

Teacher Education and its Relevance to 21st Century Secondary School Education in Nigeria: The Perspective of an Educational Administrator

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Abstract

This paper focuses on exploring the relationship between teacher education variables and educational requirements of students in 21st century Nigeria. The correlational research design was adopted in the study. A total of 273 senior secondary school teachers took part in the study. Random sampling technique was used to select the teachers through balloting. A validated researcher designed 47-item instrument which was used for data collection. The reliability of the instrument was established using the Cronbach alpha method to obtain an index of 0.83. Seven research questions and three hypotheses guided the study. Mean, standard deviation, and multiple linear regression analysis were used for data analysis. The findings among others established the fact that the current content of teacher education is relevant in meeting the professional training needs of teachers in the 21st century Nigeria (M=3.12, SD=0.41), the extent of the current content is relevant in meeting best practices of teacher education in 21st century Nigeria (M=2.96, SD=0.50), and the extent of the content of national policy on teacher education is relevant to 21st century Nigeria education (M=2.65, SD=0.56), which were rated above average. The educational requirements of students in 21st century Nigeria was also rated moderately satisfactory (M=2.80, SD=0.44). There were respectively positive, strong, and significant relationships between current content of teacher education (Beta=0.152, t=2.881, prob=0.004), best practices of teaching (Beta=0.146, t=2.884, prob=0.004), teacher education policy (Beta=0.377, t=8.229, prob=0.000) and the educational requirements of students in 21st century Nigeria. It was recommended, among others, that the current content of teacher training programmes should continue to link with the knowledge needed in the 21st century.

Keywords: Teacher education, relevance, 21st-century secondary school education, Nigeria

INTRODUCTION

Nigeria has consistently maintained that education is the chosen foundational vehicle for national development and social change. To achieve this, the individual person, the citizen who must acquire appropriate skills, mental, physical, and social abilities and competencies, is the target and primary “persona” to cause the transformation of society (FRN, 2014). One of the goals of education in Nigeria is the indulgence of the individual into the immediate community, the Nigeria society, and the world to face challenges of the time while setting agenda for the future. The learner in Nigeria, like his counterpart all over the world, is faced with national issues and international concerns that must be addressed. There are malaises such as unemployment, corruption, ethnicity, racism, illiteracy, child- trafficking and abuse, diseases, terrorism, shrinking economies, insecurity, forced migration, wars, religious extremism, food insecurity/ hunger and starvation, violation of human rights, diminishing values in democracies, oppression of women and children, the marginalization of the weak, minorities and emphasis on proliferation arms and armament (Halsey, Lauder, Brown & Stuart-Wells, 2007; Obanya, 2004; <https://en.m.wikipedia.org> 26/04 2018). There are also issues of environment, climate change, desertification, and deforestation. In appreciation of these challenges, the then Minister of Education in Nigeria, Malam Ibrahim Shekarau, in his Foreword to the National Policy on Education 2014, stated that events at both national and global level such as trade liberalization, globalization, global citizenship, and transformative democracy made it imperative for Nigeria’s policy on education to reflect and be aligned to goals of education in a global context (Lauder, Brown, Dillabough, & Halsey, 2006; FRN, 2014). Beyond the borders of Nigeria, there have been international initiatives to address these global challenges. They include: The Millennium Development Goals (MDGs), Sustainable Development Goals (SDGs) (<https://www.un.org>>education, 26/04 2018), The Education For All, Education for the 21st Century, Global Education First Initiative, 2012 (www.unesco.org/new/gefi, 26/04/2018), United Nations Children Education Fund (<https://www.unicef.org>, 26/4/2018), African Education Initiative (www.nef3.org, 26/4/2018), Education For All in Africa (www.unesco.org , 26/4/2018), etc.

What knowledge, skills, and competencies do learners need to equip themselves with to live, work, and function effectively in the 21st century Nigeria and the world?

In spite of the existence of abundant natural and material resources in various countries of the world, and the enormous input they constitute to

development, education has always been regarded as the foundation for sustainable development (Brende, 2015). The reason is not far-fetched. Human capital drives all developments and, therefore, controls all the inputs needed and necessary for the development and transformation of any society. If this is true, it becomes imperative that every society must educate its citizenry on skills, knowledge, and competencies that equip them to address those fundamental malaises in the society. The question now is what are the skills, knowledge, and competencies needed by the learners to live, work, and function in their society in the 21st century?

Consequently, the skills, knowledge, and competencies are (1) life skills and (2) innovation skills and information technology skills. These skills are clearly identified as: problem-solving, critical thinking, creativity, analytical ability, communication, collaboration, leadership ability, awareness of national and global issues, adjustability, flexibility, cultural and information literacy, civic and social responsibility and enterprise (Nigeria's National Policy on Education, 2014; UNESCO, 2015; American Association of Colleges of Teacher Education). Thus, the partner for 21st century skills include: The International Baccalaureate, Common Core Standards and The Global Digital Citizen Foundation (Watanabe-Crockett, 2016; Hanover Research, 2011).

To acquire the skills listed above within the school setting, the teacher is a critical factor and the dynamic centre from where teaching and learning activities begin. Teachers are responsible for laying the scaffold for the cognitive, affective, and psychomotor development of learners and they further assist parents in helping their children/wards to define their career paths and develop their special talents and abilities (Anashe, 2016). The teacher's responsibility is to blend the learners' skills and knowledge to be able to exist and live, work, coexist, and assert their humanity in a world that is gradually becoming politically, economically, and socially a close-knit of nations. The teacher is able to take on these roles in the 21st century challenging educational space called the school. He also needs effective preparation and defined path for sustaining required capacities, knowledge, skills, and social and professional values (Ubi & Edet, 2013). For such teachers, what should be the content of their education that connects with the requirements of the learners?

The Content of Teacher Education and its Relevance to Learners Needs in the 21st Century

Education in the 21st century has its challenges not for the learners only, but for policy makers, curriculum experts, administrators, parents, community, and teachers as well. While the tasks before each of these categories have their dimensions and implications, the challenges faced by

teachers are unique based on the fact that the teacher is charged with the execution of the curriculum which is fundamental to the learner and the learning process (Obanya, 2004). The teacher who educates for the 21st-century skills, according to Obanya (2004, pp. 84-87) and National Policy on Education (2014, p.43-45), is faced with executing curriculum that must be culture-faceted, one open to international/global influences, and creativity centered. Another consideration here is the insight as to what should be the constituents of teacher education. It has to embed nationally and internationally accepted professional knowledge, professional best practise (with cross-cutting abilities, values, attitude, and conduct), and deliberately designed policy defining career growth and advancement for the 21st-century teacher (FME, 1993). In other words, the 21st-century teacher must be completely knowledgeable in regards to content, pedagogy, and professional collaborations necessary for productive learning, work, and the life and existence of learners in the 21st century. The teacher's education must also contain information literacy, knowledge and use of new technology in the classroom, and should be designed as a lifelong process (Adeosun, 2014).

Education/ Training of the Teacher

In Nigeria, would-be teachers and practicing teachers that requires retraining are trained and educated in Colleges of Education, Institutes of Education, National Teachers Institutes, Schools of Education in Polytechnics, National Institute for Nigerian Languages, National Mathematical Centre Universities of Education, and/or in the Faculty of Education in conventional universities. Depending on the certificate sought after, they are exposed to training and education that lasts three or four years. Those attending Colleges of Education and Institutes spend a minimum of three years and graduate with the Nigeria Certificate in Education (NCE). Those who seek teacher education in the university, spend a minimum of four years to obtain a first (Bachelor) degree in education (FRN, 2014, p. 43-45; Jokthan, 2012; Adeosun, 2014; FME, 1999).

The Content of Teacher's Professional Education

The content of teacher education that bears relevance in the present, according to Okoli, Ogbondah and Ekpefa-Abdullahi (2015), FRN (2014), and FME (1999), includes:

- Knowledge of the subject matter, current research, and knowledge direction in the subject area.
- Knowledge of learners' characteristics, aptitudes, and options.
- Classroom characteristics.
- Pedagogical knowledge.

- Cross-cutting instructional and methodological strategies and skills needed to show interconnection amongst knowledge areas.
- Knowledge and skills in teaching in pluralistic and multicultural society.
- Strategies for effective evaluation of learning materials, instructional techniques, and the learners and even the teacher themselves.

Generally, these areas are the main focus of the teacher's curriculum. It is expected that teachers who have received education on these areas should execute curriculum at the secondary school level (Ubi & Edet, 2013; Ololube, 2009). Additionally, the knowledge areas mentioned above are critical to teacher's competencies and quality. However, Adeosun (2014) has argued that the Teacher training curriculum in Nigeria lacks in its scope in equipping teachers with the capacity to introduce learning strategies such as "constructivist learning, learner-centered instructions as well as bringing and connecting technology into learning". Again, Adeosun's observation that a huge gap exists, between what teachers learn while in training and the reality on the ground in the 21st century, causes a fundamental deficit to learners' requirements and their ability to prepare for challenges in the society. Besides the quality of the content of Teacher education, Ahmadi and Lukman (2015) raised the issue of inadequate teachers in Nigeria's secondary schools to teach the new secondary school curriculum developed by National Educational Research and Development Council. To address the challenges of the 21st century through education, 42 subjects and 34 vocational, trade and entrepreneurship courses were introduced without the commensurate quantity and quality of teachers to teach them. Therefore, this completely negates the position and proposal of the National Policy on Education (FRN, 2014).

Best Practices Content of Teacher Education

Best practices in teaching are seen as providing would-be teachers with skills of motivating and creating an enabling environment when they teach and carry out other responsibilities in the process of achieving the goals of the school and the objectives of the learners. It entails the facilitation of the skills of teachers in deploying strategies, techniques materials, and technologies that elicit learners' participation/engagement, cooperation/teamwork, and inquiry. Teachers are equipped to be able to set out clear goals, define learning outcomes, and put in place dynamic evaluation mechanism that ensures learners have their feedback (Missouri State, 2017; Lakshmi, Rana, & Hendrick, 2007; Marzano 12 Teaching Best Practices, 2015; Public Schools of North Carolina Department of Public Education, 2006). Nigeria's National Policy on Education (FRN, 2014) clearly states in one of its goals that would-be teachers would be given an education that develops their creative, analytical, and critical thinking skills. Teachers should also gain knowledge of

the society they find themselves in order to appreciate the characteristics and challenges learners bring to the learning environment (Obanya, 2004). Teachers who receive education and training in Best Practices are expected to impact their knowledge with simplicity when they teach. However, there are factors that have a significant positive effect on the teacher's skills and ability in this direction. These factors include teacher friendly environment, availability of facilities, availability of instructional aids and materials, technologies, teacher welfare, self-goal setting policy, and quality assurance programme (Okenjom, Ogar, Bake & Eze-Anyim, 2016; Obidike, 2016). In addition, the presence and professional deployment of these factors can enhance Best Practices in schools (Timilehin, 2012).

However, findings from studies across the different regions of Nigeria regarding the state of facilities in secondary schools are quite revealing. In some states of Northern Nigeria such as Sokoto and Bauchi, the initial attempt to strengthen education at the basic levels by U.S Agency for International Development (USAID) through Northern Education Initiative Plus Program has met various challenges of poor teaching quality and motivation as well as poor school facilities (Lovenburg, 2017). In a study assessing School Facilities in Public Secondary Schools in Delta State, southern Nigeria, Asiyai (2012) reported that existing facilities were in poor states because of overuse and lack of maintenance. Generally, the situation is similar all over the country. A study by Akindele (2013) showed that secondary schools faced enormous challenges that affected the quality of teaching. They include decay in facilities, low-quality teachers, inadequate funding, and a high rate of indiscipline among staff. The implication of these findings is that Best Practices will be compromised.

Policy on Teacher Education

Teacher Education is a critical factor in the production of quality and century compliant teachers who are relevant to the educational demands of 21st-century learners. This, therefore, means that policy on teacher education must deal with issues of curriculum, retraining, professional development, conditions of service/welfare, career path, and growth (Jokthan, 2012).

STATEMENT OF THE PROBLEM

The undeniable role of education in national development and its ability to equip the individual for life, work, and coexistence beyond national boundaries is well accepted and expected. Therefore, whether as individuals or as a nation, investments in education is expected to yield returns in diverse forms. However, in spite of the investments in education, there are still challenges of widespread poverty, unemployment, violence and crime, lack of skills for entrepreneurial development, lack of creative ability, deficiency in

information gathering, and inability to identify opportunities in their environment and beyond. This situation, therefore, has agitated the minds of Nigerians, especially parents and guardians, educational administrators, teachers, politicians, captains of industries, and other stakeholders. The questions regularly asked, given that a wide range of subjects have been introduced and curricula of education in Nigeria has been updated in line with reality of the time, is on whether or not the education that teachers receive to qualify them to teach in school is relevant to the education needs of the learners in the 21st century world dominated by liberalization and globalization. Directly then, the question is, how relevant is the content of education which teachers receive to meet the educational needs of learners in the 21st century Nigeria?

PURPOSE OF THE STUDY

The purpose of the present study is to investigate the relationship between teacher education variables and educational requirements of students in 21st century Nigeria. Specifically, the objectives of the study were to:

- Determine the extent to which the current content of teacher education is relevant in meeting the professional training needs of teachers in the 21st century Nigeria.
- Find out the extent to which the current content is relevant in meeting best practices in teacher education in 21st century Nigeria.
- Explore the extent to which the content of national policy on teacher education is relevant to 21st century Nigeria education.
- Investigate the educational requirements of students in 21st century Nigeria.
- Determine the relationship between the content of teacher education and educational requirements of students in 21st century Nigeria.
- Explore the relationship between the best practices of teaching and educational requirements of students in 21st century Nigeria.
- Find out the relationship between the content of teacher education policy and educational requirements of students in 21st century Nigeria.

RESEARCH QUESTIONS

The followings research questions guided the study:

- To what extent is the current content of teacher education relevant in meeting the professional training needs of teachers in 21st century Nigeria?
- To what extent is the current content relevant in meeting best practices in teacher education in 21st century Nigeria?

- To what extent is the content of national policy on teacher education relevant to 21st century Nigeria education?
- How can we describe the educational requirements of students in 21st century Nigeria?
- What is the relationship between the content of teacher education and educational requirements of students in 21st century Nigeria?.
- How can we describe the relationship between the best practices of teaching and educational requirements of students in 21st century Nigeria?
- What is the relationship between the content of teacher education policy and educational requirements of students in 21st century Nigeria?

RESEARCH HYPOTHESES

The followings research hypotheses guided the study:

H₀₁: There is no significant relationship between the content of teacher education and educational requirements of students in 21st century Nigeria.

H₀₂: There is no significant relationship between the best practices of teaching and educational requirements of students in 21st century Nigeria.

H₀₃: There is no significant relationship between the content of teacher education policy and educational requirements of students in 21st century Nigeria.

METHODS AND MATERIALS

Design: The correlational research design was adopted in the present study. The study intends to investigate the relationship between teacher education variables and educational requirements of students in 21st century Nigeria. The predictor variable is teacher education, whereas the criterion variable is the educational requirements of students in 21st century Nigeria.

Participants: The population of the study is all teachers in the senior secondary schools in Rivers State. A total of 300 teachers participated in the study. To select this sample, first, random sampling technique was used to select three local government areas in Rivers State. Then a random sampling technique was used to select the teachers through balloting.

Instrumentation: A validated researcher designed 47-item instrument which was used for data collection. This instrument had four sections and the sections respectively measured the current content of teacher education, current content relevant in meeting best practices in teacher education, the content of national policy on teacher education and educational requirements of students in 21st century Nigeria. The instrument measured data on a 4-point scale of Strongly Agree (4 points), Agree (3 points), Disagree (2 points), and

Strongly Disagree (SD). The reliability of the instrument was established using the Cronbach alpha method to obtain an index of 0.83.

Data Collection: Prior to the administration of the research instrument, the participants were given an orientation on the purpose of the study. After which the researcher with the assistance of two research assistants administered 300 copies of the instruments to the participants. Thus, only 273 were retrieved. This indicated 91% return rate and an instrument mortality rate of 9%.

Data Analysis: Descriptive and inferential statistics were used for data analysis. Specifically, Mean, standard deviation, and multiple linear regression were used for data analysis.

RESULTS

Table 1. Mean and standard deviation on the extent of the current content of teacher education which is relevant in meeting the professional training needs of teachers in 21st century Nigeria

S/N	The Content of Training Programmes	N=273				Mean	SD
		SA	A	D	SD		
1	The content of your training programmes has a direct link with the knowledge needed by 21st-century scholars	126	135	9	3	3.41	0.61
2	The content of your training programmes has a direct link with the skills required by learners in the 21st century	84	156	33		3.07	0.89
3	The content of your training programmes has a direct link with creative ability learners need in the 21st century	93	150	15	15	3.18	0.77
4	The content of your training programmes has a direct link with innovative ability learners need in the 21st century	78	159	3	33	3.03	0.88
5	The content of your training programmes equipped you with alternative innovative methods for curriculum delivery	84	138	30	21	3.04	0.85
6	The content of your training programmes equipped you with skills and knowledge to teach culturally, linguistically and racially diverse class of learners	72	129	42	30	2.89	0.92
7	The content of your training programmes equipped you with clinical supervisory skills	57	132	66	18	2.84	0.83
8	The content of your training programmes equipped you with skills to address environmental issues from the perspective of your subject matter	90	150	21	12	3.16	0.75
9	The content of your training programmes equipped you to develop the entrepreneurial skills of learners from the perspective of your subject matter	102	108	30	33	3.02	0.98

10	The content of your training programmes equipped you to expose learners to the direct link between learning experience and life in the society	102	129	27	15	3.16	0.82
11	Your training programmes contained learning experiences which teachers need to develop critical thinking and problem-solving ability of learners	114	132	18	9	3.29	0.73
12	Your training programmes contained learning experiences that equipped teachers with the skills to develop adequate communication for effective teaching and social interaction of learners	105	153	12	3	3.32	0.61
13	The content of your training programmes contained learning experiences which have a direct link with preparing students for flexibility, adaptability, self-decision, social and cross-cultural skills	87	150	15	21	3.11	0.82
Grand mean						3.12	0.41

Table 1 shows that the mean and standard deviation on the extent of the current content of teacher education, which is relevant in meeting the professional training needs of teachers in the 21st century Nigeria, was 3.12 and 0.41 respectively. The key extent of the current content of teacher education relevant in meeting the professional training needs of teachers in the 21st century Nigeria was that the content of their training programmes has direct link with knowledge needed by 21st century (M=3.41, SD=0.61) and was followed by the fact that their training programmes contained learning experiences that equipped teachers with the skills to develop adequate communication for effective teaching and social interaction of learners (M=3.32, SD=0.61). However, the least was that the content of their training programmes equipped them with clinical supervisory skills (M=2.84, SD=0.83).

Table 2. Mean and deviation on the extent of the current content of teacher education which is relevant in meeting best practices in teacher education in 21st century Nigeria

S/N	Best Practices Content	N=273					
		SA	A	D	SD	Mean	SD
1	Learners are actively involved in the decision of what to learn, how much to learn and how to learn	60	93	51	69	2.53	1.09
2	Learners are allowed sufficient time to learn concepts through inquiry and exploration	51	132	36	54	2.66	1.00
3	Corporative, collaborative and interactive learning is encouraged	129	120	24		3.38	0.64
4	Structured learning activities enable learners to assess their experiences and challenges, correct beliefs, and develop new practices and understanding	102	144	24	3	3.26	0.66
5	Learning experiences are directly linked to professional disciplinary contexts	87	120	42	24	2.99	0.91
6	Multiple teaching methods and modes for curriculum delivery stimulate learner's interests and motivate learners' participation.	165	78	24	6	3.47	0.75
7	Clearly articulated expectations, goals, outcomes, and courses requirements are strategies to motivate learning	147	105	12	9	3.43	0.73
8	Learners are prepared to take responsibility for their own learning, use higher order thinking skills of analyzing, synthesizing and evaluating challenges	96	75	48	54	2.78	1.13
9	Information and communication technologies are adapted for curriculum delivery	87	123	24	39	2.95	0.99
10	Learning resources are sufficiently available and employed in curriculum delivery	60	63	60	90	2.34	1.15
11	Learners' interpersonal, professional and cognitive skills are incorporated in curriculum delivery	57	159	33	24	2.91	0.82
12	Clear mechanisms for active classroom participation are designed and adopted for various learning experiences	84	105	39	45	2.84	1.04
Grand mean						2.96	0.50

Table 2 shows that the mean and deviation on the extent of the current content of teacher education, which is relevant in meeting best practices in teacher education in 21st century Nigeria, was 2.96 and 0.50 respectively. The key extent of the current content relevant in meeting best practices in teacher education in 21st century Nigeria was that Multiple teaching methods and modes for curriculum delivery stimulate learner's interests and motivate learners' participation (M=3.47, SD=0.75) and was followed by the fact that Clearly articulated expectations, goals, outcomes, and courses requirements are strategies to motivate learning (M=3.43, SD=0.73). However, the least was

that learners are actively involved in the decision of what to learn, how much to learn and how to learn ($M=2.53$, $SD=1.09$).

Table 3. Mean and standard deviation on the extent of the current content of national policy on teacher education which is relevant to 21st century Nigeria education

N=273							
S/N	The Content of Teacher Education Policy	SA	A	D	SD	Mean	SD
1	Entry qualification into the teaching profession is a 1 st degree in education	72	120	27	54	2.77	1.05
2	License/registration from a profession institution is a prerequisite for entry into profession	84	90	57	42	2.79	1.05
3	Qualifying written and oral examinations by the professional body must be passed before recruitment into teaching	144	81	27	21	3.27	0.93
4	Recruited teachers undergo a formal process of induction	141	66	21	45	3.11	1.12
5	Teachers are regularly retrained to meet the demands of 21 st -century methodology and curriculum development	69	78	66	60	2.57	1.09
6	Mentorship under experienced teachers is part of professional requirements	75	105	27	66	2.69	1.12
7	There are professional development programmes to bring teachers up to date on global education issues, knowledge and skills of the 21st century	90	111	27	45	2.9	1.04
8	Teachers are exposed to international exchange programmes	24	81	81	87	2.15	0.97
9	Conditions of service and incentives are periodically reviewed and improved upon	18	84	90	81	2.14	0.92
10	Teachers are highly motivated	30	63	108	72	2.19	0.95
11	Teachers are supported to pursue higher degrees in methods, curriculum delivery, and subject areas	39	75	99	60	2.34	0.98
12	Teachers are given administrative responsibilities	87	105	54	27	2.92	0.95
Grand mean						2.65	0.56

Table 3 shows that the mean and standard deviation on the extent of the content of national policy on teacher education, which is relevant to 21st century Nigeria secondary education, was 2.65 and 0.56 respectively. The key extent of the content of national policy on teacher education relevant to 21st century Nigeria was that qualifying written and oral examinations by professional body must be passed before recruitment into teaching ($M=3.27$, $SD=0.93$) and was followed by the fact that recruited teachers undergo a formal process of induction ($M=3.11$, $SD=1.12$). However, the least was that

teachers are regularly retrained to meet the demands of 21st century methodology and curriculum development (M=2.57, SD=1.09).

Table 4. Mean rating on the educational requirements of students in 21st century Nigeria

SN	Items	SA	A	D	SD	Mean	SD
1	Problem-solving	75	136	42	20	2.97	0.85
2	Critical thinking	57	137	66	13	2.87	0.79
3	Creativity	80	148	33	12	3.08	0.76
4	Analytical ability	105	104	30	34	3.03	1.00
5	Effective communication	88	135	29	21	3.06	0.86
6	Collaborative skills	74	80	68	51	2.65	1.07
7	Leadership ability	81	110	29	53	2.80	1.07
8	Awareness of national and global issues	95	115	27	36	2.99	0.99
9	Adjustability	30	87	82	74	2.27	0.98
10	Flexibility	31	87	90	65	2.31	0.96
						2.80	0.44

Table 4 shows that the mean and standard deviation on the educational requirements of students in 21st century Nigeria was 2.80 and 0.44 respectively. The key educational requirement of students in the 21st century Nigeria was creativity with a mean rating of 3.08 and a Standard Deviation of 0.76. This was followed by effective communication with a mean rating of 3.06 and a Standard Deviation of 0.86. Analytical ability had a mean rating of 3.03 and a Standard Deviation of 1.00, while Awareness of national and global issues had a mean rating of 2.97 and a Standard Deviation of 0.85 among others.

Table 5. Summary of multiple regression analysis on the relationship between the content of teacher education variables and educational requirements of students in 21st century Nigeria

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.895116	0.164371	5.445720	0.0000
Content of Teacher education	0.151901	0.052718	2.881377	0.0043
Best practices of teaching	0.146480	0.050788	2.884163	0.0042
Teacher education policy	0.376921	0.045805	8.228877	0.0000
R-squared	0.452867	Mean dependent var		2.802930
Adjusted R-squared	0.446766	S.D. dependent var		0.440411
S.E. of regression	0.327577	Akaike info criterion		0.620354
Sum squared resid	28.86543	Schwarz criterion		0.673240
Log-likelihood	-80.67834	Hannan-Quinn criter.		0.641584
F-statistic	74.21804	Durbin-Watson stat		2.234427
Prob(F-statistic)	0.000000			

Table 5 shows the summary of multiple regression analysis on the relationship between the teacher education variables and educational requirements of students in 21st century Nigeria. Teacher education variables were proxied by Content of Teacher education, Best practices of teaching, and Teacher education policy. When the independent variables were regressed on the educational requirements of students in 21st century Nigeria, the coefficient of determination (R-squared) value was found to be 0.452867. The value of the adjusted R-squared of 0.446766 shows that the predictor variables jointly explained about 44.68% of the variations in the educational requirements of students in 21st century Nigeria. The F-statistic of 74.21804, prob=0.000000, was significant at 1% level. The Durbin Watson statistic was 2.234427. The result further revealed that the current content of teacher education (Beta=0.151901, t=2.881377, prob=0.0043), best practices of teaching (Beta=0.146480, t=2.884163, prob=0.0042), and teacher education policy (Beta=0.376921, t=8.228877, prob=0.0000) respectively had positive strong and significant relationships with the educational requirements of students in 21st century Nigeria. Thus, this led to the rejection of the three hypotheses at .05 alpha level.

DISCUSSION OF FINDINGS

The Relevance of the Current Content of Teacher Education Variables in Meeting the Professional Training Needs of Teachers, Best Practices in Teacher Education, and National Policy on Teacher Education

The result from Table 1 shows that the extent to which the current content of teacher education is relevant in meeting the professional training needs of teachers in the 21st century Nigeria is satisfactory (M=3.12, SD=0.41). It is worthy of note that the key extent to which the current content of teacher education relevant in meeting the professional training needs of teachers in the 21st century Nigeria was that the content of their training programmes has a direct link with the knowledge needed by 21st century scholars (M=3.41, SD=0.61). This was followed by the fact that their training programmes contained learning experiences that equipped teachers with the skills to develop adequate communication for effective teaching and social interaction of learners (M=3.32, SD=0.61) among others. The implication of the findings is that the need for the training programmes, to have direct link with the knowledge needed by 21st-century learners and training programmes containing learning experiences that equip teachers with the skills to develop adequate communication for effective teaching and social interaction of learners, is a vital element in 21st-century education. This may be linked with the reason why Anashe (2016) opined that teachers are responsible for laying the scaffold for the cognitive, affective, and psychomotor development of

learners and further assist parents in helping their children/wards to define their career paths and develop their special talents and abilities.

The result from Table 2 shows that the extent to which the current content is relevant in meeting best practices in teacher education in the 21st century Nigeria was satisfactory ($M=2.96$, $SD=0.50$) based on criterion mean of 2.5. The key extent to which the current content is relevant in meeting best practices in teacher education in 21st century Nigeria was that Multiple teaching methods and modes for curriculum delivery stimulate learner's interests and motivate learners' participation ($M=3.47$, $SD=0.75$). This was followed by the fact that Clearly articulated expectations, goals, outcomes, and courses requirements are strategies to motivate learning ($M=3.43$, $SD=0.73$) among others. Nigeria's National Policy on Education (FRN, 2014) clearly states in one of its goals that would-be teachers would be given an education that develops their creative, analytical, and critical thinking skills. Teachers are to also gain knowledge of the society they find themselves in order to appreciate the characteristics and challenges learners bring to the learning environment (Obanya, 2004).

The result from Table 3 shows that the extent to which the content of national policy on teacher education is relevant to 21st century Nigeria education was moderately satisfactory ($M=2.65$, $SD=0.56$) based on criterion mean of 2.5. The key extent to which the content of national policy on teacher education is relevant to 21st century Nigeria was that qualifying written and oral examinations by professional body must be passed before recruitment into teaching ($M=3.27$, $SD=0.93$). This was followed by the fact that recruited teachers undergo a formal process of induction ($M=3.11$, $SD=1.12$) among others. The implications of the findings on the relevance of the content of national policy over the fact that qualifying written and oral examinations by the professional body must be passed before recruitment into teaching, and that recruited teachers undergo a formal process of induction, were moderately accepted. Jokthan (2012) opined that teacher education is a critical factor in the production of quality and century compliant teachers relevant to the educational demands of 21st-century learners. This, therefore, means that policy on teacher education must deal with issues of curriculum, retraining and professional development, conditions of service/welfare, career path, and growth.

The Relationship between the Content of Teacher Education Variables and Educational Requirements of Students in 21st Century Nigeria

The result from Table 4 shows that the educational requirements of students in 21st century Nigeria were rated moderately above average ($M=2.80$, $SD=0.44$). The key educational requirement of students in the 21st century Nigeria was creativity with a mean rating of 3.08 and Standard

Deviation of 0.76. This was followed by effective communication with a mean rating of 3.06 and Standard Deviation of 0.86. Analytical ability had a mean rating of 3.03 and Standard Deviation of 1.00, while Awareness of national and global issues had a mean rating of 2.97 and Standard Deviation of 0.85 among others. The teacher responsibility is to blend learners' skills and knowledge to be able to exist and live, work, coexist, and assert their humanity in a world that is gradually becoming politically, economically, and socially a close-knit of nations. The teacher is able to take on these roles in the 21st century challenging educational space. He also needs sufficient preparation and defined path for sustaining required capacities, knowledge, skills, and social and professional values (Ubi & Edet, 2013).

The result from Table 5 shows that there were respectively positive, strong, and significant relationships between current content of teacher education (Beta=0.151901, $t=2.881377$, prob=0.0043), best practices of teaching (Beta=0.146480, $t=2.884163$, prob=0.0042), teacher education policy (Beta=0.376921, $t=8.228877$, prob=0.0000), and the educational requirements of students in 21st century Nigeria. The above findings are in agreement with an earlier study by Adeosun (2014) which established that the teacher's education must also contain information literacy, knowledge and use of new technology in the classroom, and should be designed as a lifelong process. Nigeria's National Policy on Education (FRN, 2014) clearly states, in one of its goals, that would-be teachers would be given an education that develops their creative, analytical, and critical thinking skills. Teachers are to also gain knowledge of the society they find themselves in order to appreciate the characteristics and challenges learners bring to the learning environment (Obanya, 2004). Teacher Education is a critical factor in the production of quality and century compliant teachers relevant to the educational demands of 21st-century learners. This, therefore, means that policy on teacher education must deal with issues of curriculum, retraining, professional development, conditions of service/welfare, career path, and growth (Jokthan, 2012).

CONCLUSION

It worthy of note that the current content of teacher training programmes has a direct link with the knowledge needed by the 21st century. In addition, their training programmes contained learning experiences that equipped teachers with the skills to develop adequate communication for effective teaching and social interaction of learners. Multiple teaching methods and modes for curriculum delivery stimulate learner's interests and motivate learners' participation. Also, clearly articulated expectations, goals, outcomes, and courses requirements are strategies to motivate learning. The qualifying written and oral examinations by the professional body must be passed before recruitment into teaching and recruited teachers to undergo a

formal process of induction. The major educational requirements of students in the 21st century Nigeria were creativity, effective communication, and analytical ability among others. The current content of teacher education, best practices of teaching, and teacher education policy were found to be strongly related to the educational requirements of students in 21st century Nigeria.

RECOMMENDATIONS

Based on the findings of the present study, the following recommendations were made:

1. The current content of teacher training programmes should be strengthened and continued to be linked with the knowledge needed by students in the 21st century.
2. The policy on qualifying written and oral examinations by professional bodies must be strictly adhered to and implemented across the board.
3. Teachers education must emphasize the building of effective communication skills, critical reasoning, Analytical ability, and Awareness of national and global issues which are relevant among learners.
4. Skills and knowledge necessary for global inclusion must be prominent in teacher education.

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