



The Place of Information and Communication Technology in Higher Education Reforms: A Sociological Perspective

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Abstract

Change is an inevitable thing in every given society. Be it in a complex or simple society. The concept of change can be re-substituted to mean reform and the phenomenon of globalization has ushered in Information Communication Technology (ICT) which has created a better avenue for effective teaching and learning in tertiary institutions. The use of Information and Communication Technology would therefore improve the quality of instruction in higher education in Nigeria through reforms.

Keywords: ICT, Higher Education, Reforms, sociology

1.0 Introduction

To sociologists, the concept of social change is a familiar concept to classroom teachers as well as the society at large. According to Onyema (2013), the concept of change could be traceable to August Comte (1798-1857), Herbert Spencer (1820-1903), Emile Durkheim 1858-1917 Karl Marx (1818-1883) Ferdinand Tonnes 1855-1936 and Sorokin Pitrim (1889-1968). In this 21st century, the concept of change can also be referred to as reform. "Reform" refers to a change and improvement on the existing practice. It means to improve by alteration, corrections of error or removal of defects.

The question of reforms in the education system becomes prominent as the world is currently at the scientific stage as propounded by Auguste Comte whereby the process of globalization and industrialization are propelled by information Technologies (ICT). In this age of Urbanization and globalization, every section of the society (social system) both the super structures and the sub structure have been reformed due to the era of globalization revolutionized by information and Communication Technology.

However, worthy of note is the fact that Information and Communication Technologies (ICTs) is an aspect of the phenomenon of globalisation. For instance, Torres (2001) opines that globalisation has been driven by the liberalization of international trade; freer capital flows; and manifests itself mainly through an intensification of activities in the following areas:

1. International trade in goods and services
2. Capital flows FDI and short-term flow):
3. The reorganisation of production networks on the international scale; and the adoption of new technology, notably ICT.

From the on-going, one can easily deduce that ICT cannot be discussed without referring to the phenomenon of globalisation since it is an aspect which helps to revolutionize the phenomenon and helps to play the significant role that brings about changes in every sector of the economy especially in teaching and learning process in higher education.

1.1 ICT and Reforms in Higher Education

Recently, in Nigerian education system, the issue of reform has been a recurring theme and this is because of the dynamics of the society. The major concepts which are essential in the understanding and treatment of reform within the Nigerian education system include terms like reform, educational reform and information and communication technology. "Reforms" refers to a change and improvement in existing practice. Reform in higher education therefore implies a change and improvement in different aspect of education at tertiary level. Educational reforms means federal government induced and directed substantial alteration of the Nigerian education system (programme curriculum agencies, educational levels etc). Information and communication technology (ICT) as a term is a globally common word. This stems from the penetrating impact of ICT on every facet of human endeavour. Curtin (2002) defines ICT as a set of activities that facilitate by electronic means: the capturing, storage processing, transmission and display of information. ICT is also defined by UNESCO (2005a) as the combination of the computer, telecommunication, and media technologies. Thus, ICT as a term is broader than computer. It is the combination of the potentials of computer, telecommunication and electronic media using the digital technology. Information and communication technology has impacted positively on every aspect of human existence, thereby creating a powerful force for changes in how human being live, convey information, process information, conduct businesses and in fact, determine the status of nations. Information and communication technology has the potential for the not only introducing new teaching and learning practices in higher education but also for being an imperative for revolution using the education system through reform.

2.0 Literature Review

According to Trucano (2005), ICT helps to empower teachers and learners and promote the growth of skills necessary for the 21st century workplace. In fact, Nigeria as a nation, has recognized the potentials of information and that of information and communication technology in the school system. This is evidenced in the educational reform policies aimed at integrating the use of ICT, particularly the computer, in the Nigerian school systems. The first national programme on ICT was the Federal Government 1988 policy document, National policy on computer education (FME, 1988). The document emphasised the need for primary school. Pupils to be taught basic computer skills, the use of the computer to facilitate learning, and rudimentary use for text writing, computation and data entry. For secondary schools, the goals were as identified for primary schools but to be pursued at a higher level. The additions were the organisation of curriculum for secondary school students on computer education and the decision to use the unity schools as the pilot institutions for computer education. Tertiary institutions were also required to teach computer science as a subject discipline and also integrate it in school administration and instruction. Other components of the document include; equipment requirement, teacher training, and specific recommendation on different tertiary institution. However, as noted earlier, the implementation was not effective. Despite this fact, the application of information and communication technologies (ICT) is making dramatic changes in economic and social development. These changes go beyond a mere increase in the number of computers appearing in work places, homes, and schools to more fundamental changes in the foundations of economic growth and its relationship to human capital and this could

only be achieved through ICT and that accounts for the paradigm shift in the traditional role of ICT which was minor curricular subject to be an instructional aid to help students learn other subjects like maths science other than computer literature or keyboarding.

It was in this vein that the educational reforms act of 2007 (FME, 2007) clearly highlights the need to: improve the quality of instruction in Nigerian higher school, provide enriched learning environment, need to provide more access to education and provide the students with knowledge and skills necessary for the 21st century work place among others as the motivating factor for the educational reforms. It is expedient to note that ICT will assist in ensuring the achievement of these goals of the educational reforms.

In line with this, Gallimore and Stigler (2003) opine that teachers in contemporary knowledge society require large, rich and easily accessible-knowledge base which can be provided through ICT that support teacher professional development. Furthermore for the reform to succeed, the staff should be made to undergo constant developmental training to be relevant in the teachers' or librarians' professional development. Teachers need to be life-long learners to keep abreast of new knowledge, pedagogical ideas and technology (World Bank, 2003), relevant to successful implementation of Nigerian educational reforms.

To this end, it is imperative therefore to state that ICT provides new frontiers for providing access to basic education and information to disadvantaged children and youth excluded from the formal school system which was not guaranteed by the functionalist theorists.

2.2 Reforms in Education: Sociological Perspective

Azikiwe (2007) defines perspective as "ones" mental view of facts, ideas etc and their interrelationships to have a clear perspective of situation". It could also be said to mean a standpoint to explain something, or a point of view used in explaining an event or a phenomenon to make a meaning out of it. Sociological perspective therefore means the application of sociological principles, theories, paradigms, pedagogy or method in explaining an event. According to Berger (2007), perspective means seeing the general in the particular or seeing the strange in the familiar. Simply put "things are not what they seem". In the study of sociology, two approaches or perspectives stand out namely: functionalist and conflict theories or perspectives.

2.3 Functionalist Perspectives

Structural-functional analysis, which highlights the role of schooling in socialization, delves into how formal education promotes social integration, places people in the social hierarchy, and encourages cultural innovation. Structural functional theories of education argue that education performs many functions: cultural transmission and reproduction, social control, teaching of specific skills (credentialism), selection of students for future adult roles, and promotion of change. In order words, education fails to equalize opportunity for the disadvantaged and the poor. Functionalists see nothing wrong in credentialism because they believe it is the way a technologically complex society produces well-trained workers for specialized jobs.

The early proponents of functionalist perspective are Auguste Comte and Emile Durkheim (French), Herbert Spencer (British), and Talcott persons (American). The primary assumption of functionalist perspective is that the society is made up of parts (structures) and that each part has a particular function to perform for the survival

of the society. It further assumes that these parts are interdependent as each needs the others, and must work in harmony with one another. Functionalists therefore believe that the society is a stable, well integrated, self-regulating system. According to Gelles and Levine in Azikiwe, 2007.

Each society is composed of many specialized structures called social institutions (the family ... policies, the education system ...). Each of these institutions has a function that contributes to maintaining the whole ... these social structures are interdependent. (The economy depends on the education system to provide future workers with skills; the education system depends on the economy for funds). For a society to survive, interdependent parts must function in harmony. Functionalists hold that survival depends on co-operation, depends on consensus (agreement) on basic values and rules for behaviour. Under normal conditions, the various parts of society work together toward shared goals, producing order, stability and equilibrium.

From the functionalist perspective, the current reform in education could be as a result of some factors that impinged on the old education system. In addition, changes in the political system, in Nigeria, (emergence of democracy after many years of military rule), and the economy, as a result of the oil boom, with unrecorded prices since 1999, will inevitably cause changes in other sectors of the society, of which education system, is one of them. Furthermore, the realization of the fact that the world is now a global village through ICT also brings about changes in the education system so that Nigeria and her citizens will not be left behind, because of the benefits from the information highway. In other words, since change in one area of the society consequently causes adjustments in the other areas, the current education reforms in Nigeria become inevitable so that the

education system will work in tandem/harmony with other parts of the society for the survival of Nigeria; as well as to produce the needed manpower to drive the economy and the political terrain. These agree with the views of Schaefer and Lamm (1997) that functionalist perspective emphasizes those parts of a society are structured to function in such away to maintain social growth, stability and for survival. They likened society to a living organism with many specialized parts that must perform specialized functions to maintain the whole.

As the sociologist investigates a social phenomenon from the functionalist perspectives, there are two basic questions to guide him/her. One, what functions do different parts of the system serve? Two, how are the parts connected to one another? If these two questions are applied to explain the reasons for the education reforms, then the reforms are appropriate in the present political, economic and social changes in Nigeria, for without the reforms the education system might be failing in its function to produce adequate manpower, needed to survive in the national and international race for rapid developments. Furthermore, Nigeria needs a robust education system to be able to meet the 2020 date for attaining the MDGs since success in Education is one of the essential vehicles for achieving the goals.

In addition to achieving the above goals, the reforms, if effectively implemented will also achieve what may be called the five natural functions of education from the functionalist's perspective. They are:

Instruction: equipping future workers with basic knowledge and technological skills.

Socialization: equipping youngsters with attitudes, values and interpersonal skills society endorses.

Custody and control: taking responsibility for the care of children

during specified hours.

Certification: awarding credits, diplomas, and other signs of competence that other organizations recognize.

Selection: sorting individuals for future educational, occupational and social positions.

The 2006 education reform from the functionalist perspective will be for the good of society because it is embarked upon to perform the above functions, as well as meet the demands of an increasing changing, complex, technological and growing economy which is now sweeping across Nigeria. The initiators also have in mind the demands for skilled workers, and equality of opportunity. Moreover, the reform is planned to enable Nigeria meet her target of being one of the 20 strong economies in 2020. Nigeria's economy also needs a large population of human resources equipped with basic literacy and skills, knowledge and skills in ICT, for its rapid growth. The reforms will also produce better informed citizenry who are able to participate in the nascent democratic process. From the functionalist perspective, the contents of the reforms are laudable; they are for the improvement of the citizenry, in particular, and of the society (Nigeria) in general. The expansion of education, which is the intention of the current education reformers, constitutes definite progress for Nigerians, the economy, and the political system. In the main, functionalist perspective is a sociological approach which explains that parts of a society are structured to work in harmony for its stability. With regards to education, functionalists believe that education is concerned with the functions, and consequences of the education system for the maintenance of the society, for change, as well as for conflict resolutions. One hopes that the reforms will actually achieve the above in the end.

Conflict Perspective

Schaefer and Lamm (1997) notes that conflict perspective is based on the premise that social behaviour is best understood in terms of conflict or tension between competing groups. They add that such conflict need not be violent and can take the form of labour negotiation, party politics and so on. The authors continued that in conflict perspective, the focus is on how the society's institutions may help to maintain the status quo, by maintaining the privileges of some groups and keeping others in subservient position. Education reform, from conflict perspective, according to Onyema (2013) is a story of betrayal and false promises, and it is meant to serve the interest of those with the means of production (capitalists) and not to meet the needs of the society as a whole. In the same vein, Azikiwe (2007) opines that conflict perspective is therefore a sociological approach which assumes that society is best understood in terms of conflict or tension, and inequalities between groups. Conflict theorists, therefore, believe that constraints, struggle and disagreement are factors that hold the society together, and not consensus. They also emphasize the struggle between the various segment of society due to inequality in power, prestige, status and class. In consequent, the powerful, educated and the rich exploit the weak, illiterate and the poor. Invariably, a society that tends to cater for every member will keep on reviewing its system of education to be geared towards empowering the weak, illiterate and the poor. It is, indeed, very impossible for everybody in a society to be equal in every aspect of life, in the real sense of equality. An example will suffice here, using the craze for computer literacy as a prerequisite for securing jobs nowadays, to drive the conflicts argument. ICT skills give leverage to those who possess them in the scramble for the few jobs in the system. The conflicts proposition is that the

emphasis on computer literacy and skills, which is a focus in the reforms, is bound to enable just a handful to enjoy the privileges. As a matter of fact, education has become one major vehicle for the acquisition of these computer skills and knowledge, thus has become a source of power and status. The conflicts believe that computer skills will give the few educated ones more advantage to suppress the majority illiterates, who cannot afford to send their children to school or buy computers for them at home. The truth of the matter is that computer literacy as a prerequisite for good jobs, and the emphasis on ICT in the education reform could make a handful that have the ICT skills to access lucrative jobs and this will enable them to maintain the status quo. Applying conflict perspective, and since education, as a social institution, has become the main vehicle for acquisition of computer skills, it goes to conclude that computer literacy culture will become added source of power and privileges to the few elites. As a matter of fact, how many Nigerians have access to computer? How many families can afford computers for their members? The computer culture, indeed, will surely benefit one group at the expense of others which will further reinforce social inequality. From the conflict perspective, the current education reforms are in favour of the rich and the educated thereby maintaining the status quo. Unintentionally, the reforms will create cultural patterns that rationalize the power of the elite and behaviours taught in subtle ways to learners that support the status quo, and credentialism, which is the requirement that a person should have some particular/special diploma or degree as condition for employment. No wonder Azikiwe (2007) affirms that conflict theorist frown at these two terms that are inherent in education, and thus perpetuate inequality in the society, even as the society regales in the euphoria that the reforms are to empower all and sundry. Conflict theorists believe that

education helps maintain inequality in three ways: the hidden curriculum, credentialism and the reproduction of inequality.

Education, according to the conflicts, reproduces social class, advantaged, and disadvantaged groups in the society. Social conflicts analysis points out that no matter how free and compulsory any education system may be, the opportunity for formal education is unequally distributed across the population. This approach also explains too that education acts as a means of social control, instilling values of discipline that reproduce compliant adult workers. Education is further seen as a capitalist tool, by conflict theorists, as they believe that mass education, (such as UPE, UBE), developed because it benefited the interest of the capitalist class. They further argued that capitalists demanded educated workers not only because literacy made workers more effective but also because they had been taught obedience, punctuality, and loyalty to the economic and political systems (Onyema, 2013). The heart of the conflict perspective is that those who benefit from the system seek to perpetuate it. Brinkerhoff and White (2007). The different institutions in the reforms, VEIs and IELs, will be seen by the conflict theorist as tools for tracking which categorically assign students to different types of educational programmes, as well as jobs, according to the demands of the employers, owners of production, and the powerful. In the final analysis, the conflicts will see nothing good in the reforms, since they believe that any reform is put in place, not for the benefit of the poor masses but for the benefit of the bourgeoisie.

Relevance in Higher Education Reform

It is clear that any reform to be initiated in higher education should be relevant if resources are not to be wasted. In order to determine the level of relevance, certain criteria are to be considered. Obanya (2007) states the following as criteria for determining

relevance of a reform: historical, socio-cultural, geographical and psychological factors. Others are early warnings signals, currency and futuristic factors.

Historical Factor: Higher education should be related to origin and trends in the development of the country. In doing this, the administrators should examine the nature of higher education in the past, identify the good aspects to be continued and determine the aspects which need amendment or total abandonment.

Socio-Cultural factor: This is the way of life and aspirations of Nigerians. Any reform to be introduced should not be at variance with the culture of the society.

Geographical Factors: This includes physical environment, weather and climatic condition. Type of reform and process of implementation should take this factor into consideration. For example, a reform in academic calendar should consider the effects of raining and dry seasons in the teaching of some subjects.

Psychological factors: Development needs and aspirations of members of the society should be considered in reform agenda. The level of our development now and the development we intend to achieve should be critically examined. If the gap between these two is very wide, it may be difficult to carry people along and the reform will fail.

Early Warning Signals: This involves an examination of treats or possible obstacles to successful introduction and implementation of a reform. Also, opportunities that can enhance implementation are to be identified and utilized. The treat and opportunities should be examined in the immediate and larger society.

Currency: The reform should be current in terms of available knowledge and skills

around the world. This will enhance its usefulness.

Futurist: relevance of a reform should be considered both for present and future needs of the society. One of the mandates of higher education is to conduct research and proffer solutions to challenges' in the society. The researchers should generate new ideas for the benefit of the present and future generations.

Conditions for Successful Reform in Higher Education

Government and educational administrators must bear certain facts in mind in their proposal to introduce reforms. These are relevance, availability and judicious use of resources such as personnel, facilities and funds, and political will.

Main reforms in tertiary institutions would require personnel such as teachers and administrative staff for successful implementation. These personnel cannot be made available overnight because, they need a long period of training. Fredric Herbison was assigned to forecast manpower needs as part of Ashby Commission's term of reference. He warned that human resources were not like facilities which could be procured within a short period Fafunwa in Abdulkareem, (2009). Also, a reform agenda would require facilities for implementation. Decision has to be taken on existing facilities, many of which may not be relevant for reform implementation. Additional facilities will need to be procured. These demand proper planning before commencement of implementation. It is a common practice that reforms are proclaimed without minding the required facilities. This always leads to failure.

Availability and management of fund also constitutes a condition for successful reform implementation. Before a reform is initiated, the financial implication should be determined and sufficient money should be made available. At the implementation stage, the

fund should be well managed.

The role of politics in reform initiation and implementation cannot be over emphasized. Leaders should demonstrate a high level of commitment towards the success of a reform either it originates from them or not. Successful reforms are the ones that have strong political backing.

Conclusion/Recommendations

One business of sociology of education is to analyze social institution in a bid to find out how they (institutions) help to maintain the society in which they exist. In other words, the institutions are analyzed to find out their social functions and when they do not meet the needs of the society, the issues of change or reform is considered for the institutions to be able to fulfil their function in an efficient manner. The social institution addressed in this paper is education. The questions then arise, what are the social functions of the educational system? Does the Nigerian educational system fulfil its functions in the society? If the answers are in the negative, plans will be put in place to change and improve the dysfunctional system, which in the main is a reform. On the other hand, reform in education is veritable tool for governments that strive to improve their economies, their governance, as well as their citizenry. In other words, education reform, is a global issues, and thus is practiced in both developed and developing countries of the world. Reform is a vehicle that is put in place, with clear objectives, to correct the observable anomalies in the existing education policies and programmes with a view to improve education, is was in the light of this that ICT was introduced to bring about the desirable change in the educational system.

However, the realization of the fact that the world is now a global village through ICT should bring about the desirable change in the education system so that Nigeria and her citizens will not be left behind, because of the benefits, since change in one area of the

society consequently, causes adjustments in the other areas, the current education reforms in Nigeria becomes inevitable that the education system will work in tandem/harmony with other part of the society for the survival of Nigeria and this could be made possible through the utilization of information and communication technology in her tertiary institutions. Information and communication technologies offer veritable tool for ensuring the success of the educational reform programmes of the federal Government. The value of ICT is globally recognized. However, there is a big gap in ICT skill between average Nigerian staff of comparable economies around the world (Aniebonam, 2007) the government and individual need to address this technology gap so that Nigeria citizen can compare globally with others. Nigeria, as a nation and Nigerian as citizens are never in want of policy but always go short of policy implementation. The potential for information and communication technologies should be exploited to ensure the success of educational reforms.

In summary, education being a social, economic, political and technological tool for development needs to be reform in tandems with any changes in other social structures. Hence to achieve the goals of EFA, MDGs and NEEDS, it is pertinent to reform Nigerian's education system: goal, objectives, content, methodology and evaluation. Other areas that need reforming include: infrastructure, human and material resources, equipment, funding, and the physical environment. For the success of the reform, it is being recommended that: Reforms in higher education should emanate from the needs of Nigerians since importation of education policies from advanced countries has not benefited us. Hence, the government should discourage this practice. Socio-cultural and political environment of our country should be considered before an idea is introduced.

Also, it is recommended that the Governor

and the educational administrators should consider the effect of a new policy on all aspects of the education system. This will make them prepare for the demands which a new policy may place on other units or parts of the education system. Moreover, there should be continuity in reform implementation by succeeding administrations. Laudable as reform programmes introduced by Ezekwezili (a one-time minister of education) is, the programmes were abandoned immediately she left office. Finally, personnel, facilities and fund for execution of a reform agenda should be made available before the reform is introduced. The government and other stakeholders in education should assist in this direction.

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