

# Restructuring Teacher Education in Nigeria towards the Challenges of the 21<sup>st</sup> Century Teaching and Learning Process

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**Abstract—** The ineluctable demands of the 21<sup>st</sup> century teaching and learning process make it imperative for every society to re-assess her teacher education to ascertain its functionality and relevance to the contemporary pedagogy. Just as the saying goes, “No nation can rise above the level of its teachers”, it is obvious that teacher education programme should be structured to be compatible with the current pedagogical implications. In view of this, this work x-rays the historical development of teacher education in Nigeria with its attending challenges.

Also, it x-rays the 21<sup>st</sup> century teaching and learning process, as well as the expectancy of 21<sup>st</sup> century teacher education with reference to the goals of teacher education programme in Nigeria. The teacher education model-mapping recommendations of the National Institute of Education, Singapore are employed to buttress the 21<sup>st</sup> century teacher education. Lastly, the work recommends that the Nigerian society should have a proactive paradigm shift from what is observed in teacher education today to the 21<sup>st</sup> century education demands-compliant teacher education.

**Index Terms—** Teacher Education, Learning Process .

## I. INTRODUCTION

Highlight The roles teachers play in the society are enormous and significant to the extent that if their training/preparation is not given adequate considerations, the society is bound to collapse. Aside playing prominent roles in the school and community, teachers, also contribute significantly to nation-building, curriculum planning and implementation, policy formulation, conflict resolution and even in the electoral process. All these roles are societal based not minding the stratum at which the teacher performs them. Invariably, developments in the society imperatively determine the tune or relevance of these responsibilities the teacher assumes. Therefore, the 21st century and its attending prospects and challenges, inevitably becomes a justifiable yardstick for measuring the relevance and efficiency of teachers' roles in the contemporary society. It should not be forgotten that teacher education is a professional education of teachers which is tailored towards attainment of attitudes, skills and knowledge considered desirable so as to make them efficient and effective in their work in accordance with the

needs of a society at any point in time (Osuji 2009). In view of this, our society Nigeria, though there are existing goals for teacher education, needs to look inwards to ascertain if the outputs of teacher education programme are really meeting up with the 21st century pedagogical demands. In a bid to buttress the above, this work will assess teacher education programme in Nigeria, the 21 century teaching and learning process and 21st century teacher education, as well as the imperative to restructure teacher education programme in line with the 21st century skills.

## II. TEACHER EDUCATION IN NIGERIA

Though this work is not dwelling on the historical perception of teacher education in Nigeria, it is imperative to mention that teacher education in Nigeria is traceable to the advent of the Christian Missionaries. Oyeleke, Akinyeye & Opeloye (2013) confirmed that the rise of modern teaching profession in Nigeria coincided with the coming of Christian missionaries who

held tenaciously to the belief that proper Christianization of Africa hinges on impartation of western education. The emergent need for evangelizers then saw to the engagement of untrained and unskilled teachers, notwithstanding that they met the demand for which they were engaged. This level of teachers dominated the teaching profession until there was a focus on Ashby Commission report on Investment in Higher Education in 1960. Osuji (2009) asserted that the report which was set up for Post-School certificate and Higher Education brought about establishment of Advanced Teacher Training Colleges (now Colleges of Education) as from 1962 to produce well-qualified non-graduate teachers to teach lower classes in secondary schools. Then from there, universities started offering degree programmes in education to produce graduate teachers and post degree programmes in education for post graduate teachers till date.

Progressively, in order to systematize teacher education to meet the societal needs, the Federal Government of Nigeria formulated the following objectives:

Teacher education shall be to:

- a. Produce highly motivated, conscientious and efficient classroom teacher for all levels of the education system;
- b. Further encourage the spirit of enquiry and creativity in teachers;
- c. Help teachers fit into social life of the community and the society at large and enhance their commitment to national goals;

d. Provide teachers with the intellectual and professional background adequate for assignment and to make them adaptable to changing situations; and

e. Enhance teachers' commitment to the teaching profession. (National Policy on Education, 2013:28)

In view of the above goals, Nigeria as a society, traditionally has expected and set high and stringent ideals for teachers to follow. Kolo (2009) holds the view that teachers essentially need to be lifelong learners themselves in order to shoulder the heavy responsibilities entrusted to them and be capable of positively influencing the students in their thoughts, behaviours and lifestyle. Jokthan (2012:175) posits:

Teachers are expected to be prospectors, inspirers, critics and appreciators of excellence and enemies of shoddiness. They cannot be aloof but should not be too bold. They must give as well as receive and most of all they must be above reproach, indefatigable, dedicated, zealous and self controlled.

Apart from the above characteristics expected of a well trained teacher by the society, it is equally expected that one who has acquired teacher education should have a profound knowledge of his/her subject area, exhibit prowess in instructional delivery as well as in other school and community related activities. But these expectations are defiled when one tends to establish a relationship between the output of teacher education programme and its national objectives. Afe (as cited in Jokthan, 2012) confirmed that our teacher education programme has been deficient in providing teachers with intellectual and professional background adequate for their assignment in the society. In the same vein, Adeosun (2014:105) affirms:

Teacher training institutions have been critiqued for their inability to produce teachers who are properly grounded in pedagogy and content as well as having the ability to collaborate professionally in a working environment. Educationist observed that the transition from academic theories in universities to classroom practice has often been very sharp suggesting that student-teachers are not often properly groomed to put into practice current pedagogy and interactive skills that have been theoretically learnt.

### III. CHALLENGES OF TEACHER EDUCATION IN NIGERIA

Teacher education in Nigeria has not been rosy and that justifies the discrepancies between the desired objectives and the output of the programme. The challenges/shortfalls have become so systemic that one would be tempted to neglect the recommendations from many scholars and studies, since the polity of the country gives a lip praise attention to them. Summarizing the reports of Education Sector analysis, National Teacher Education Policy, Education Support Programme in Nigeria, and Input Visit, as well as the studies of Ajeyalemi and Okebukola (as cited in Adeosun, 2014) the following are evident in teacher education in Nigeria:

1. There is no congruity between teacher education curriculum and the new age teaching and learning environment which is characterized by constructivist learning, learner-centered instructions and integrating

technology into the pedagogical process.

2. A gap exists between the curriculum taught to teacher trainees and the actual teaching experience and environment they are exposed to in schools.

3. The supposed professional education emphasizes on content delivery, examination and certification at the expense of creativity, innovation and research which are indices of lifelong learning.

4. The only course in NCE curriculum which is Primary Education Studies explicitly set out to prepare students for teaching in the primary school has always gained low enrolment, leaving primary schools with dearth of teachers.

5. There is low quality and quantity of input in teacher training programmes.

6. Learning materials are not consistently available and this makes written materials not to play a coherent and pervasive role in the provision of a strong cognitive and structure-giving basis for the development of the required professional knowledge, skills and attitude of an effective teacher.

7. Lack of professional development opportunities for teachers.

8. The varying levels of qualifications characterizing teaching profession in Nigeria makes it heterogeneous unlike other established professions who have equivalent level of education and training. For instance private schools' teaching force are predominated by pre-service teachers.

In a more succinct manner, Okoli, Ogbonda & Ekpefa-Abdullahi (2015) highlighted that the contemporary Nigerian teacher education are inhibited by problem of quality assurance, insufficient funding, lack of personnel, poor facilities, lack of commitment by government, poor supervision, faulty selection process and poor teacher education curriculum.

### IV. THE 21ST CENTURY TEACHING AND LEARNING

The 21st Century society has been characterized by knowledge- driven economies, rapid information exchange and fast –moving communication technologies. Aside these, there are a lot of challenges facing our communities, along with instant connectivity to a global society; and civic literacy could not be relevant or applicable to the curricula in our schools. In a country like Nigeria today, apart from global warming, pandemic diseases and financial meltdown, terrorism (Boko Haram), agitations for sovereignty, corruption, electoral malpractices and other emerging tribal conflicts are just a few of the issues today's students will be called upon to address.

In view of the above exigencies, education must focus on nurturing the whole child/learner morally, intellectually, physically, socially and aesthetically to face these looming challenges inherent in today's society. Students need to acquire new knowledge, skills and dispositions to ensure their survival and success as individuals, as members of the community, as citizens of a nation (American National Education Association (no date). Boholano (2017) posited that the school system must be outfitted with a prerequisite of ICT resources; and curriculum must be designed to promote a

collaborative learner-centered environment to which students will relate and respond. 21st century learner must possess both self-direction and an ability to collaborate with individuals groups and machines (McCoog as cited in Boholano, 2017). It is obvious that pattern and focus of teaching and learning in the 20th century cannot meet with the demands of the 21st century. Referencing America's system of education which is not far from Nigerian system, NEA (no date:5) posits:

In manufacturing and agrarian economies that existed 50 years ago, it was enough to master the "Three Rs" (reading, writing, and arithmetic). In the modern "flat world", the 'Three Rs' simply aren't enough. If today's students want to compete in this global society, however, they must also be proficient communicators, creators, critical thinkers, and collaborators (the four Cs).

The Partnerships for 21st Century Skills 2008 as cited in Adeosun (2014: 108) identified the following skills to be acquired by 21st century learners:

- A blend of content knowledge, specific skills, expertise and literacy
- Critical thinking, problem solving, creativity, flexibility, effective communication and collaboration ,self-directed learning as a base for core academic knowledge; and
- Skills needed to make the best use of rapid changing technologies and vital to working and living in an increasingly complex, rapidly changing global society.

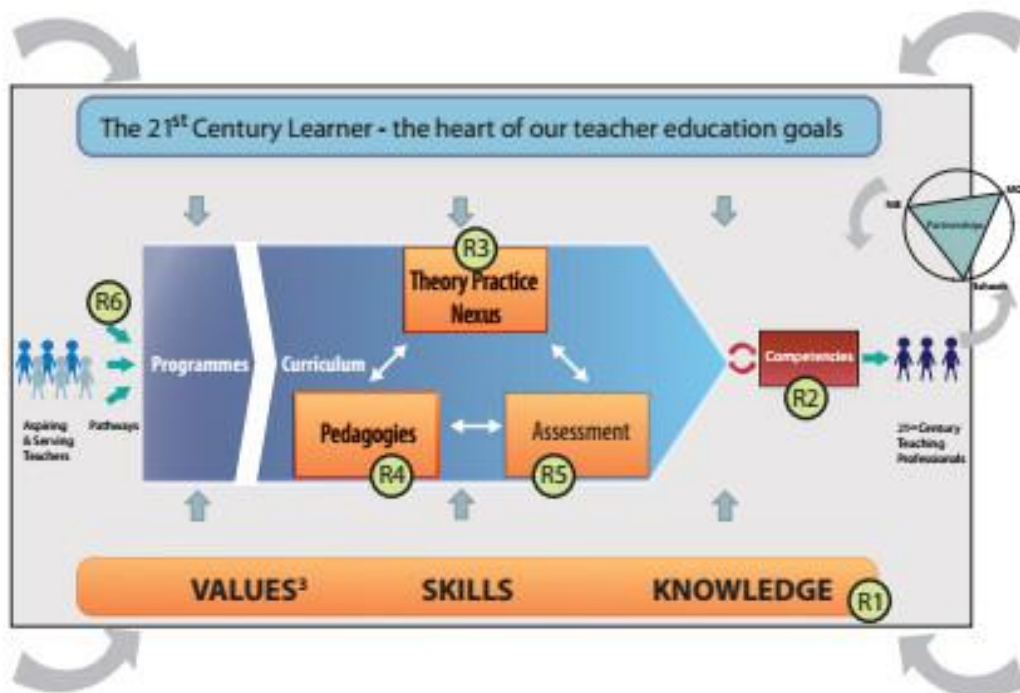
Invariably, the 21st century pedagogy should give credence to producing individuals that would possess skills in communication, creativity, critical thinking and collaboration. Learning contents should be loaded with knowledge and skills relevant to the inherent challenges of the 21st century. Teaching and learning activities should be

problem solving based as well as teachers' pedagogical approaches. Learners should be exposed to learning experiences that will be relevant to the realities of the looming societal challenges; making them conscious of the fact that they are acquiring the skills to remedy those challenges. Classroom instructions and learning packages should be driven by the fast-moving communication technologies.

#### V. 21ST CENTURY TEACHER EDUCATION

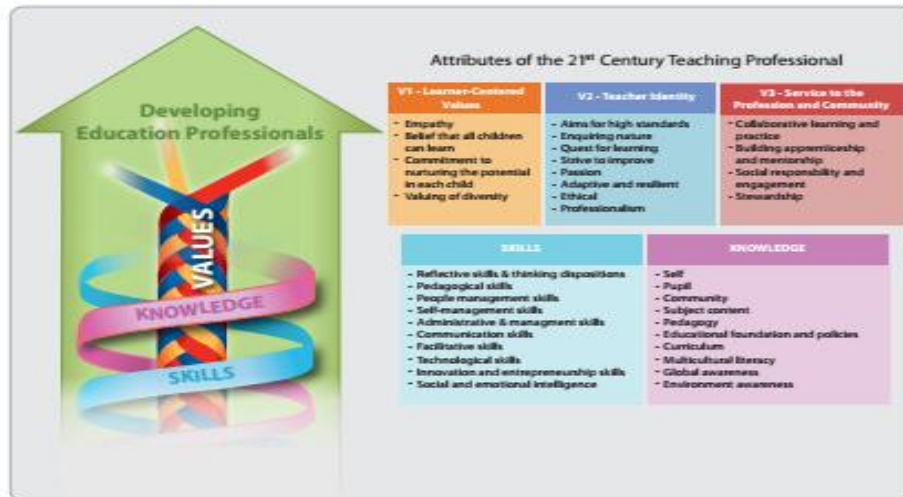
The 21st century learning calls for 21st century teaching. 21st century teaching involves a balance of objectives of a teacher with the needs and input of the students (McCoog as cited in Boholano, 2017). The demands of the 21st century society teaching and learning as discussed above necessitate the objectives of the 21st century teacher education. It is truism that the quality of the teaching force determines the quality of education. Thus, as the standards for the 21st century learner/child are raised, the 21st century teachers will also need the right values, skills and knowledge to be effective practitioners who will bring about the desired outcomes of education.

To elucidate what is expected of an ideal 21st century teacher, the National Institute of Education Singapore (Programme Review and Enhancement 2008-2009) designed a model for teacher education. This model put forward six broad recommendations that are intended to enhance the key elements of teacher education, including the underpinning philosophy, curriculum, desired outcomes from our teacher and academic pathways. The six broad recommendations are labeled "6Rs" (R1, R2, R3, R4, R5, R6) in the table below.



**Fig. 1: NIE Teacher Education Model and the 6key recommendations**

National Institute of Education, Singapore (2009)



**Fig. 2: New Value Skills and Knowledge (V3SK) Model**

National Institute of Education, Singapore (2009)

**A. R1 – The New V<sup>3</sup>SK**

The V<sup>3</sup> represents the three value paradigms (learner-centered values, V<sup>2</sup> Teacher Identity and V<sup>3</sup> Service to profession and community). A professional teacher should put learners at the center of his/her teaching work; considerations should be given to learners’ development, differences, emotional status and abilities while planning and delivering instructions. The second values category V<sup>2</sup> gives attention to teachers’ identity and personality. Teachers are expected to have high standards and strong drive to learn in order to keep abreast with the incessant changes in the

educational milieu, so that they would possess the appropriate skills and knowledge to measure up with the 21<sup>st</sup> century students’ needs. The third paradigm V<sup>3</sup> sees to the values of service to the teaching profession and the immediate community. Teachers here are expected to be committed to their profession through active collaborations; and should strive to become better practitioners to benefit the teaching community. The S and K re present the 21<sup>st</sup> century skills and knowledge surrounding the values a professional teacher should have.

**Organisation of the GTCs**

Performance Dimensions	Core Competencies
Professional Practice	<ol style="list-style-type: none"> <li>1. Nurturing the child</li> <li>2. Providing quality learning of child</li> <li>3. Providing quality learning of child in CCA</li> <li>4. Cultivating knowledge:                             <ol style="list-style-type: none"> <li>i. with subject mastery</li> <li>ii. with reflective thinking</li> <li>iii. with analytic thinking</li> <li>iv. with initiative</li> <li>v. with creative teaching</li> <li>vi. with a future focus</li> </ol> </li> </ol>
Leadership & Management	<ol style="list-style-type: none"> <li>1. Winning hearts &amp; minds                             <ol style="list-style-type: none"> <li>i. Understanding the environment</li> <li>ii. Developing others</li> </ol> </li> <li>2. Working with others                             <ol style="list-style-type: none"> <li>i. Partnering parents</li> <li>ii. Working in teams</li> </ol> </li> </ol>
Personal Effectiveness	<ol style="list-style-type: none"> <li>1. Knowing self and others                             <ol style="list-style-type: none"> <li>i. Tuning into self</li> <li>ii. Exercising personal integrity</li> <li>iii. Understanding and respecting others</li> <li>iv. Resilience and adaptability</li> </ol> </li> </ol>

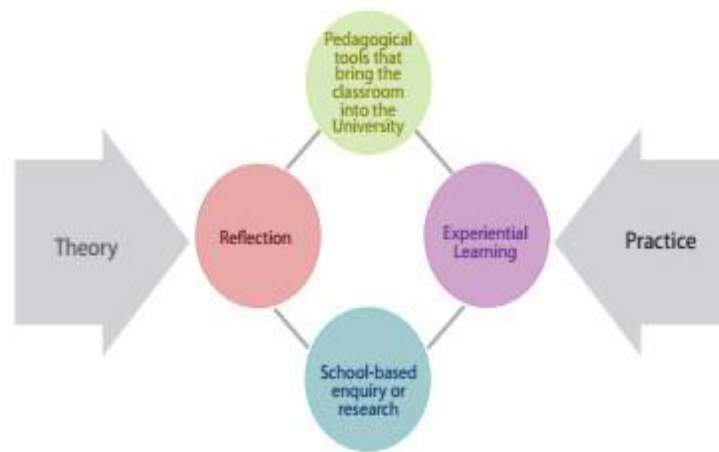
**Fig.3: The Graduant Teacher Competencies Framework**

**B. R2 Graduant Teacher Competencies**

This encompasses the professional practices of graduates of teacher education; the leadership and management of these graduands, as well as their personal effectiveness. The graduands of teacher education are expected to carry-out

certain professional activities in relation to learners’ education; manage those activities with their affiliations and equally maintain their personalities as professionals. There should also be regulatory partnership between the practicing

teachers and the stakeholders in education such as the Ministry of Education.



**Fig.4: Theory-Practice Nexus**

National Institute of Education, Singapore (2009)

**C.R3- Strengthening the Theory – Practice Nexus**

The model above upholds the need to achieve balance between theoretical knowledge and practice based learning, as the gap is inimical to teacher education programme. The common approaches to bridge this gap according to the

model are reflection, experiential learning, school-based research or inquiry projects and pedagogical tools that bring the classroom into the university.

Values <sup>3</sup> Skills Knowledge (V <sup>3</sup> SK)							
Values -anchored, Deep Knowledge and Rich Pedagogical Skills							
Examples of Teaching Practices	Core Pedagogical Approaches						
	Didactics Demonstration Modelling	Inquiry	Reflection	Simulation Authentic	Experiential Clinical Practicum	Self-Directed	Collabrative
GESL			●		●	●	●
Microteaching	●		●	●			
School Based Practicum		●	●		●		
Problem-based Learning		●	●			●	●
Case Studies		●	●				●
E-portfolio			●			●	
Blended Learning	●	●	●	●			
Role Playing	●		●	●	●		

Graduand Teacher Competencies (GTCs)

**Fig. 5: Map of Pedagogical Approaches and Practices in Teacher Education Programmes**

National Institute of Education, Singapore (2009)

**D.R4 - Programme Refinement and an Extended Pedagogical Repertoire:**

Acknowledging the dynamism in teacher education programmes and the antecedent need to update the content, the model upholds that in the 21st century, there is need to put in place a mechanism for greater sharing ideas and

articulation. Recognition in the changing nature of content should be increased in terms of accessibility, advancement and conditions for bringing about new learning. Also, pedagogies and assessments need to change given the changing nature of knowledge, learning, profile of learners and new environment.

**E.R5 – Assessment Framework for 21st Century teaching and Learning**

The model captures the establishment of assessment framework for teaching and learning to address the need for producing teachers who have assessment literacies and who are able to adopt the best practice in classroom to effectively evaluate students' outcomes

**F.R6 Enhanced Pathways for professional Development**

The model embraced the need to attract the best and the brightest ways to make teaching a profession of choice. A staged approach is proposed for implement of a 2- year full-time PGDE-Master's programme and a 4+1 year accelerated Bachelor-Master's programme for the top 10% of the cohort. This approach is proposed to determine and establish the basis for certifying professional teachers.

**VI. IMPERATIVES FOR 21ST CENTURY TEACHER EDUCATION IN NIGERIA**

Looking at challenges and exigencies in the contemporary Nigerian society as a result of 21st century globalization and internationalization, as well as other looming political, social and economic worries, it leaves no doubt that there should be a crucial need to reassess the nation's education, particularly the education of teachers who are expected to transfer the needed values, knowledge and skills to others. Besides, a review of the challenges of teacher education programmes and the corresponding criticisms against the programmes as earlier discussed in this work still bring dissatisfaction about the programmes. Iwuamadi and Anyanwu (2016) affirmed that it is through education that the society could meet the challenges of these changes. They equally suggested that the challenges and impacts of globalization, high technology, economic transformation, international competition and local development in the new century could be tackled if there are reforms and innovations in teacher education system aiming at promoting best practices and to meet up with the imperatives for 21st century education which are increased capacity and efficiency, improved effectiveness, easy accessibility and a competitive mindset.

It is worthy of note to acknowledge the Federal Government efforts, in terms of formulation of policies and setting of goals for teacher education programmes in Nigeria; establishment of National Teachers' Institute Kaduna (1978) through Distant Learning System (DLS), to provide academic programmes that not only upgrade teachers' qualifications but would also enhance the development and professional certification of teachers. Also, ensuring that both pre-service and in-services teacher education programmes are offered in the universities, colleges of education and even in polytechnics with varying tags as distance education, sandwich and part-time programmes; and establishment of regulatory bodies like National Commission For Colleges of Education (NCCE) and Teachers Registration Council of Nigeria (TRCN) saddled with the responsibility of determining what standards of Knowledge and skills to be attained before registering as a teacher and other duties meant to promote the image of Nigerian teachers. Aside these

commendable efforts from the government, the programmes still cannot measure up with the goals for which they are designed for. Those who have acquired teacher education are expected to be academic specialists, methodologists, character trainers, counselors/confidants, curriculum developers, diagnosticians, facilitators, administrators, evaluators, public relation officers, professionals etc (Iwuamadi & Anyanwu 2016). Similarly, with the rapid development in technologies, rapid exchange of information and fast moving communication characterizing the 21st century, coupled with the following skills expected to be developed by contemporary students/learners: proficient communicators, creators, critical thinkers, and collaborators (The Four Cs of the 21st Century), there seems no congruity between the potentials of teacher education programmes output and achievement of the aforementioned. Oyeleke et.al (2013) agrees to this when he says, "Teachers seem not to have demonstrated competence in instilling creative ability in the learners at any educational level".

**VII. EXPECTANCY OF TEACHER EDUCATION IN THE 21ST CENTURY NIGERIA**

Just as it is stated in fourth of the goals of teacher education," to provide teachers with the intellectual and professional background adequate for their assignment and to make them adaptable to changing situations" (NPE,2013), teacher education programmes are expected to produce professionals endowed values, knowledge and skills that reflect today's society, so that they can reproduce critical thinkers, problem-solvers, creators and collaborators that will measure up with 21st century demands. Education should not be a mere reflection of social and economic forces at work in the society, it should also be an important means of shaping the socio-economic and cultural forces and determining the direction of their growth. There should be circularity in the interrelation of education and a range of other human and social factors (Singh, 1991). Invariably, teacher education curriculum in Nigeria should not only reflect the contemporary challenges in the Nigerian society, it should be structured to shape these challenges taking cognizance of their resultant exigencies and determining direction of growth.

Jokthan (2012:178) having examined the challenges of teacher education in Nigeria made the following contributions:

1. Teacher education in the 21st century should provide opportunities for teachers to have appropriate knowledge and skills to meet the new needs of school and society, most particularly as a result of increasing globalization and the use of information and communication technologies.

2. Newly recruited teachers should undergo a systematic induction programme to make adequate provision for professional development of teachers.

3. Teacher education should focus on training teachers to be reflective in practice, be active in learning and be innovative, creative and partnership building.

4. At higher education, the personnel who train teachers or eventually take up teaching in tertiary institutions should be

subjected to evaluation by students in both content and personality.

5. The curriculum needs to be reviewed to ensure that it supports the development of the above.

In addition to the above, the evaluation of the personnel should be extended to evaluation of methodologies. Lecturers who train teachers should discard lecture method and put into practice those pedagogical approaches they are transferring as knowledge and skills to trainee teachers.

Succinctly put, Iwuamadi and Anyanwu (2016) suggested the following as best practices for the 21st Century teacher education in Nigeria:

- Teacher education curriculum should focus on Contextualized Multiple Intelligence and learning ability, students' learning and development; and school's development. This will offer teachers ample opportunities to individualize, localize and globalize learning and teaching.

- Teacher education curriculum should have global relevance and exposure; world-class material and related to technological, economical, political, cultural, and learning globalization.

- The curriculum should also have local and community relevance to offer pre-service teachers opportunities to localize teaching and learning.

- The curriculum should be flexible and adaptable in terms of learning targets, contents, methods, schedules to meet the developmental needs of individual teachers.

- Pedagogical practices should embrace the use of information communication technology; facilitate teachers' life-long learning, offer teachers multiple sources of learning, encourage a local and global network of learning, and should equally be enhanced with learning World-wide IT pedagogical environment and other meaningful learning infrastructures.

### VIII. CONCLUSION

The 21st century society does not only need mouthwatering policy-statements, it requires a proactive paradigm shift from what it used to be to what it should be. Placing side by side Nigerian policy-statements on teacher education and today teacher education in Nigeria, it is obvious that the gap would add to the challenges of our time. Invariably, the nature of teacher education in Nigeria with its attendant worries as discussed in this work and the 21st century demands call for a proactive restructuring of the programme. Complementing the teacher education expectancy discussed in this work, teacher education programme should be given the needed professional attention in terms of policy implementation and outfitted with the 21st century skills. The stakeholders should realize that teacher education is a determinant to a knowledge-based society and do the needful to avert giving lazy teachers and the lip-servers in the teaching profession justifications for their inadequacies.

### REFERENCES

- [1] Adeosun, O (2014) *Teacher education programme and the acquisition of 21<sup>st</sup> century skills: issues and challenges in Nigeria*. Retrieved from [home.hiroshima-u.ac.jp/cice/2014/03](http://home.hiroshima-u.ac.jp/~cice/2014/03)
- [2] Boholano, H B (2017) Smart social networking: 21<sup>st</sup> century teaching and learning Skills. *Research in Pedagogy*, 7(1), 21-29.

- [3] Federal Government of Nigeria (2013) *National Policy on Education* 6<sup>th</sup> edition. Lagos. NERDC
- [4] Iwuamadi, F N & Anyanwu, C U (2016) 21<sup>st</sup> century innovation best practices in Practices in pre-service teacher education: Nigerian perspectives. *International Education Journal*, 10(1), 51-61
- [5] Jokhtan, E T (2012) Teacher and teacher education in the 21<sup>st</sup> Century-the Challenges. *JORIND* 10(2) Retrieved from [www.ajolinfo/journals/orind](http://www.ajolinfo/journals/orind)
- [6] Kolo, I (2009) A sustainable road map for the education sector in Nigeria. *Leadership Nigeria*, February 6.
- [7] National Institute of Education (2009) *A teacher education model for the 21<sup>st</sup> Century*. A Report by the national Institute of Education Singapore
- [8] Okoli, N J, Ogbondah, L & Ekpefa-Abdullahi, J (2015) Preparing teachers for the contemporary Nigeria. *Journal of Education and Practice*, 6(14), 129-134
- [9] Osuji, S N (2009) Teacher education curriculum in Nigeria in the perspectives of Life-long education. *The Journal of International Social Research*, 2(8), 296-301.
- [10] Oyeleke O, Akinyeye C O & Opeloye B A (2013) A critique of teaching profession and teacher education in Nigeria. *International Journal of Humanities and Social Science*, 3 (5) pp 267-273.
- [11] Singh, R R (1991) Education for the twenty-first century: Asia-Pacific perspectives. *APEID* Thailand, UNESCO.