

**IMPROVING THE QUALITY OF TEACHER EDUCATION IN NIGERIA; THE
INFORMATION COMMUNICATION TECHNOLOGY OPTION**

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Abstract

Nigeria educational system has passed through very many developmental processes. Improving quality in the teacher's education as a tool for national development is imperative. Evolving ICT based teaching/learning methods is a vehicle enhancing effective learning that will enable the Nigerian nation to catch up with the rest of the world in the context of globalization. This paper using a descriptive survey technique views the effective use of Information Communication Technology (ICT) as a process of improving new method in teacher education. Highlighting the meaning of ICT, its roles in enhancing new effective teaching methodology, using different communication devices or application such as radio, television, cellular phones, computer (hardware and software), and social network and satellite systems and so on. The importance of ICT and its contribution to teaching and learning method in bringing about new approaches in the classroom through changes in teaching practices, school innovation and community services are reviewed. It concludes by highlighting that no specific effort of ICT based instructional strategy would suffice in teaching methodology without the presence of the teachers. However, highlighting the use of internet for retrieving, downloading and uploading information with making e-payment and browsing easy.

Key-words: Information, Communication, Technology, Teachers education, Information Communication Technology.

Education is the transmission of society's culture in all ramifications. It is an instrument for reproduction of the society, the dynamics and the actions and reactions that constitute the education policy of the society. It is a legacy on which the economy of a society depends. Nigeria educational system commenced with early missionaries who established first primary school alongside the teacher training college in 1842. Ever since, it has become a gigantic cornerstone sector of the nation and has remained an enormous industry. Consequently, huge sum of financial resources are budgeted and committed yearly on this important sector of the economy that is regarded as the bedrock of the country's development. However, it is imperative to note that the educational system's goals, aspirations, aims and achievement could not be realised without a virile and formidable qualitative teacher education coupled with the other stakeholders in the education industry.

Hence, a qualitative teacher education is imperative as a major determinant growth, stability and quality citizens of the nation. The quality and training of teachers will determine the level of knowledge, skills, attitudes, values, effectiveness and competencies impacted on the citizens, students and people of the nation. Therefore, the country's teacher education remains the nervous centre of the education system. However, the sector had suffered immeasurable depression, humiliation and degrading. Teacher's education has been relegated while the profession had suffered untold hardship. The teachers are considered as bunch of disgruntled, disillusioned, frustrated and depressed professionals.

Above situation of the Nigerian education system has been a major concern to parents, students, teachers, government and stakeholders because it has caused a sharp drastic fall in the education standard. The main concern has been concentrated on the quality of education which has been noticed to be declining tremendously. Whereas teachers through the performance of their primary functions in the system, having the major role to determine the development and performance of the society are to help shape the ideas and aspirations of the nation.

The importance of teachers in executing educational programmes especially teaching is although recognised in the National Policy on Education (2009) that "no educational system can rise above the quality of its teachers. But how can a highly motivated conscientious and efficient teacher be produced in a dying and inactive scenario where teachers suffer humiliation from non-payment of salaries leading to incessant strikes actions, facing un-conducive working environment, dilapidated structures and inadequate facilities and equipment necessary for classroom delivery.

Also, schools lack basic textbooks, library, classrooms, laboratories and equipment for impacting knowledge. Meanwhile a huge portion of the nation's yearly budget is year-marked to educational development to boost development of adequate manpower requirement of the nation (Oyedeji, 2006) in Akinsanya (2010). None-the-less, the result has been quiet discouraging.

Consequently, rather than recording improvement in the teaching profession, high decline in performance had been noticed. There are factors expressed by

scholars from studies as responsible for the poor performance which include gross inadequate funding of the system, the collapse of educational structures, poor and irregular salaries, decline in reading culture, widespread examination mal-practices, admission of students into tertiary institutions those who had no interest in teaching, cultism among students and the anti-intellectual attitudes of the past government and lack of job opportunities for the products of the system Olakunrin (2001) in Amuludun (2006). Hence, all sort of people who had no professional training are involved in teaching. Many of them attended crash training programmes then involved into teaching. The result of studies on these half-baked teachers trained resulted to poor teacher's effectiveness in the classroom. Result of research finding by scholars such as Chacko 1981, Oyedeki 1998, Akinsanya 2010 lent credence to poor academic performance recorded by students as an effect. Further research by Okunola (1985), Oni (1992) and Akinsanya (2007) in Akinsanya (2010) also confirmed that there was a significant positive relationship existing between quantity and quality of teachers and general academic performance of students.

Meanwhile, the indispensable role of the teachers in the educational system cannot be less emphasised especially in the developing and bringing up leaders and intellectuals in the economy. The teachers is also a central figure in any educational system, hence its quality training and skills is of high significance to the success of the educational system. It is worthy of note that the problem of teachers education resulting to poor quality is as old as the country and a such different approaches have been used to tackle the issue by different regimes. In 1957 to 1961 respectively, the University of Ibadan introduced a one year course for graduate leading to diploma in education and started another one year Associate ship course for selected Grade II teachers trained for headship purpose. Also the Ashby commission recommendation in (Fafunwa 1974) for teachers Grade I college modified to give rise to the Nigeria Certificate in Education (NCE). Established for further teachers advancement are different advance teachers colleges built in Ondo 1962 Owerri 1963, Zaria 1962, Kano 1964 and Abraka 1968 respectively (Taiwo 1968 in Utulu, 2014). The big stride way was the Federal Government approved emergency teacher training programmes during the introduction of the Universal Primary Education Scheme in 1976

introduced by Obasanjo regime. Subsequent regimes had also tried in several ways to work on improvement of the teacher's education quality but all efforts to no avail. In real sense, what we had is inadequate funds, increases in enrolment without corresponding structures, owing of salaries by all tiers of government, examination malpractices, of recent strikes by National Union of Teachers (NUT) in many states such as Ogun, Anambra, Ebony, Osun states etc. In view of the above situation with serious negative effects on the economy but with the globalization of all sectors of the economy there has been a paradigm shift in the method of teaching nowadays. The introduction of information communication and technology into teaching this paper is of the opinion that a high level of improvement will move into process of education and dissemination of necessary information.

The transformation process of the Nigeria educational system is a factor of teachers proficiency, development, self-efficacy, positive attitudinal change, because teachers are at the centre of the education enterprise. Teacher's education is a vehicle for national development. Its efficacy are factors that will enable the Nigeria nation educational system meet up with the rest of the world in the context of globalization. In recent time, Information Communication Technology (ICT) has exercised a strong pivotal role in the digital economy as it has currently been developed as one of the core element of managerial transformation around the global. Information Communication Technology (ICT) tools has also played a central common place role in formal and informal investigation for information seeking, content sharing and self-expression in technology pervasive in information environment of the 21st century (Mills, Knezek, and Wakefield, 2013).

Information Communication Technology (ICT) has been defined as an umbrella term that include any communication device or application encompassing radio, television, cellular phones, computer, that is, hardware and software, social network, satellite system and host of other Nana (2012). It entails further, various services and application that are associated with aforementioned device such as video-conferencing and distance learning. It entails further, various services and application

that are associated with aforementioned device such as video-conferencing and distance learning.

The ICT of recent has become a house hold name with special reference to ICT in education, health care and keeping of modern library. It is imperative that the new generation needs to become competent in the ICT use, acquire the required necessary skills that will necessitate the quest and need to have access to computers and social networks both at school and at place of work. Essentially, the use of ICT offers a rich choice of learning experiences that are appropriate to student's needs, space, pace, aspirations and learning styles. (Flood, 2002). The United Nation Educational, Scientific and Cultural Organization (UNESCO, 2013) expressed about Information Communication Technology as an instrument that can contribute to universal access to education, equality in education, the delivery of quality learning and teaching, teachers professional development, efficient management, governance and administration. Further that ICT will assist to exert impact on pedagogical approaches in the classroom by contributing to changes in teaching practice, school innovation and community services to allow for considerable influence on students achievement.

The process of introducing and inculcating ICT into teacher's proficiency and usage in education will throw light on the potential to empower teachers and learners by transforming the teaching and learning method and process. It will help to transform the system from the traditional teacher dominated learning process to student-oriented centred. This transformational process which will result in increased learning advantages for students creating and allowing for greater opportunity for the learners is to develop their creativity, problem-solving abilities, informative reason skills, communication skills and other higher thinking skill.

Although, it should not be gain-saying that one of the major problem confronting the educational system is the teacher centered method of teaching and learning which had led to lack of effective time and learning management. With the ICT and student centered learning system evolving, the need for well-educated management personnel in the era of globalization hardly needs being stressed too much particularly when the economy is not stagnant and does not remain perpetually

underdeveloped. Rather, evolving ICT in transforming teacher's roles from being a guide on the side for the learners and the student's roles that is changing from being passive receivers of content to being more active participant and partners in the learning process is encouraged and emphasized. Carnoy (2004) then opined that one of the most important ways that ICT can changed the student and teachers activities in the teaching learning process is by creating new networking possibilities directly with other schools and indirectly to information database on the world wide web (www). Further, the potential of information communication technology (ICT) to facilitate student learning, improve teaching and teaching methods plus an enhanced institution administration should be emphasized. For instance, heralding the use of ICT as a tool for enhancing students learning in teacher's institution and as catalyst for improving access to quality education in formal and non-formal setting has become imperative.

Recognizing the impact of new technologies on the work place and everyday life, teacher's education institutions must try to restructure their education programme and classroom facilities in order to husband the potentials of ICT in improving the content of the teacher education. This is because it reveals further that ICT as tools within the school environment include use for school administration and management, teaching and learning of ICT related skills for enhancing the presentation of classroom work, teaching, learning repetitive tasks, teaching, learning intellectual – thinking and problem solving skills, stimulating creativity and imagination for research by teachers and students and as communication tools by teachers and students.

Teachers' education plays a vital role in teacher's quality development because it acts as the tools for the production of well –equipped teachers who are the major actors for building and developing the education system. Although there has been much concern expressed on the quality of teachers education which is the nerve-centre of any education system. No system can rise above its teachers level as earlier expressed; you offer only what you have. Meanwhile Olakunrin (2001) in Amuludun(2006) expressed opinion about quality of teachers education as nothing to write home about. That inadequate funding of the system and that there has been a collapse of the educational infrastructure coupled with poor salaries of educationist

resulting to decline of reading culture, widespread examination mal- practice, admission of incompetent personnel into the tertiary institutions, enhancing cultism among students, increased strikes in the education system and lack of job opportunities for product of the systems.

It is important to note that the National policy on education spelt out the main goals of teacher's education to include: -

- Production of highly motivated, conscientious and efficient classroom teachers for all levels of our educational system.
- Encourage the spirit of enquiry and creativity in teachers.
- Help teachers to fit into social life to national goals.
- Provide teachers with the intellectual and professional background for their assignment and make them adaptable to changing situation and
- Enhance teacher's commitment to the teaching profession.

The NPE recognized the importance of proper preparation of teachers and the dare need to update and upgrade the teachers education programmes for national development. There are also a bid to ensure quality and competence of teachers and to fine tune them with the current modern teaching and learning techniques, state of the heart teaching method with up to date current tools of disseminating information that is introduced and used in the teaching process i.e. ICT. Meanwhile other problems affecting the quality of teachers in the educational system include; absence of prescribed entry qualification into teaching profession, that is, entrance into the profession is just by anybody that holds any qualification, introduction of post graduate diploma in education (PGDE) as an entry qualification in teaching and in availability of necessary tools and equipment to train teachers. It should be noted that teachers produced from this system of crash training programme are no teachers but cheaters.

The degree of professionalism of such teachers is in doubt. It is imperative to education stakeholders and policy makers in this country to note and introduce ICT into education curriculum. This will lead to improvement in teacher education and

ways of ensuring quality in teacher's education. There is the need to ensure regular supply of equipment, facility and consumables. Also there is the need for attitudinal changes of teachers towards the introduction of modern communication technology. The provision of ICT in schools will not guaranty their effective uses, and regardless of the quantity and quality of technology made available in classroom rather the key to the effect use of these tools are the teachers. The teacher's attitudinal change in terms of competence and right attitude towards technology is required. This right attitude includes the positive or negative judgment about a concrete subject and it is determine by the analysis of the information regarding the result of an action and by the positive or negative evaluation by these results.

Attitudes they say determine the altitude, hence there is the established close link and affinities between teacher's attitude and their use of ICT to bring about attitudinal change and methodology of teaching. In fact, more positive attitude towards the computer is associated with a higher level of computer experience (Teo, 2008). Identifying factors explaining ICT use is considered as a way of answering the question. Why some teachers embrace the use of technology with students in classrooms and others do not? This is because they are technology – related teachers characteristics. However, one important variable that is used to determine the adoption of information communication technology in introducing new teaching method is self – efficacy. That self-efficacy is a method by which one believes in owes capabilities to organize and execute the course of action required to manage prospective students. It is a personal belief in one's ability to succeed in a particular situation. For instance, a perceived efficacy plays a key role in human functioning, because it is internal instinct that affects and engineer behaviour towards an action not only directly, but by its impact on their determinants. These determinants include goals and aspirations, outcome expectations, affective productivities and perceptions of impediments and opportunities in the social environment

Accepting responsibilities and readiness to explore new grounds and methods of impacting ideas, knowledge and facts through the use of ICT will develop and promote effective learning process. It will also build self confidence in one ability.

The introduction of ICT based instructional teaching strategies is one of the new teaching methods introduced and that has been proved to be effective in impacting knowledge to students. It is an effective change in the style of teaching. ICT based their teaching method is students centred; students are put at the centre stage of learning process and are responsible for their own advance in the knowledge acquisition process. It is imperative to highlight some of the salient attribute of ICT based teaching method to enhancing effective teaching as contributions to knowledge.

Information communication technology (ICT) by definition is the processing and maintenance of information and the use of all forms of computer, communication information communication technology which include all media employed in transmitting audio, video, data major multimedia such as all cable, satellite, fibre optics, wireless (radio, infra-red, Bluetooth, wifi). While technology include Personal Area Networks (PAN), Campus Area Network (CAN) Intranets, Extranets, LANS, WANS, MANS and the internet. Computer technologies include all removable media such as optical disc, disks, flash memories, video books, multimedia projectors, interactive electronic boards and continuously emerging state of the art PCS. Also, mobile technologies include mobile phones, palmtops with information as their material object.

Teaching involves information dissemination which cannot be reserved for use in isolation; rather it must be communicated among users. The applications of ICT to education especially through teaching enhances the delivery and access to knowledge and improve the curriculum learning outcomes. It further encourages critical thinking and assists in achievement of educational goals with unlimited means.

There are four basic approaches identified for effectively employing ICT in education that is, teaching methods. They include emerging, applying, Infusing and Transformation to bring about ICT optimization stages in education. The last three phases are regarded as the functional approaches. However, evolving ICT in teaching methodology, finding reveals that 90% of Nigerian education institutions are in the emerging phase, 7% in the Applying phase and 3% in the Infusing and transforming. This reveals that much is still required to be done in transforming the education sector

in ICT operations. Corroborating the claim above (the United Nation Development Programme, UNDP, 2013) expressed that information communication technology has no doubt been recognized as a potent force that can transform the development pace and status of a country. The evolution of ICT to the professional development of teachers is to help in the integration of ICT to education (Kelley, et al, 2000). Hence, ICT has heralded the development and implementation of new and innovative teaching strategies to learning process.

Also, the evolving approach where ICT has been used to support learning has been found to benefit tremendously the affective learning domain and student centered by improving student's engagement in task (Jacobsen, 2001). It has assisted students, teachers, school administrators, agents and agencies of education and curriculum developers. It has enhanced information technology skills in order to make teaching and learning more effective and improve their ability in classroom delivery. The use of social media for institutions would make learning more productive and enthusiastic. Hence, there is no gainsaying in the fact that to be successful in today's information – rich and knowledge based societies, students and teachers must utilize technology effectively and develop ICT skill (UNESCO, 2013).

Buttressing this need, in the writers opinion, it is outlined that some of the aims and objectives of implementing ICT in teacher's education include:

- To implement the principle of lifelong learning and education.
- To increase a variety of educational services and medium method
- To promote equal opportunities to obtain education and information.
- To develop a system of collecting and disseminating educational reforms
- To promote technology literacy of all citizens especially for students
- To develop distance education with national contents.
- To promote the culture of learning at school developing learning skills expression of optional education, open source of education and
- To support in sharing experiences and information with others.

This goes further to reveal that the use of new technologies in the classroom is essential for providing opportunities for students to learn to operate in an information age, especially preparing the students for life in the 21st century. It is evident further that the new technologies (ICT) in teaching method will help teachers enhance their pedagogical practice and assist learners in their learning process. According to Garbe and Garbe (2007) technologies can play a role in student's skill, motivation and knowledge by presenting information to students why they complete the learning process and tasks. ICT introduction into teaching method will by all means enable students to demonstrate understanding of the opportunities and implications of the uses for learning and teaching in the curriculum context, that is effective planning, implementing and managing learning and teaching in open and flexible learning environment (UNESCO, 2013).

The introduction of ICT into teaching accordingly will enhance teaching and learning through technology transformation and will assist teachers to be more effective and enthusiastic in teaching. It will assist in effective organizational structure of the new course and course materials there by promoting and enhancing a rethink and revision of curriculum and instructional strategies. It will enable student's opportunity to carry out more independent work, lecturers with opportunity to experiment with the emerging technology and facilitating the provision of interesting and creative presentation of content. It will equally provide increased opportunities for lecturers to enhance collaborative research effort and network with colleagues with ample time to offer valuable academic resources and advise to students.

In actual fact, information communication technology (ICT) will encourage and allow people to participate in a world in which schools work, and other activities have been increasingly enhanced by access to varied and developing technologies. This has further assisted people find, explore, analyses, exchange and present information most importantly, without discrimination, ICT introducing into education provide quick access to ideals and experiences from a wide range of people, communication and cultures.

Furthermore, in a bid to address one of the philosophical goals of education in Nigeria, that is the need for functional educational towards the promotion of a progressive and united Nigeria, the National Policy on Education (NPE 2009) introduce information and communication technology into the Nigeria school system alongside emphasizing the provision of facilities and necessary infrastructures for the promotion of information and communication technology to make teaching and communication of ideas on electronic media easy and stress free in nature.

Conclusion

In this paper, it has been unequivocally established that teachers are critical factors in qualitative education delivery. Their training and improvement is to be enhanced since the improvement in the performance of learners is based on the improvement in teachers preparation and competence as no education system can rise above the quality of its teachers. Also there is no gainsaying in the fact that teachers are the personnel in charge of teaching and implementing educational policies designed to attain educational goals. In essence, the success of the education system depends on teachers as they are in the centre of education enterprise. A teacher is the custodian of knowledge in a dynamic teaching and learning environment, teachers must be well informed and resourceful especially in the present information technology age in Nigeria where we are building an ICT based nation.

In this paper, I emphasised the fact that teachers are the first resource to consider when it comes to teaching and learning. However, emphasis had been shifted from the teachers as the centre of learning to the child with the introduction of ICT. The current trends of moving away from the dull instructional routine that emphasize teacher dominance and excessive content coverage to a teaching and learning style which allows the engaging activities in a well-orchestrated cohesiveness and in which the teaching and learning environment quite stimulating and enriching is rapidly changing. In actual fact, at this digital age, teaching and learning the various educational activities is now evolving around the social media. The teachers are to husband the potential of ICT in improving the teaching learning content.

In final analysis, teachers accepting responsibilities and readiness to explore new grounds of impacting knowledge through the use of ICT will develop and promote effective learning process.

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