

## **Perspectives of Globalization on Teacher Education in Nigeria: Imperative to National Security**

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### **ANNOTATION**

The impact of globalization on education across the globe is in no mean measure, felt in many obvious ways by teachers in Nigeria, either positively or negatively. In many nations, novelty and innovation have been introduced in teacher education through renewed educational plans, policies, decisions, implementation and import of technology so that teachers' knowledge and skills can be embellished with the demands of the global workplace. However, the dwindling fortunes of teaching profession orchestrated by poor governance has dismembered teachers in Nigeria from global village linkages. Differences exist across the length and breadth of Nigeria in the way and manner teachers are perceived by the general public. This scenario gives a definition of who becomes a teacher in each state of Nigeria, how they are respected and how they are financially rewarded. This affects their job performance in teaching and learning, teachers' effectiveness in bringing out the best from their pupils or students in terms of their learning outcome. This paper centers its discussion on perspectives of globalization on teacher education in Nigeria: Imperative to national security.

**KEYWORDS:** Globalization, Education and Teacher education.

### **Introduction:**

Globalization is a process of global economic, political and cultural integration. It has made the World become a global village; the borders have been broken down between nations. Globalization simply means close economic relationship of the entire world through increase transfer of goods and services, capital, technologies and manpower. Globalization is a process of interaction and integration among the people, companies, and governments of different nations, a process driven by international trade and investment and aided by information technology. This process has effects on the environment, on culture, on political systems, on economic development and prosperity, and on human physical well-being in societies around the world. Globalization has contributed to the development of the educational systems in Nigeria. It is quite obvious that the educational system in Nigeria has advanced in recent time because, globalization has impacted on the professions that demand development of higher skills acquisition.

This demand enables individuals to acquire education to decrease the illiteracy level. This is seen in many developing countries whose illiteracy level has reduced significantly in recent times. According to the World Bank (2004) " With globalization, more than 85 percent of the world's population can expect to live for at least sixty years and this is actually twice as long

as the average life expectancy one hundred (100) years ago". By globalization, there are many international organizations, such as, Non-Governmental Organization (NGO), World Health Organization (WHO) and UNESCO, trying to eliminate illiteracy and deadly diseases in the world and save life.

Most nations are embracing new ideas, novelty and innovation in teaching at the basic and secondary school education as it is a focal objective of the millennium development goals. Despite the increasing interests in the influence of globalization on education and teaching profession, there is no empirical study or position papers regarding perspectives on globalization and teacher education in Nigeria. The limited literatures available include: The effect of globalization on Nigerian educational system in relation to adult education programme; globalization and challenges for education in least developed countries; impact of globalization on the educational system in Nigeria; globalization, Education and National development. It is against this background that this paper examines the Concepts of globalization, impact of globalization on teacher education, scope of teacher education in Nigeria, purpose of teacher education as enunciated by National policy on education, Importance of continuous teacher education, new technologies and their implications for teacher education, challenges of teacher education, teacher education: imperative to national security, recommendations and conclusion.

### **Literature Review**

Globalization is the term used to describe the growing world-wide integration of the people and countries. Globalization is related to the process of development. It does not only focus on ways of enhancing structural change and economic growth but, also improving the potential of the mass of the population; for instance, through education, health and workplace conditions". Globalization has changed the picture of World Economy, by increasing the cross-border trade, exchanges of currency, free flow of capital, movement of people and flow of information. Globalization has introduced the concept of border-less and integrated world economy. David (1997) opines that among the features that characterize globalization include interconnection of sovereign countries through trade and capital flow; harmonization of the economic rules that govern the interaction or relationship between these sovereign nations; creating structures to support and facilitate dependence and interconnection; and creation of a global market place.

According to Paulo (1998) the process of increasing global integration has accelerated dramatically in technology. Garry (1998) views globalization as the harmonization of political system and enthronement of the culture of the West. Francis (2001) describes globalization as the great economic event of our era. It is also bringing unprecedented opportunities to billions of people throughout the world. Peter (2002) views globalization as a process of integrating economic decision-making such as consumption, investment and saving all across the world. This means that globalization is a process of creating global market place in which increasingly, all nations are forced to participate. Eduard (2002) notes that the people of the planet earth have become one large family through globalization. To him, information technology has advanced to a level of rendering distance irrelevant. He further observed that, the new epoch offers new challenges and new global problems, such as environmental catastrophes, extinction of resources, blood conflict and poverty. ). Bright Chima Megbo, Godwin Ndubuisi Ahaotu (2015) corroborated the views of Paulo (1998), Garry (1998), Francis (2001) and Edward and Peter (2002) respectively.

**Impact of globalization on teacher education:**

Knowledge and information are key to any meaningful development in individuals, society or nation that desires to measure up to international standards in any spheres of life. In this era of globalization, connectivity is the key to global competitiveness. The globe has become a village in which, value oriented programmes are the prevailing concepts. Value-less ideas do not fit into global trends contemporarily. All the nations of the World, including Nigeria, need Information Communication Technology (ICT) infrastructure for development. It is imperative that, teachers must avail themselves access to these ICT facilities in order to be creative and productive in this globalized world. Globalization has brought about Global Distance Learning Network (GDLN), which is an online distance learning programme. Developing nations like Nigeria, need to incorporate such programme more fully into their educational system in order to reduce expenses on physical structures (buildings). Contemporarily, knowledge is an indispensable resource for economic growth. Hence, the survival of any society or nation, depends on the volume of investment on its human capital development especially on education, training and re-training of its teachers. Information technology should be a pre-requisite for Teacher education programmes in Nigerian educational system.

All teacher education programmes in Nigeria can be repositioned to be abreast with technological innovations. The attainment of educational goals in Nigeria is a function of, teaching and learning tailored towards meeting the needs of the individuals and the society. Classroom teaching, according to Etim (2006), are one of the innovations in Nigeria geared towards achieving the goals of education. One of the ways of achieving the optimum result in education is through the use of instructional materials. Instructional materials store and transmit information or message.

It is crucial to recognize that, issues pertaining to life are either skewed negatively or positively. Same with globalization and teacher education in Nigeria. With this understanding, it is pertinent to discuss the following:

**Upward impacts of globalization on teacher education:**

Globalization has impacted positively on teacher education in the following ways:

Innovations in education: - According to Babalola (2007), globalization has brought innovations in teaching and learning technologies through educational technology courses, improvement in research and training. Through globalization, problem based method of teaching-learning has been introduced. Human capacity building and skill development: - Education improves the choices available to one and provides the types of labour needed in a given society. As a result of the globalized nature of the world system, there has been need to plan the various sectors of the economy. Knowledge Advancement:- Enrolment for programmes online to acquire knowledge by people of all classes through the internet is made possible through globalization. Educational curriculum harmonization: - Globalization has made it possible for the educational curriculum of Nigeria to be harmonized with the curriculum of other nations, thus making it possible for the Nigerian students to receive the same knowledge with their counterparts in other parts of the globe. Competitive international education system: - Oni and Alade (2008) stated that in order for Nigeria to accelerate her development, its educational system must be brought to the world's class. Thus, globalization has led to healthy competition in the education system of nations of which, Nigeria is not an

exception.

### **Downward impacts of globalization on teacher education:**

From the above discussions, there is no doubt that, globalization has impacted positively on Nigerian educational system. In the same way, it has also had its negative impact on teacher education in the following ways: Increased educational finance: Globalization has its associated pressures and tensions in the Nigerian educational system. The pressures and tensions require enormous costs implications, this costs implication has placed pressure and tension on Nigerian government to adequately fund education in line with global best practices. Culture: - In the traditional system of education, students were taught to promote their cultural heritage, take active participation in family and community affairs, and were even taught proverbs. Sadly, globalization has changed all of these by imposing Western values, norms and standards without due consideration to our socio-political, cultural and historical background.

Unhealthy competition: - The quality of Nigeria's education is now increasingly being compared with other nations. Nigeria in a bid to meet up with expectations in relation to international best practices, has resorted to borrowing in order to provide standard education that would meet the world's standard. Its output too is now being compared with the output of other nations, thereby making it pretty difficult for Nigerian graduates to secure gainful employment since they do not meet up with the expectation of the globe. Examination malpractice: - In a bid to reform our educational system, Nigeria has embraced international testing and national assessments through various examination bodies.

These bodies employ standardized tests in their assessment, such as West African Examination Council (WAEC), National Examinations Council (NECO), Graduate Management Admission Test (GMAT), and Test of English as a Foreign Language (TOEFL). The use of such standardized tests has given rise to desperate attitudes in students as they now indulge in examination malpractice. More recently, it has been discovered that some students engaged in examination malpractice using their electronic gadgets which International Journal of Advanced Academic Research | Social & Management Sciences | ISSN: 2488-9849 Vol. 3, Issue 8 (August 2017) Worldwide Knowledge Sharing Platform | [www.ijaar.org](http://www.ijaar.org) Page 146 happen to be a product of globalization. The resultant effect of such is that these students come out of school half-baked.

### **Scope of teacher education in Nigeria**

Probably, there is no argument on who is regarded as a teacher. According to Alani, R. A (2000), anybody who has expertise in any field of human learning and he or she is engaged in the vocation of sharing the expertise with others is involved in teaching. He further explained that, in order to function in the school system, prospective teachers undergo a schematic and formal training so as to professionalize the vocation of teaching. Whether teaching is a profession or not is not part of the discourse in this paper.

Purpose of teacher education as enunciated in the National Policy on Education (NPE 2004) are the following:

1. To produce highly motivated, conscientious and efficient classroom teachers for all levels of our educational system;
2. To encourage further the spirit of enquiry and creativity in teachers;

3. To help teachers to fit into the social life of the community and society at large and to enhance their commitment to national objectives.
4. To provide teachers with the intellectual and professional background adequate for their assignment and to make them adaptable to any changing situation not only in the life of their country, but in the wider world; and
5. To enhance teacher's commitment to the teaching profession.

In order to achieve all these, the National Policy on Education (NPE), unequivocally states that, "all teachers in educational institutions shall be professionally trained". To address this issue in a more effective and efficient manner, the policy document through the instrumentality of the law, recognizes the following institutions as centers for professional training of teachers in Nigeria: Colleges of Education, Institutes of Education, Faculties of Education, National Teachers' Institute and Schools of Education in Polytechnics. In the time past, the minimum entry requirement for teaching was "Grade 11 Teachers' Certificate obtained from Teachers' Training Colleges (TTC). Although, such colleges are no more in existence at present in most of the states of the Federation. The graduates of these colleges teach in primary schools. The National Policy on Education (NPE) has however, recommended that, Nigeria Certificate in Education (NCE) shall be the minimum qualification for entry into the teaching profession.

This development ushered into the Colleges of Education courses in Teacher Education programmes for primary school teachers under a part-time arrangement. First degree and Higher National Diploma holders are deployed to Senior Secondary Schools and other post-primary institutions, although, many NCE holders are subject teachers in many senior secondary classes. The reasons for this condition are: Dearth of personnel in secondary schools and the need to reduce personnel costs. Most private school proprietors believe that, engaging teachers with NCE qualification instead of those with university degree, is more cost effective since NCE holders receive lower remuneration. Teachers in tertiary educational institutions receive their training in various disciplines in universities and polytechnics. The National Teachers' Institute, an agency of the federal government was established by Decree No 7 of 1978 especially for primary schools. The statutory functions of NTI among others include: organization and provision of programmes for the training, development, upgrading and certification of teachers in the country. The NTI on its own volition and in cooperation with Institutes of Education, established in-service courses for unqualified and underqualified teachers to the T.C 11 level (Aghenta, 1992). NTI at present, organizes NCE part-time programme for Grade 11 Teachers. Aside pre-service training for teachers, The National Policy on Education (NPE), also supports the provision of in-service education, like library service education; evaluation techniques, guidance and counseling, etc. in order to remedy the deficiencies of pre-employment training of teachers.

#### **Importance of Continuous teacher Education:**

Ogunsanya (1988), carried out a study on the need for continuous teacher education, the study identified five specific reasons for the training of school personnel and these reasons are aptly applicable to the continuing education for teachers in the following ways:

1. Teachers may have to be re-trained when they are promoted to a position of higher responsibility. The pre-service qualification of a teacher may fail to meet the

requirements of the new position. For an example, promotion of a class teacher to the rank of Headmaster or Principal will require the acquisition of administrative, managerial, and supervisory skills and competencies for effective functioning. In-service programmes like seminars attendance, workshops, conferences etc. will close the gaps and reposition him or her with the needed skills and competences demanded by the present position.

2. Re-training of teachers may be expedient when they assume new responsibility. The new responsibility may be administrative, academic or technical. A teacher who was a house master, but assigned the position of library officer, needs training in the organization of library materials for general reading and for academic purposes.
3. To check the declining productivity among teachers. Teacher's productivity may be hindered because of lack of relevant pre-service training especially in the pedagogy or as a result of the inability of the teacher to develop himself or herself. A teacher who graduated many years back, and has refused to embark on self-development programmes, cannot keep pace with the innovations in his or her subject area.
4. Necessity for specialization of staff. The re-organization of curriculum may require division of labour and the specialization of staff. Many basic schools are at present, encouraging specialization among teachers as opposed to the old generalist approach to the teaching of primary school subjects. Where a teacher has to specialize in the teaching of a single subject he may need to upgrade his knowledge in that discipline.
5. The need for an academic staff to acquire higher or professional qualification as a minimum requirement for the job. For academic staff positions in the universities, graduate assistance and assistance lecturers are always mandated to pursue doctorate degree (Ph.D.) programme for them to be employed as substantive lecturers. In Colleges of Education, academic staff are encouraged to engage in professional training in teaching because of the nature of these institutions and this attracts a credit in their promotion. The National Policy on Education (NPE) recommendation that, NCE will now be minimum qualification for entry into the teaching profession in Nigeria exemplifies this point.

#### **Avenues for Further Training and Development of Teachers:**

Business organizations, have two categories of staff development that have received global accolade. These are on-the job and off-the job programmes (Flippo, 1980). Alani (2000) in supporting this assertion, opined that, this staff development can also be adapted to the school system in conducting in-service education for teachers.

##### **A. On-the-Job Programmes:**

These staff development programmes are organized within a particular school system. The teacher is not required to visit another school. Generally, five strategies applicable to the school situation are discernible here.

##### **Coaching**

Teachers receive assistance from their professionally superior colleagues who had acquired more experience, teaching and academic skills for longer years. The coach offers advice, comments and suggestions that can improve the ability of the teacher.

**Understudy**

This approach can be explored in training of a Vice-Principal who may likely succeed the principal or an assistant Head teacher who may succeed the Head teacher respectively. The practicum courses in educational administration and planning in universities are designed for this purpose. The superior must however be ready to devote time, must show interest and have managerial expertise which will enable the trainee to grow and acquire practical and real training. For instance, micro-teaching can be used to improve the skills of in-experienced teachers under the guidance of a highly competent superior.

**Position Rotation**

Provided teachers have suitable academic background, job rotation can be practiced among teachers. A teacher, for instance, can be moved to a higher class to teach the same subject in order to broaden his knowledge. To develop the administrative skills of teachers, they can be assigned different administrative responsibilities bi-annually.

**Special Projects and Committee Duties**

When teachers participate in the execution of projects or committee deliberations, they become involved in school management (planning and decision making). Committees can either be standing or adhoc with specific terms of reference.

**Staff Meetings and in-house Academic Fora**

Staff meetings, workshops, seminars, conferences, symposia, etc. organized by school can meet the development needs of teachers and the school. These fora enable a teacher to gain from the viewpoints of his colleagues.

**B. Off-the- Job Programmes**

These programmes are organized outside a particular school system. Three modes of such programmes that readily come to mind are the following:

**Further Education and other outside Courses**

Teachers can benefit from further education offered by colleges of education, polytechnics and universities on full-or part-time basis. The prevailing economic realities in the country, the need to ensure continuity in staffing, have made part-time in-service education more popular than the full-time. Today, many teachers at all levels of education take part in one form of higher education or the other. Workshops, conferences and seminars organized by tertiary educational institutions and subject associations are beneficial to teachers in meeting their developmental goals.

**Visitation to Other Schools and Educational Centers**

Teachers can visit other schools, zoological gardens, museums, manufacturing industries and other places that offer educational services in order to increase their knowledge.

**Secondments**

According to Egiogu (1990), teachers can be seconded to other schools to learn new ideas and test the skills they have acquired in other environments. Secondments can be encouraged at the basic education level as well as the secondary education level. In Nigeria, Federal Education Officers are usually deployed to states to help train their personnel and such

officers can mutually benefit from this exercise (Alani, 2000). He further clarified that, a significant number of university teachers have also gained from staff exchange and fellowship programmes of universities abroad and international organizations and agencies. Tertiary educational institutions also grant sabbatical leave and leave of absence to deserving staff to conduct research, work in related institutions or engage in professional consultancy services to broaden their academic and professional knowledge.

### **New Technologies and their Implications for Teacher Education**

Nigerian educational system is currently facing challenges posed by diverse student population with varied levels of insecurity, insurgency, cultism and dilapidated infrastructures, and is further under pressure to increase against a backdrop of lean resources. At the same time curricula have to be aligned to meet the constant changes in societal expectations in a 21st century, which calls for improved preparedness of teachers with what has been termed 21st century skills (Becta 2008; Johnson et al. 2011) and digital citizenship (Johnson and Adam 2011). Responding to these challenges, while maintaining quality of teaching and learning processes, require a revalidation of curriculum and delivery.

Nigerian educational institutions (NEIs) have been responding to this with a number of different strategies, such as curriculum, programmes review, with corresponding educational policies (Boughey 2002; Garraway 2009; McKenna 2004). (Ivala 2011; Snowball and Mostert 2010; Snyder and Prinsloo 2007) carried out a study on the integration of technology in education into the school curriculum and opined that, the integration of technology has been seen as another way of responding to these challenges, often applied as an overly-optimistic remedy resulting in large institutional infrastructure projects, such as the implementation of resource intensive institutional Learning Management Systems (LMS) The results and uptake of these technologies have been varied (Chigona and Dagado 2011).

One of the main critiques of the implementation of these technologies is that they have fallen short of delivering on the promise of transforming existing teaching and learning practices (Kirkup and Kirkwood 2005; Margaryan and Littlejohn 2011). However, international research points to the fact that there are new, cost-effective technologies – that have been attributed with a disruptive nature, but which teachers are using competently and creatively – with the potential to positively transform existing teaching and learning practices (Johnson et al. 2011; Meyer 2010). The use of emerging technologies in education, for example, provides opportunities for learners to practise writing, with the added benefit of developing, an appreciation for the audience they are writing for (Helvie-Mason 2011; Jones 2011). Furthermore, the ease of use that emerging technologies such as Twitter and Facebook afford, makes these methods of engagement an accessible option for both teachers and learners (Wankel 2011). Social media can offer opportunities for collaboration, co-creation, learning and interaction, thus contributing to improved teaching and learning (Dede 2009; Greenhow, Robelia and Hughes 2009; HelvieMason 2011; Jones 2011; Pang 2009; Wankel 2011).

Of particular importance in the context of the current study is that they can increase teachers' and students' access to social learning networks (Ng'ambi and Rambe 2008); bridge informal and formal learning (Rambe and Ng'ambi 2011); and support students with difficulties in learning in a language different from their mother tongue (Ng'ambi 2008). These innovative practices currently happening on a small-scale basis; are mostly initiated by individual teachers or students; and are not widespread. To improve diffusion on a wider scale, it is



advised that teacher education need to actively engage with these technologies.

### **Emerging technologies in Education**

Emerging technologies according to Bozalek (2011) are those technologies which are 'likely to have a large impact on teaching, learning, or creative inquiry on learners or those technologies which are on the rise'. The podcasts, blogs and e-books which are part of it have been shown to be useful to education. Specifically podcasts are seen as particularly useful because of their relative low cost and ease of use. Bozalek cites Van 'T Hooft (2009) as saying that mobility expands learning across space and time and opens many opportunities for learning that is neither sequential nor consistent. Sloan (2006) opined that emerging technologies represent a new paradigm that at first grows on the edge in relative obscurity and often seems to be of no threat or even of little value to users of the sustaining technology.

Bozalek continues to say that emerging technologies in education can be used in innovative ways to address issues of inequity and social exclusion. Recent developments in digital technologies, especially web 2.0 tools such as blogs, wikis and social media, and mobile devices such as phones and tablets, have given the end user, much more control over access to and the creation and sharing of information and knowledge. Digital technology empower learners, innovative instructors are also finding ways to harness this media to increase motivation of learners through relevant activities (Nord, 2013). According to Hoque, Razak, and Zohora (2012) integrating ICT in teacher education is high on the educational reform agenda of both developed and developing countries.

For developing countries, ICT can be seen as a way to merge and even leapfrog into a globalizing, technological world. Yet in practice the use of ICT for teaching practice is limited at best. Much research is therefore done on factors influencing or constraining the use of ICT for teaching practice. Uses of ICT in pedagogical activities are widespread in the education system. Teachers use computer software to create lesson plans, PowerPoint presentations, and use smart boards for interactive lessons. Hoque, Razak, and Zohora (2012) argue that ICT in education are described with the following functions: ICT as object by referring learning about ICT; ICT as an "assisting tool" while making assignments, collecting data and documentation, communicating and conducting research; ICT as a medium for teaching and learning; and ICT as a tool for organization and management in schools. These four functions are of primary importance in the educational systems. A study conducted by Al-Senaidi and Gawande (2013) at the Sultan Qaboos University used interviews, focus groups, and document analysis to study the factors that affect the adoption of technology among faculty members of the Sultanate of Oman. The conclusion from this study showed that though ICT in Omani higher education institutions has grown rapidly over the past decade, its use is still at the infantile stage.

The findings also showed that the traditional approach to teaching had a negative on ICT uses at the university and as a result of that the university needs to help its faculty members improve ICT skills. Individual differences on ICT uses and skills by faculty members were identified. However, the ICT skills are not being automatically transformed into the instructional processes. Al-Senaidi and Gawande acknowledged the fact that today's faculty members are much more proficient in the use of ICT than in the past. This is due largely to the fact that ICT has permeated the modern society and the university. Asangansi, Adejoro, Farri, and Makinde (2008) used quantitative methods to find out the extent to which doctors

in a Nigerian Teaching Hospital use computers and the Internet.

Their study highlights the level to which medical practitioners use technology to manage patients and records of patients'. Their analysis showed that 62.1% of the respondents used the word processor, 95.9% surfing the Internet, the study reported that 66.9% of the respondents knew how to make slides for presentations. The percentages reported by Asangansi et al to be using technology to support their work are highly significant. Interestingly a smaller number of the respondents knew how to actually use basic statistical software applications and that had resulted in only 39.3% of the respondents who were able to publish research papers. Though trainee doctors used technology, the study did not indicate whether or not there is a policy framework that enjoins doctor trainees to study a mandatory technology course as part of their academic programme. Weighting, (2006) reports that the classroom is a microcosm of society, and that technology is having an increasing impact in schools.

Weighting (2006, p 371) concluded that information is available in far greater quantities than ever before, and the means to access and share it with others is unprecedented. Though there is a growing literature on ICT integration in education, few studies have focused specifically on the personal experiences of teacher education. This study will contribute to the general body of knowledge in both theory and practice in teacher education.

### **Enhancing Teachers Competence for Emerging Technologies:**

Niles (2007) observes that, "Possessing openness to emerging technologies is critical for teachers in the technology-rich 21st Century as technology continues to accelerate at a rapid rate. Readiness for new technologies is a challenge associated with change. Teachers who resist change may impede and/or limit their students' learning and skills. Teachers, therefore, must prepare students by teaching knowledge and skills necessary for students' intellectual development as illustrated herewith: Emerging Technologies and Teaching Competencies; Area of Competence; Desired Competencies for School Teachers; Emerging based Operations and Concepts Technologies; Have knowledge, skills, and understanding of concepts related to emerging technologies; Have updated technology knowledge and skills; Stay abreast of recurrent and emerging technologies; Emerging Technologies supported Learning; Environments Develop appropriate technology supported learning opportunities;

Apply technology-supported instructional strategies; Create stimulating learning environment to arouse learners by using technologies; Emerging Technologies mediated Teaching and Curriculum; Use technology to support learner-centered teaching; Apply technology to develop learners' higher skills and creativity order; Manage student learning activities in a technology enhanced environment; Emerging Technologies enabled Assessment and Evaluation; Apply technology in assessing student learning; Use technology resources to collect and analyze data; Evaluate students' use of technology resources for learning; Emerging Technologies enhanced Professional Development;

Use technology resources for their professional development; Apply technology resources to learn new tricks of the trade; Use technology to communicate and collaborate with peers, students, and community; Emerging Technologies empowered Learner Support; Apply technology resources to enable and empower learners; Identify technology resources to empower learners for effective use of technology; Facilitate equitable access to technology resources for all learners.

In this context, teachers need to understand how the technologies work, what they offer, and to understand how to use them for betterment of teaching learning process. Teachers need to apply technologies wisely to real problems, and to reflect and search for the deeper issues that the technologies raise, and to bring up and discuss these issues with the students. The teachers also need to create evaluation criteria, and to make and understand the distinct criterions related to emerging technologies mediated teaching learning. Gunter (2001) suggests, "To prepare educators for the twenty first century, colleges of education must be leaders of change by providing pre-service teachers with a technology-enriched curriculum."

In Nigerian context, three agencies namely National Commission for Colleges of Education (NCCE), National Teachers Institute (NTI) and Teachers Registration Council of Nigeria (TRCN) can play important role to fulfill this task. The needed actions required at their part to make school teachers competent for emerging technologies are discussed under following subheads. A number of studies conducted on the process of educational change show that education policies often lack focus that encourages the integration of technology content into the learning landscapes of schools. This is a clear indication that we must look for ways to re-orientate and re-organize teaching learning processes to promote technologies usage among teachers. Being the nodal institution of teacher education in Nigeria, National Commission for Colleges of Education (NCCE) is expected to play leading role to motivate and support school teachers to learn and use emerging technologies for educational purposes.

The NCCE may take the following initiatives to empower school teachers for emerging technologies: Make emerging technologies an integral part of teacher education curriculum Policy initiatives and as the key to promote emerging technology in teacher education in Nigeria. We need competent teachers for effective utilization of emerging technologies in present educational scenario. Making teachers' competent for emerging technologies is a task that requires efforts at different levels. As technologies usage among teaching fraternity Formulation and implementation of clear-cut policies and guidelines will help teacher education institutions and school teachers to accept and embrace emerging technologies for betterment of teaching learning process. Bright Chima Megbo, Godwin Ndubuisi Ahaotu (2015) asserted that, teacher education programmes are key and lean ways to national security because, it takes care of holistic aspirations of a nation towards socio-economic and political stability.

Therefore, the first requirement will be to make emerging technologies an integral part of existing teacher education curriculum. Need based policies and guidelines will pave the way for teachers to learn and use emerging technologies for betterment of teaching learning process. Frame emerging technology based teaching learning tasks. The promotion of emerging technologies in schools depends on its use for teaching learning tasks. To support this cause, teacher education programme is required to frame mandatory 'emerging technologies based teaching learning tasks' in teacher education curriculum. National Commission for Colleges of Education (NCCE) should make it mandatory for colleges of education, faculties of education and other institutions that offer programmes in education, to establish 'Educational Technology Laboratories and addition of this new mandate, should further support teacher education departments/institutions to equip future teachers with emerging technologies mediated teaching learning skills, organize training programmes to promote emerging technologies usage.

Training teachers is another major requirement to promote emerging technologies usage in

schools. NCCE may fulfill this promise by conducting national/ zonal level training programmes all over Nigeria on regular basis. These training programmes will help school teachers to have knowledge, skills, and understanding of concepts related to emerging technologies. Besides, these training programmes will further help teachers to stay abreast of recurrent and emerging technologies and updating of technology knowledge and skills. Promote emerging technologies based researches. Research is vital to promote emerging technologies usage in classrooms. The researches will help teachers to understand and assess the impact of emerging technologies on teaching learning process.

NCCE may offer research grants and projects to willing teachers and researchers to conduct emerging technology based researches particularly, research papers. Results from these studies will help the NCCE and teacher education departments/institutions to take specific measures for empowering teachers to use emerging technologies. Prepare a resource pool of experts: It has been observed that majority of existing school teachers need orientation and training about use of emerging technologies for teaching learning purposes. Unfortunately, majority of our teacher training institutions lack expertise to train teachers for technological aspects. NCCE may play a leading role to serve this cause.

NCCE may prepare a resource pool of experts having specialization and experience in educational utilization of emerging technologies and may depute these experts to train school teachers in different parts of the country. Teacher Education Departments/Institutions; To fulfill the educational needs of fast emerging society of digital rural learners in schools, the existing pedagogical practices in teacher education programmes are needed to be replaced by e-pedagogical practices ( the term e-pedagogy denotes the art and science of e-teaching). But this is not the case with our Colleges of Education, Institutes, departments/institutions as majority of them lack focus to integrate technology content into pre-service/in-service teacher education programmes.

### **Problems confronting Teacher Education in Nigeria:**

A myriad of shortcomings militate against the organization and delivery of teacher education programmes in Nigeria. The lists of the problems confronting teacher education in Nigeria is no way exhaustive. However, the drawbacks are discussed below.

#### **Insufficient Funding:**

The financial predicaments faced by government and the competing demands for resources is affecting the budgetary allocation usually set aside for staff development programmes by the various institutions of learning. The situation is even worst at the Basic and Secondary levels where staff development depends largely on private initiative. Even, at the tertiary level, fund is a major hindrance in the organization of further education programmes for personnel.

#### **High Cost of Further Education**

Closely associated with the above point, is the issue of rising cost of in-service education. In many tertiary institutions, part-time or sandwich programmes for teachers are fully commercialized. Tuition fees and other incidental charges are so prohibitive to the extent that, many teachers are unwilling to attend such courses. Even in the case of short-courses and conferences, the cost of participation constitutes a major disincentive to teachers.

### **Inadequate Motivation and Laziness among Some Teachers**

A good number of teachers are not motivated to partake in in-service education activities. Those teachers who have reached the zenith of their career may not be interested in further academic studies if such additional training cannot enhance their status or salary. Many teachers, especially at the lower cadre, receive poor salaries. These hardly meet their basic needs, talk less of leaving a substantial percentage that can be invested in further education. Little or no immediate material rewards are made available to teachers who participate in some expensive re-training courses especially in educationally advanced states that already have excess supply of qualified teachers. Study leave with pay is now a luxury in some states of the federation. Even if a teacher leaves his job for full-time study, he has little or no assurance that, he will regain it after the completion of the programme. Above all, some educational institutions send teachers on in-service training but fail to assign them challenging duties which will allow them to utilize the newly acquired competencies. This situation could lead to frustration among teachers especially when such training programmes were self-sponsored.

Apart from inadequate teachers' motivation, some teachers are patently lazy and find it difficult to embark on self-improvement courses. This is common among teachers who see teaching as a stepping-stone to a more lucrative job. Some teachers prefer to scout for other avenues for making more money to attending re-training courses. Perhaps, such teachers are blameless because of the poor condition of service in the teaching profession. The intellectual capacity of a good number of teachers serves as a major source of their disinterestedness in further education.

### **Inadequate Opportunities for some Teachers in tertiary Institutions**

Certain courses are not widely offered in universities. Thus, teachers who specialize in such subjects below the university level, always find it cumbersome to pursue further education. For instance, in the time past, NCE holders whose areas of specialization are agricultural education, social studies, home economics etc. have limited opportunities for further education because, only few universities offer these courses. Hence, limited number of such teachers can be accommodated in their (universities) B. Ed degree programmes. Because of family commitments and the need to combine such programme with work, many teachers miss the opportunity for further education.

### **Rigid School Programmes and Uncooperative Attitude of some school Administrators**

Many tertiary institutions offering different in-service educational programmes for teachers draw their clients from several schools and states. These schools and states have different time-tables and school calendar of activities. The problem is how to organize continuing education activities without disrupting school programmes or ensuring that every registered student takes part fully in the in-service education programme. To solve this problem, further education courses are usually slated for weekends and long vacation periods. The disruption of tertiary institution's calendar as a result of students' crisis or strike by members of staff affects the organization of vacation courses.

Apart from this, many school administrators fail to give necessary support to their staff. Sometimes, the administrator sees his or her subordinate as a threat and will therefore, do all he/she can to frustrate any teacher who wants to go for further education. Some

administrators may not release needed funds at the right time even when such had been made available by the appropriate authority.

### **Government's Lukewarm Attitude to Policy Implementation**

The National Policy on Education (NPE), as earlier noted, recommends that Nigeria Certificate in Education (NCE) will be the minimum qualification for entry into the teaching profession. Up till now, there is no firm proclamation by the federal government on when this will be effective. Also, government is yet to announce the date when teachers without necessary qualification will be asked to leave the school system. Universities have also not taken any desirous measure to train the lecturers outside the Institute/ Faculty of Education professionally. This gap between policy implementation can hinder continuing teacher education in Nigeria.

### **Teacher Education: Imperative to National Security.**

National Security is a top public issue today. It is a matter of national importance that should be of great concern to all stakeholders in Nigeria and as well as one that, requires comprehensive and committed contribution of all groups and interests that make up Nigeria. National Security cannot be narrowed down to defense and military might alone. It is more broadened than that. It is this narrow conception of national security that forms the basis for the disproportionate budgetary allocation of funds as the case is, to "ensure the security of lives and property", however, to the utter neglect of other equally important sectors of the economy that bear direct or indirect burden on National Security. Ahaotu, Godwin Ndubuisi & Ogunode Niyi (2018) opine that Teacher Education is a key instrument to national security. They further state that, Leadership and national-security have consistently been Nigeria's most constant priority agenda before and since independence fifty-nine years ago. Unfortunately, in spite of all good intentions and spirited efforts of the nation's leaders since 1960, these twin problems have remained a national dilemma. Such sectors as education, health, agriculture etc. become poorly mobilized.

Iredia (2011) defined National Security as the ability of a State to overcome any form of its challenges no matter what the challenge is. He averred that National Security is wider than military might, defense or law enforcement and pointed out others as rather, basic dimensions like job, water and food security. It is appropriate therefore, to state unequivocally that, a National Security Policy would be of no use to the unemployed and hungry citizens that constitute the majority of the population in a country like Nigeria where 90% of national income is in the pockets of few individuals.

To lay credence to the all-inclusive nature of the meaning of National Security, the American President Barack Obama in 2010 canvassed an all-encompassing world view in his own definition of America's National Security interests which include, "a strong, innovative and growing U.S. economy in an open international economic system that promotes opportunity and prosperity"

Education is a process by which individuals are assisted formally through proper direction and guidance to develop their capacities for their own benefits and that of the society. It therefore follows, by a simple logic, that if a nation bequeaths the right type of education to its citizens through well informed teachers, the citizens will not turn against their father-land. Daily Sun (2013, reported a former Minister of Education, Professor Ragayyatu Rufai as

having identified reform of the education system as the solution to the security challenges confronting the Nation. She opined that, there is need for a total overhaul of the curriculum at all levels of education with a view to providing its recipients, broad based education in the development of the mind, soul and body; and in comprehending the environment and in the development of appropriate attitudes, skills, abilities and competences to co-exist with and contribute to the development of the society. This calls for a synergy between liberal education, vocational and entrepreneurship education. A liberal education is one that frees the minds of its recipients from their preconceptions. It broadens the possibilities for greater understanding of others in our nation and around the world (Forum Futures, 2007). Institutions should try to train future workers to help States' economies and to offer liberal education so as to produce informed citizens who can contribute to our democratic way of life. Every sovereign, independent state must train, sustain and nurture men and women to serve in its security and intelligence out fits.

According to Esiemokhai (2005), in Europe and America, these men and women are selected from the best and the brightest citizens, who are endowed with keen and subtle intellect. Recruitment into defense and military intelligence outfits needs scrupulous assessment of the recruit's educational background, intellectual sharpness, smartness and patriotism. Graduates with the best grades should be deployed not those who got ranks by the federal character formula. Education helps to create informed citizenry which is vital to our democratic society. It increases the potential for individuals to perform as citizens. There are many examples of the public being misinformed and making bad decisions. However, without education, the situation would be vastly worse. It gives one the ability to critically examine an issue and articulate a reasoned position about it. Nurturing critical thinking is a key component of education, very critical to National Security.

### **Recommendations**

The Following measures will be helpful for teacher education, departments/institutions to take care of this situation: Provision of infrastructural facilities for use of emerging technologies. Government at all levels can help teachers by giving them a different perspective, by involving them in meaningful activities, and by allowing them entry into the knowledge networks that define teaching and learning, giving them the hardware, and some technical training, is the first part of their learning journey (Sutton, 2006). Following this advice, teacher education, departments/institutions are supposed to mainly provide computer and broadband Internet connection as majority of the above discussed emerging technologies, are almost available for free. The other required hardware/software will include printer, scanner, digital camera, handy cam, audio-video editing software, etc. Availability of these facilities will help school teachers to overcome one of the most talked e-barrier regarding usage of technology in classrooms 'material access barrier' and promotion of in-house opportunities for teachers to learn and use technologies. Support teachers to use emerging technologies.

In the light of the problems listed, the following recommendations are made to ensure effective teacher education: adequate funds for staff development programmes should be set aside in the budget of various institutions of learning from basic school level to the tertiary level; cost of part-time, sandwich and other re-training programmes for teachers should be reviewed downward by the institutions of learning to be within the easy reach of the majority of teachers who may like to benefit from such programmes; Teachers should be motivated to

participate in in-service training programmes through affordable tuition fees and other administrative charges; Teacher education courses should be broadened to accommodate as many teachers as possible in their various areas of specialization as a means of equalizing educational opportunities; Ministries of education should cooperate with tertiary institutions of learning in drawing up the calendar of activities for part-time and sandwich programmes to remove disruption of these activities; deadline should be set for all teachers including lecturers in any educational institution to undergo professional training in teaching. This could be one of the conditions for academic staff promotion.

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