour market and compete favourably with their counterparts elsewhere in the world. Second, to make graduates
R. A. Olatoye & B. J. Ogunkola

self-reliant by training them in practical entrepreneurship education. The training should involve practical exposure to certain skills like poultry, textile, engineering and repairs and many other skills that are relevant to the needs of the society.

Higher education graduates should have entrepreneurial skill. Certain skills have been identified by Meredith (1983). They are: recognizing business opportunities, analyzing such opportunities, take decision to act upon the analysis, assemble the required human and material resources and execute a programme resulting in a new business enterprise and profits. Ajeyalemi (2008) noted that in Nigeria, the following factors have hindered curriculum reforms:

1. Faulty or unrealistic goals from the onset.
2. Inadequate planning for implementation.
3. Lack of adequate political will to implement reforms leading to
   - gross under-funding of programmes
   - constant programme somersault and
   - abandonment of existing programmes
4. Inadequate experience or expertise of reform implementers
   (teachers and other practitioners).
5. Corruption.

To ensure sustainability through curriculum reforms, Ajeyalemi (2008) advocated that curriculum reforms should not be mere importation and replication of foreign policies and ideas but adapting whatever is imported to local conditions. The momentum of reforms should be maintained by continuous dialogue and assessment. Researchers should be involved in the formative evaluation of progress. The educational structure should be able to cope with the changing needs. Enough human physical and material resources should be provided.

Okebukola (2002) noted that the labour market is changing continuously and the content of the curriculum has to be relevant to the needs of the society. He noted that private employers of university graduates consider inadequate the content of university education curriculum to the modern world. The need to make university education relevant has led to the packaging and re-packaging of courses. There are now universities specializing in areas such as Agriculture, Petroleum, Engineering to produce managers, researchers and practitioners for Nigeria’s agricultural and oil sectors. Commenting
on the current thinking on curriculum organization and content in Nigeria’s higher Education, Obanya (2003) asserted that specific fields of knowledge are useful only to the extent to which they can help in inculcating the following core generic skills.

1 Analytical power: An advanced capacity for logical reasoning, employing appropriate verbal, quantitative, graphic, documentary, audio-visual, sensory perceptions and a wide variety of tools;
2 Communication: Oral and written, using appropriate language and non-verbal forms in specific situations to achieve specific objectives;
3 Problem-solving: The ability to task one’s analytical power to the maximum in developing solution paths to problems in a wide variety of situations;
4 Team Spirit: The ability to contribute meaningfully to group activities in a wide variety of forms, to relate to others, to get out of one’s shell while still remaining oneself;
5 Creativity: The ability to go beyond a well-trodden path, in thinking as well as in action;
6 Versatility: A broadened horizon in terms of domains of knowledge and competence.

The most successful of policy formulation and reform strategies have adopted the participatory approach (Obanya, 2003). This means the adoption of the practice of multi-layer, multi-stakeholder consultations, as a means of building real consensus and of evolving a more responsive higher education curriculum and policy. There is a need to agree on national philosophy of higher education, quality assurance mechanism should be put in place, there should also be consensus on funding and cost-sharing among the stakeholders and management of students flow which is not the same as restricting student in-take. There should also be consensus on the pattern and extent of private participation in establishment of higher institutions. However, curriculum and policy on higher education should be reviewed regularly to ascertain their relevance to prevailing situation in the society.

The role of curriculum in education cannot be over-emphasized; it remains the core and nucleus of education regardless of the type and level. Igwe and Osayeme (2007) noted that the significance of education rests on its being responsive to the yearnings
and aspiration of the people or society. Correspondingly, curriculum must necessarily and logically be responsive to the needs and yearnings of the society since it remains the core of education. A realistic curriculum should be good and workable. It should be the type designed to help the citizenry transform, reconstruct, change, where necessary and improve the culture of the people through the process of education. Okebukola (2000) asserted that since curriculum and education cannot be studied, analysed and applied in isolation from the society, they must work in and for the society.

**Funding of Higher Education**

It is obvious that the level of funding in Nigerian Universities is inadequate. The federal government reduced budgetary allocation from 11.2 per cent in 1999 to 1.83 per cent in 2004 fiscal year (NUC Report, 2003). The report further indicated that for more than 11 years (1990-2001), no federal university was able to get 100% of the fund needed and requested for modest management. Only 44.34 per cent of what was requested for between 1990 and 2001 was released; the fund released was both for current and recurrent expenditures.

Subventions are needed to purchase laboratory chemicals, maintain facilities, subscribe to international journals and periodicals, maintain hostel accommodation and pay staff salaries. In Nigeria, the option most universities adopt is to levy tuition which many students from low-income earning families find difficult to pay. The university managements, in desperate bid to keep the system going have to levy students for services that normally should be offered free. There is need for universities to seek for alternative sources for funds besides tuition and federal government subvention. Areas of investment can be large scale commercial farming and animal breeding industry, investment in estate, equity and long-term deposit. Other areas that can also be explored are investment in bakeries, printing press, bookshops, guest houses, agricultural and food processing industries and consultancy services in areas of research and professional services such as medicine and law. Educational institutions can also be financed through donations and endowment funds.

However, the reality on ground is that many universities are not located in places where they can have competitive advantage to carry out many of the fund-raising strategies identified. It is therefore imperative for the government to strive to meet the United Nations
Educational Scientific and Cultural Organisation (UNESCO) recommendations of 26% of the total budgetary allocation to education sector. The main bone of contention that has been causing face-off between the Academic Staff Union of Universities (ASUU) and the federal government is funding.

Another way to address the problem of funding is by allowing private sector contribution to financing of higher education by establishing private universities. Private university establishment is another potentially important way to diversify the financial base of the national education system. More private universities will also provide competition to the publicly-owned ones (Odekunle, 2001). There should however be regulation and moderation of the university system so that, what should be a means of developing the citizens will not be a means of exploitation. Conscious efforts should be made to encourage access, equity and quality in higher education. Education being a social service, government should also provide support for private universities by way of endowment funds and providing conducive environment for private universities to thrive.

Odekunle (2001) remarked that in some countries, Brazil for example, several universities are prevented by law from imposing tuition fees while in Indonesia, tuition fees are set only with government approval. In Nigeria, federal government always stops or limits the amount of fee a university can charge for important activities or services like post university matriculation screening examination and hostel accommodation. The federal universities are not therefore able to charge enough to meet basic needs in the universities especially at the time when the fund coming from the government is inadequate. It is therefore imperative for government to know that higher education, like health cannot be totally privatized to ensure access, equity and quality. Benefits of investments on health and education are sure to directly reach the low-income earners unlike investments in other areas.

Funding of higher education is not only providing financial support for payment of staff salaries and execution of capital projects. Funding is also necessary for research. In a study carried out by University of Sussex to examine international approaches to research policy and funding in different countries, Millar and Senker (2000) reported that over 50% of funding for research comes from industries in developed countries. They cited that Belgium, Germany, Ireland,
Sweden, Switzerland and the USA recorded industry funding of over 60%. Korea and Japan recorded funding by industry of over 70%. For Nigeria, the industry involvement includes endowment of professional chairs in certain disciplines, construction of offices and hostel blocks and donation of laboratory equipment. There is almost no industry involvement in funding of academic research in Nigeria.

Donwa (2006) noted that universities in Nigeria have almost become mere ‘teaching centres’ due to their focus on knowledge dissemination and insignificant contribution to knowledge creation through academic research. Donwa’s study of funding in eight Nigerian universities revealed the following facts:

1. Research funding is inadequate and not regular.
2. Whereas investments in Research and Development in many countries are as high as 6 to 10% of the GDP, that of Nigeria is less than 1%.
3. In no year did research funding exceed 0.03% of the total budget.

Donwa suggested that there should be collaboration between universities and industries in the area of research funding. Industry involvement in funding should be seen as corporate social responsibility. Government should channel all researches to universities and encourage industries to do the same.

**Practical Strategies for Addressing the Issue of Funding**

In Nigeria, the federal government sources of funds include federal taxes, duties on petroleum, profits, exports and imports. In order to tackle the issue of funding, Educational Trust Fund (ETF) was introduced. This has helped in carrying out many capital projects in many tertiary institutions. The following practical strategies can help in addressing the issue of funding:

- ✓ Increasing the contribution of private and public sectors to ETF.
- ✓ Decentralization of education programme to include the participation of the Non-Governmental Organizations (NGOs) and private sector. Many private universities here emerged in the past few years.
- ✓ The Nigerian government should mobilize external resources through appropriate bilateral agreements with development agencies to help contribute to the funding of education in
Nigeria. Aids from development agencies such as the World Bank, UNICEF and Ford Foundation should be used for the provision of science and technical equipment or establishing model institutions.

- Government should fund education by allocating higher percentage of her revenue to education for at least 10 years.
- Institutions should vigorously adopt the mechanism for internally generated funds such as mixed agriculture, catering services, consultancy services, printing, laundry services, transport, bookshops, publishing, sales and production.
- Partnership among universities, the industries and the government in Nigeria especially in the area of science and technology is important. This aspect has not been fully explored in Nigeria.
- Charging of moderate tuition fees in order to inject rationality in student behaviour and also reduce wastage.
- Prudence, integrity and accountability in the management of funds.

**ICT use for Teaching, Learning and Research**

The availability of functional well-equipped laboratories, lecture theatres, classrooms, libraries and offices, and the provision of adequate computer facilities are vital to effective teaching, learning and research (Okandeji, 2007). Unfortunately, the phenomenal increase in student enrolment in an environment of declining resources and facilities has been a major constraint to quality assurance in Nigerian higher institutions.

One of the most urgent areas of highly needed infrastructure development in Nigerian higher institutions is the area of Information Communication Technology (ICT). Kozma (2005) observed that ICT is now perceived as a principal driver of economic development and social change, worldwide. It offers the potential to restructure organizations, promotes collaboration, increases democratic participation of citizens, improves transparency and responsiveness of governmental agencies. It also makes education and health care more widely available, fosters cultural creativity, and enhances the social integration of individuals with people of different abilities and cultural backgrounds. Farrer and Shafika (2007) also noted that there are widespread beliefs that ICT can be an important tool to introduce and
sustain education reform efforts in Africa.

According to Brown (2002), computers enhance teaching and learning via presentations, more opportunity to practice and analyse and more access to materials via internet. He noted further that computers and internet connectivity have been found to enhance communication between colleagues within faculties, between classmates and between faculties and students.

Roswell (1999) observed that ICT enhances effective delivery of higher education in a number of ways:

- It enables the effective storing and sorting of information.
- It enables reduction in information quantity towards a higher quality and better.
- It can be integrated into teaching and learning strategies and used to support learning theories.
- It can be used to create new types of interactive learning media for improved quality, equity and access in higher education.

Adedoyin (2008) recommended that while embracing ICT use, technical support should be given to students and users where necessary, special attention should be paid to improving our socio-economic and political environment. Basic infrastructure should be provided to make ICT use profitable in addition to increasing the local contents of ICT service delivery.

Another area where ICT can help to enhance quality higher education and sustainable development is the area of Open and Distance Learning (ODL). The ODL which Nigeria has embarked seriously on by re-opening the National Open University with study centres scattered across the country is an avenue through which education is acquired to equip students with functional life-long learning skills that will make for balanced development of citizens. Distance education also employs innovative use of modern instructional technology to facilitate contact between students and the institution. To this end, Akubui and Udognam (2007) suggested that ICT should be demystified in Nigeria. Local production of ICT facilities should be vigorously pursued and encouraged by the government. They further suggested that importation of computer software, hardware and other relevant items for promotion of ICT use in higher institutions should be
exempted from tax and other duties.

In the recent times, there is zeal by governments and university managers to inculcate ICT into the educational process due to the gains it yields both to the teachers and learners. Carlson and Gadio (2002) opined that teachers, who succeed in making use of ICT in their teaching stimulates student interest in learning. ICT reduces isolation and increases professional satisfaction and productivity. Also, Radloff (2001) identified the opportunities the ICT presents for enhancing the quality of teaching and learning. He explained that ICT encourages collaboration and teamwork among staff (and students), offers greater access to learning for more people and increases the skills and status of university teachers. Archibong and Offiom (2009) asserted that the realization of the benefits of ICT in the educational process to a large extent depends on the academic staff that plays the crucial role in any innovation that takes place in the educational system. Acquisition and utilization of ICT in the teaching and learning process pose a great challenge to academic staff because, ICT use requires them to continuously adapt to the changes brought about by technological revolution. For ICT use to be meaningful in ensuring higher quality, lecturers and other staff should be well-equipped with skills required to explore the advantage of the new technologies to enhance research development, collaboration and dissemination.

According to Fatunde (2009), debate is raging in Nigeria universities about the need to integrate Information and Communication Technology learning into the curriculum in response to growing demand for computer skills in the labour market. This is because employers of labour are finding out that the university graduates being recruited into managerial position are ill-trained and ill-prepared to handle strategic operations involving the use of ICT. Many employers of labour prefer to employ qualified graduates with ICT knowledge than to send recruited staff for training on ICT. The Nigerian universities therefore are faced with the challenge of making their graduates employable by make ICT skill part of the curriculum.

Finally, for ICT to be meaningful, there is need for the federal government to address the problem of erratic power supply and general infrastructural decay presently being experienced in Nigeria. There is also need for training and retraining of students and academic staff to handle new challenges that may be emanating from the use of ICT.
ICT Utilization and Quality Higher Education

Qualitative education has many dimensions. One of the ways of ensuring quality in higher education is by ensuring the learning environment is stimulating and such that fosters meaningful teaching and learning. Today, ICT is utilized to enhance teaching effectiveness. Any classroom teacher with adequate knowledge of ICT will definitely have his/her students perform better in classroom learning.

According to Onuma (2007), ICT has the following characteristics in the implementation of the school curriculum:

1. Accelerates students’ basic skills in school subjects like reading, science and mathematics;
2. Challenges students to learn independently;
3. Updates students’ academic knowledge and instructional practices;
4. Provides opportunities for cooperation with colleagues through networking and internet services;
5. Provides teachers with efficient and effective tools to take care of learners’ individual differences; and
6. Provides unrestricted access of teacher and students to relevant information and development in various subject areas.

Other areas of ICT utilization for quality higher education include evaluation of learning outcomes and classroom management. ICT facilities could be used to prepare lesson plans, write student reports, store data, collect and analyze students’ achievement and access recent research findings through the internet. The use of ICT in classroom situation makes the teacher more of a facilitator than a dispenser of knowledge. Some of the tools commonly associated with ICT use in the classroom include laptop computer, Local Area Network (confined in a particular classroom building) and the internet. The computer has the capacity to put texts, graphics, picture on screen and accepts students input which can easily be retrieved and analyzed. The internet provides electronic services generally utilized for correspondence and dissemination of information. Students and teachers read comments from daily mails (Newspapers) and make full use of the World Wide Web (www).
Information technology is therefore critical to all organizations. Unfortunately there has been a few publication to help managers understand the issues involved in the use of IT (Coen & Kelly, 2007). It is important that products of the university system are versatile in the use of ICT so that they can be good managers in their places of work. This is because IT has vital roles to play in the business world (Hogan & West, 2007) and also in teaching and learning (Coen & Nico, 2007).

Fabunmi (2004) noted that the Open Distance Learning (ODL) is characterized by physical separation between the teacher and the learner with the instruction being delivered through a variety of media including print and other information communication technologies to the learner who may either have missed the opportunity earlier in life or due to socio-economic; career, family and other circumstances. Due to the peculiarities of ODL, the system is confronted with such setbacks as poor facilities, lack of personnel, inadequate power supply, teachers’ poor work attitude, poor administration, improper curriculum, insufficient funding and lack of awareness. Many teachers in the ODL have experience in the conventional way of teaching and also lack sufficient ICT skill. It is therefore important that operators of ODL recruit sufficient qualified instructors and facilitators to enhance the quality of teaching and learning.

Conclusion and Recommendations
In Nigeria, curriculum reform in higher education is long overdue. It is important that stakeholders come together to review the curriculum and make it relevant to the needs of the society. Curriculum reforms should incorporate the use of ICT so that graduates will have competitive advantage in the labour market. Also employers of labour do not have to waste time and resources in training of recruited staff. Curriculum should also be learner-centred and able to stimulate students’ interest in learning thereby reducing the number and rate of drop-outs. These suggestions cannot however be implemented without proper funding of education. The higher education system as it is presently is grossly under-funded. It is important government at all levels begin to target the UNESCO recommendation of 26% budgetary allocation to education, a situation whereby education receives less that 12% of the budgetary allocation every year should be addressed. Funding of education also should not be limited to payment of salaries and financing of capital projects, funding of research projects that are
capable of transforming industrial and agricultural outputs should be encouraged.

There is need for government to allow private participation in the establishment of universities. This will provide more vacancies for placement of qualified candidates who are yearly denied admission due to limited spaces in the existing public universities. The government however should regulate the operation of these universities so that exploitation of students will be avoided and quality will be ensured. There is also the need to provide enabling environment so that all the issues discussed in this paper can be properly addressed. There is need to give attention to the problem of infrastructural decay in Nigeria. ICT use and operations of public and private universities are only possible when the problem of electricity is addressed.

There is also the need for regular monitoring and evaluation of the curriculum to ensure its continuous relevance. Review of curriculum should be done regularly with experts’ and stakeholders’ involvement and input. There is need for accountability and transparency on the part of those whose funds are entrusted. It is not possible for a nation to rise above quality of its manpower. Quality manpower is an important driver of sustainable development, higher education being charged with production of quality manpower should therefore be well-equipped and developed to fulfill this obligation. If all these measures are implemented, sustainable development as a result of quality higher education is very much possible in Nigeria.

References


