

Assessment of Basic Education Curriculum Implementation for Achieving Sustainable Development in Kaduna State, Nigeria

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Abstract

This study was on assessment of Basic Education curriculum Implementation for achieving Sustainable development in Kaduna State, Nigeria. Three (3) research objectives, questions and hypotheses each guided the study. Descriptive survey method was used and the population for the study was 2554 which comprised all the public school teachers of Lower, Middle and Upper Basic levels in Zaria Local Government Area, Kaduna state. Out of which a sample of 333 was selected through the use of simple random sampling techniques. The three (3) Research questions were answered using the mean score and standard deviation, while t-test statistics was used to test the three null hypotheses at 0.05 level of significance. The study established that, there was no significant difference in the pedagogical methods, instructional materials and resources used and, challenges faced by male and female teachers in the implementation of Basic Education curriculum for achieving sustainable development in the study area. Based on the findings, it was recommended that, the Kaduna State Government through the ministry of education should organise workshops and seminars for teachers to be conversant with the appropriate and innovative pedagogical techniques. Provide adequate instructional materials so that teachers could use it to describe how knowledge is absorbed, processed, and retained during learning.

Key words: Basic Education, Instructional Material, Pedagogy, Curriculum Implementation Sustainable Development

Introduction

Sustainable Development Goal 4 pays particular attention to ensuring quality education at primary and secondary levels and lifelong learning for all and this can only be attained through quality implementation of the curriculum at all levels of education (Australian Government Department of Foreign Affairs and Trade, (DFAT), 2018). This is based on the fact that, effective implementation of the curriculum will help to create a more sustainable world and to engage with sustainability-related issues as described in the SDGs. Such as, the teachers require the knowledge, skills, values and attitudes that empower them to contribute to sustainable Basic Education.

As noted by the United Nations Educational, Scientific and Cultural Organization (UNESCO, 2017) effective implementation of Basic Education curriculum empowers learners to take informed decisions and responsible actions for environmental integrity, economic viability and a just society for present and future generations. Kochhar, (2008:67) defines curriculum as “the instructional and educative program through which the pupils achieve their goals and aspirations of life”. The curriculum consists of components/elements such as the curriculum intent, content, learning activities, learning experiences and lastly evaluation. All these components of the curriculum are interrelated and important for an effective curriculum implementation.

Curriculum implementation is a process that is based on the fundamental assumption of student growth and improvement of learning. The process involves aligning instructional planning with learning outcomes which are specified in the curriculum framework. Resources are selected based on usefulness in meeting learner outcomes. Instructional planning becomes the primary tool for assessing student achievement and growth, rather than textbooks and activity-based planning decisions (Shields, 2007). Basic Education which teaches literacy, innumeracy and encourages cognitive, affective and social development is a pedagogic experience shared in one form or another by majority of human beings. No matter what other educational experiences that may

follow, Basic Education is generally formative and lasting. It is at this point that the students have the greatest power to effect powerful and positive life altering change. The basic goals of Basic Education therefore, remain the laying of a foundation for life-long learning for all sections of the population, whatever be their conditions in life.

The concept of Sustainability gained its first widespread attention with the publication of the Brundtland Commission Report, the Common Future by World Commission on Environment and Development (WCED) in 1987. The commission defined Sustainable Development as, development that meets the needs of the present without compromising the ability of future generations to meet their own needs. The Sustainable Development Commission (SDC) (2004) offers an alternative definition that, Sustainable Development provides a framework for redefining progress and redirecting our economies to enable people to meet their basic needs and improve their quality of life, while ensuring that the natural systems, resources and diversity upon which they depend are maintained and enhanced both for their benefit and for that of future generations".

In the words of Newman in Nwankwo (2010) the emerging consensus shows that sustainability principles underscore the importance of education in sustainable development as to promotion and improvement of Basic Education, reorienting existing education at all levels to address national development, developing public understanding and awareness of sustainability and training. The core objective of education for Sustainable Development according to UNESCO (2003) is the promotion of values and ethics through education at different levels, in order to make an impact on people's life styles and behaviour and help to build a sustainable future.

The Jomtien (1990) Declaration and framework of Action on Education for All (EFA) detailed basic education as not a package but a process, not a question of years of formal education but a question of acquisition of skills, the foundation level that emphasizes literacy, innumeracy, basic life skills and most importantly learning to- learn skills. Basic Education emphasises learning, de-emphasizing repetition and dropouts; and as well, an essential part of broad-based policy on inclusive education. In this study, Basic Education refers to primary and junior secondary education that is meant for all children of school going age in Nigeria.

In (2001), Idoko carried out a study on evaluation of the implementation of the primary education core curriculum in Enugu State. The results of the study showed that, there are adequate number of teachers for the implementation of the primary education science core curriculum in the state; Large classes were found more in urban primary schools than in rural primary schools; The implementers of new Primary Education Science Core Curriculum (PESCC) find it difficult to teach some of the topics in the PESCC such topics include water-play, timing, dyes from plants and from soil, rain formation; lever, pulley and magnets; and the implementers of the PESCC do not employ such teaching methods as expository, general project and experiment methods and such evaluation techniques as experiment and reporting research team work and project recommended for primary science teaching and evaluation, using the PESCC.

In a study conducted by Aguokagbuo (2008) found that, the problems that militate against the effective implementation of the programme were lack of equipment; lack of fund; inadequate time for study; lack of trained instructors among others. Also, a study carried by Abubakar (2009) on evaluated the implementation of nomadic primary school social studies programme in Nigeria and its implication for curriculum renewal, revealed that, there is lack of effective supervision, poor participation of government, low parental involvement and inadequate teachers which were militating against the implementation of the programme of the curriculum.

Eleojo (2011) findings revealed that, the problems against the implementation of social studies has significant effect on its implementation at secondary school levels, the perception of other social science experts significantly affects the implementation of the subject at secondary school levels, lack of materials and facilities including current textbooks, equipped library or workshop are the greatest problem affecting the implementation of social studies at the secondary school levels, there is no adequate commitment on the part of the government to ensure appropriate

implementation of the social studies curriculum, the non availability of human resources significantly affects the implementation of social studies at secondary schools.

Francis (2011) conducted a study also revealed that, the role of government and supervision on the implementation of the objectives of social studies curriculum has significant impact on effect of citizenship of pupils in primary schools, the methods of teaching techniques that aids learning in social studies have tremendous effect on effective citizenship of pupils in primary schools and the teachers' qualification determines the level of achievement of social studies curriculum objectives for effective citizenship of pupils in schools.

Similarly, Nzekwe (2013) study showed that, school administrator participants who carry heavy workload, lack institutional autonomy, lack funds to provide teacher's needs, and are poorly paid have their professional practices negatively impacted by the implementation of the new Nigerian curriculum initiatives as they could not function well as facilitators of the curriculum implementation. Findings also showed lack of principal's support and motivation, work overload, poor remuneration, and lack of instructional materials as what made the implementation of the new Nigerian curriculum initiatives impact negatively on teachers' professional practices.

Ubah and Shu'aibu (2014) study focused on the evaluation of the implementation of Nigeria certificate in education social studies programme in federal colleges of education in north-western political zone of Nigeria. They found that, the implementation of the course contents is mostly dominated by the use of traditional techniques of instruction notably the lecture method to the detriment of other instructional strategies. Domike and Odey (2014) study established that, under funding, ecology of the classroom, acute shortage of infrastructures, lack of health facilities, lack of qualified teachers, and neglect of the mother tongue, amongst others were found to be the prime problems in the implementation of primary school curriculum in the study.

In a study conducted by Baba (2015) revealed that, there is no significant difference in the pedagogical methods for the implementation of Junior Secondary School curriculum Yobe state. This study further revealed that, most of the schools lacked instructional materials, teacher motivation, and adequate classrooms for social studies lessons. Also, most students lack interest in social studies lesson and community members have negative attitude towards social studies education. Abound of empirical studies have been conducted on implementation of curriculum primary school curriculum in social studies and other subject areas. However, none of these studies have wholly focused on implementation of Basic education curriculum in Kaduna state, Nigeria. This study therefore sought to fill this gap.

Statement of the Problem

A major curriculum imperative of Basic Education for the attainment of Sustainable development demands that schooling should be geared to preparing the young learner for living a successful life both for his own good and for the good of his community as a whole. However, the greatest challenge with the use of education to achieve sustainable development goals in Nigeria and Kaduna state in particular, is found in the implementation of the curriculum at school level. It is against this backdrop that, this study assessed the implementation of Basic Education Curriculum for achieving Sustainable development in Zaria Local Government Area of Kaduna State, Nigeria. The study was guided by the following specific objectives, that is, to:

1. assess the pedagogical methods used by teachers in the implementation of Basic Education curriculum in the study area in relation to gender;
2. find out the instructional materials and resources used by teachers in the implementation of Basic Education curriculum in the study area in relation to gender; and
3. find out the challenges faced by teachers in the implementation of Basic Education curriculum in the study area in relation to gender.

Research Questions

The following research questions were answered:

1. What are the pedagogical methods used by male and female teachers in the implementation of Basic Education curriculum in the study area?

2. What are the instructional materials and resources used by male and female teachers in the implementation of Basic Education curriculum in the study area?
1. What are the challenges faced by male and female teachers in the implementation of Basic Education curriculum in the study area?

Null Hypotheses

The following null hypotheses were tested at 0.05 level of significance:

HO₁. There is no significant difference in the pedagogical methods used by male and female teachers in the implementation of Basic Education curriculum in the study area.

HO₂. There is no significant difference in the instructional materials and resources used by male and female teachers in the implementation of Basic Education curriculum in the study area.

HO₃. There is no significant difference in the challenges faced by male and female teachers in the implementation of Basic Education curriculum in the study area.

Methodology

The descriptive was used and the population for the study comprises all the school teachers from Lower, Middle and Upper Basic level of education in Zaria Local Government Area, Kaduna state. A total population of two thousand five hundred and fifty-four (2554) was focused for the study in Zaria Local Government area (Ministry of Education, Kaduna State, 2017), while a sample of three hundred and thirty-three (333) as recommended by Research Advisor (2010) was selected from all the three (3) of senatorial zone through the use of simple random sampling techniques. The instrument titled Implementation of Basic Education Curriculum for Achieving Sustainable Development questionnaire was used for data collection. The validation of the instrument was done by basic education, curriculum and language experts, while the reliability of the instrument was established using Cronbach Alpha and reliability coefficient of 0.85 was obtained which was high enough to guarantee its use for the study. Research questions were answered using the mean score and standard deviation, while t-test statistics was used to test the hypotheses at 0.05 level of significance.

Analysis

A total of three and fifty (333) questionnaires were distributed out of which three hundred and twenty-five (325) were successfully retrieved and this was used for the analysis:

Research Question 1: What are the pedagogical techniques used by male and female teachers in the implementation of Basic Education curriculum in the study area? The descriptive statistics of mean and standard deviations were used to answer this research questions. The summary of the computation was presented in Table 1.

Table 1. Summary of mean and standard deviation on the pedagogical techniques used by male and female teachers in the implementation of Basic Education curriculum in the study area

	Pedagogical Techniques	Mean	SD	Rmk
1	Gaining the students' attention	3.03	0.86	agree
2	Reviewing relevant, previously-learned material	3.55	0.69	agree
3	Presenting the new information by linking it to previous learning	3.63	0.68	agree
4	Providing learning guidance for elaboration	3.49	0.77	agree
5	Providing time for practice and feedback	3.89	0.80	agree
6	Providing for spaced practice to enhance retention	3.48	0.88	agree
7	Establishing expectations for the students	3.55	0.69	agree

8	shifting the focus of instruction from the teacher to the student	3.63	0.68	agree
9	posing problems to students that encourage them to question assumed knowledge and understanding	3.49	0.77	agree
10	describing how knowledge is absorbed, processed, and retained during learning	3.66	0.78	agree
Cluster Mean		3.54		agree

The result in Table 1 shows the summary of item by item Mean and standard deviation analysis of the pedagogical techniques used by male and female teachers in the implementation of Basic Education curriculum in the study area. The result of analysis shows that all the items have Mean responses above 3.0, with a cluster mean of 3.54. Hence, all the male and female teachers responded that the identified pedagogical techniques were the required for implementation of Basic Education curriculum. The standard deviation ranges from 0.68 to 0.89, indicating that the mean of the respondents were not far away from the cluster mean.

Research Question 2: What are the instructional materials and resources used by male and female teachers in the implementation of Basic Education curriculum in the study area

Table 2: summary of the mean and standard deviation on the instructional materials and resources used by male and female teachers in the implementation of Basic Education curriculum in the study area

	Instructional Materials and Resources	Mean	SD	Rmk
1	Textbooks,	3.08	0.92	agree
2	handouts,	3.58	0.78	agree
3	study guides,	3.08	0.86	agree
4	Manuals.	3.45	0.85	agree
5	Charts,	3.60	0.83	agree
6.	real objects,	3.32	0.91	agree
7.	photographs,	3.47	0.73	agree
8	transparencies	3.37	0.77	agree
9	Computers with projector	3.41	0.76	agree
10.	television	3.60	0.88	agree
Cluster Mean		3.39		agree

The result in Table 2 summarizes the mean and standard deviation of the item analysis of instructional materials and resources used by male and female teachers in the implementation of Basic Education curriculum in the study area. The result shows that the mean range is 3.08 to 3.60 with a cluster mean of 3.39. This indicates the male and female teachers responded that the listed instructional materials are used for the implementation of the Basic Education curriculum. The standard deviation range is 0.73-0.92, showing the closeness of the responses among the respondents around the cluster mean.

Research Question 3: What are the challenges faced by male and female teachers in the implementation of Basic Education curriculum in the study area?

Table 3: Summary of descriptive analysis of challenges faced by male and female teachers in the implementation of Basic Education curriculum in the study area

	challenges faced in the implementation of Basic Education curriculum	Mean	SD	Rmk
1	Inadequate funding of the educational system	3.37	0.79	agree

2	Teachers lack of interest on implementation process	3.36	0.77	agree
3	Acute shortage of infrastructures	3.60	0.79	agree
4	lack of qualified teachers	3.15	0.86	agree
5	Teachers' poor understanding of the curriculum content.	3.27	0.80	agree
6	Low quality of human and material resources	3.15	0.86	agree
7	low remuneration and incentives	3.27	0.80	agree
8	problem of content delivery and wrong use of methods	3.27	0.79	agree
9	Faulty monitoring/supervision of implementation process to ensure quality control	3.22	0.85	agree
10	Non-involvement and participation of teachers in curriculum development	3.27	0.79	agree
	Cluster Mean	3.29		agree

The result in Table 3 summarizes the mean and standard deviation of the item analysis of challenges faced by male and female teachers in the implementation of Basic Education curriculum. The result shows that the mean range is 3.15 to 3.60 with a cluster mean of 3.29. This indicates that the male and female teachers responded that the listed challenges items are what is distorting the implementation of Basic Education curriculum. The standard deviation range is 0.77-0.86, showing the closeness of the responses among the respondents around the cluster mean. This indicates that there was Unisom among the male and female teachers on the listed challenges in the implementation of basic education curriculum.

Testing the Null Hypotheses

Null Hypothesis 1: There is no significant difference in the pedagogical techniques used by male and female teachers in the implementation of Basic Education curriculum in the study area. Independent sample t-test was used to test this null hypothesis. The summary of the computation is presented in Table 4.

Table 4: Summary of the t-test Analysis of the pedagogical techniques used by male and female teachers in the implementation of Basic Education curriculum
 ($N_1=150, N_2=175, df=331$)

	Pedagogical Techniques	X ₁	X ₂	X ₁ - X ₂	t-cal	P Value	Decision
1	Gaining the students' attention	3.40	3.67	-0.27	0.71	0.49	NS
2	Reviewing relevant, previously-learned material	2.90	3.59	-0.69	-1.25	0.24	NS
3	Presenting the new information by linking it to previous learning	3.60	3.94	-0.34	-1.13	0.28	NS
4	Providing learning guidance for elaboration	3.50	3.48	0.02	-2.11	0.06	NS
5	Providing time for practice and feedback	3.30	3.59	-0.29	-2.02	0.07	NS
6	Providing for spaced practice to enhance retention	3.40	3.67	-0.27	0.09	0.93	NS

7	Establishing expectations for the students	2.90	3.59	-0.69	-1.25	0.24	NS
8	shifting the focus of instruction from the teacher to the student	3.50	3.68	-0.18	-1.13	0.28	NS
9	posing problems to students that encourage them to question assumed knowledge and understanding	3.40	3.67	-0.27	-2.11	0.06	NS
10	describing how knowledge is absorbed, processed, and retained during learning	2.90	3.59	-0.69	-1.03	0.32	NS

*X₁ male teachers X₂ female teachers *N.S=not significant*

Table 4 shows the summary of the item analysis of the difference in responses of the two groups of pedagogical techniques used by male and female teachers in the implementation of Basic Education curriculum. Findings from analysis shows that all the items have probability values greater than .05 the alpha level. Since the probability value is greater than .05 ($p > .05$), the result is statistically not significant. Hence, the null hypothesis is retained, thus, there is no significant difference in the responses of male and female teachers on the pedagogical techniques used in the implementation of Basic Education curriculum.

Null Hypothesis 2: There is no significant difference in the instructional materials and resources used by male and female teachers in the implementation of Basic Education curriculum in the study area. Independent sample t-test was used to test this null hypothesis. The summary of the computation is presented in Table 5.

Table 5: Summary of the t-test Analysis of the instructional materials and resources used by male and female teachers in the implementation of Basic Education curriculum

($N_1 = 150, N_2 = 175, df = 331$)

Instructional materials and resources used for the implementation of Basic Education curriculum		X ₁	X ₂	X ₁ -X ₂	tcal	p-value	Decision
1	Textbooks	3.30	3.05	0.25	0.80	0.32	NS
2	Handouts	3.40	3.60	-0.20	-0.96	0.28	NS
3	Study guides	3.20	3.06	0.14	0.46	0.63	NS
4	Manuals	3.80	3.40	0.40	1.40	0.10	NS
5	Charts	3.50	3.62	-0.12	-0.71	0.52	NS
6	Real objects	3.50	3.29	0.21	0.69	0.41	NS
7	Photographs	3.30	3.49	-0.19	-0.82	0.42	NS
8	Transparencies	3.40	3.37	0.03	0.13	0.89	NS

9	Computers projector	with	2.90	3.49	-0.59	-2.36	0.10	NS
10	Television		3.50	3.62		-0.71	0.52	NS
.					-0.12			

X_1 male teachers X_2 female teachers *N.S=not significant

Table 5 shows the summary of the item analysis of the difference in responses of the two groups of teachers male and female on the instructional materials and resources used in the implementation of Basic Education curriculum. Findings from analysis show that all the items have probability values greater than .05 the alpha level. Since the probability value is greater than .05 ($p > .05$), the result is statistically not significant. Hence, the null hypothesis is retained, thus, there is no significant difference in the responses of teachers male and female on the instructional materials and resources used in the implementation of Basic Education curriculum.

Null Hypothesis 3: What are the challenges faced by male and female teachers in the implementation of Basic Education curriculum in the study area? The descriptive statistics of mean and standard deviations were used.

Table 6: Summary of the t-test analysis of the challenges faced by male and female teachers in the implementation of Basic Education curriculum

challenges faced by male and female teachers in the implementation of Basic Education curriculum		X_1	X_2	$X_1 - X_2$	t-cal	p-value	Decision
1	Inadequate funding of the educational system	3.40	3.37	0.03	0.13	0.90	NS
2	Teachers lack of interest on implementation process	2.80	3.44	-0.64	-2.55	0.51	NS
3	Acute shortage of infrastructures.	3.50	3.62	-0.12	-0.71	0.48	NS
4	lack of qualified teachers	3.50	3.10	0.40	1.39	0.17	NS
5	Teachers' poor understanding of the curriculum content.	3.30	3.27	0.03	0.11	0.91	NS
6.	Low quality of human and material resources	3.50	3.10	0.40	1.39	0.17	NS
7.	low remuneration and	3.30	3.27	0.03	0.11	0.91	NS

	incentives						
8	problem of content delivery and wrong use of methods	3.60	3.22	0.38	1.42	0.16	NS
9	Faulty monitoring/supervision of implementation process to ensure quality control	2.90	3.27	-0.37	-1.28	0.21	NS
10.	Non-involvement and participation of teachers in curriculum development	3.60	3.22	0.38	1.42	0.16	NS

NS=not significant,

Table 6 shows the summary of the item analysis of the difference in responses of the two groups of teachers, male and female teachers on the challenges faced in the implementation of Basic Education curriculum. Findings from analysis show that all the items have probability values greater than .05 the alpha level. Since the probability value is greater. Hence, the null hypothesis is retained, thus, there is no significant difference in the responses of male and female in the implementation of Basic Education curriculum in the study area.

Discussion of Findings

The study established that, there was no significant difference in the pedagogical techniques used by male and female teachers in the implementation of lower, middle and upper Basic Education curriculum in Zaria Local Government Area, Kaduna State. This finding concurred with the study of Baba (2015) which revealed that, there was no significant difference in the pedagogical methods for the implementation of Junior Secondary School curriculum.

The study also revealed no significant difference in the instructional materials and resources used by male and female teachers in the implementation of lower, middle and upper Basic Education curriculum in Zaria Local Government Area, Kaduna state. This is in line with the studies of Okobia (2011); Nwafor and Eze (2014) which revealed that most common instructional materials available were two dimensional instructional materials which include textbooks, charts, chalkboards, pictures, newspapers, magazines, bulletins among others.

Finally, it was established from the study that, there was no significant difference in the challenges faced by male and female teachers in the implementation of lower, middle and upper Basic Education curriculum in Zaria Local Government Area, Kaduna state. This finding is in agreement with Idoko (2001); Elejo (2011); Nzekwe (2013); Domike and Odey (2014) studies which established that, under funding, ecology of the classroom, acute shortage of infrastructures, lack of health facilities, lack of qualified teachers, poor supervision, low remuneration and incentives are prime challenges facing in the implementation of school curriculum in Nigeria.

Conclusion

It can be established that, the pedagogical methods used and the challenges faced by teachers in the implementation of basic education curriculum with regards to gender do not differ significantly across lower, middle and upper levels of basic education in Zaria Local Government Area, Kaduna state.

Recommendations

Based on these findings, the following are recommended:

1. Kaduna State Government should organise workshops and seminars for teachers in order to be conversant with the appropriate and innovative teaching methods and strategies and as well employ them while teaching in the classroom among others.
2. The State Ministry of Education should provide teachers with instructional materials such as overhead projectors, film strips, videos and enough computers in order to promote quality teaching and learning for effective implementation of Basic education curriculum in Zaria Local Government Area, Kaduna state.

3. The Government of Kaduna state should provide teachers and administrators with commensurate remuneration, support and motivation, and manageable workload as they struggle with the implementation of the Basic Education curriculum.

References

- Abubakar, I.D. (2009). Evaluation of the Implementation of Nomadic Primary Schools Social Studies Programme in Nigeria: Implication for Curriculum Renewal. (Unpublished Doctorial Thesis), Ahmadu Bello University, Zaria .
- Aguokagbuo, C.N. (2008). Factors militating against effective implementation of adult learning programme in Aguata L.G.A. of Anambra State. *Careson Journal of Adult Education Benin* 3 (1), 18-25.
- Australian Government Department of Foreign Affairs and Trade.(2018). *Education Learning and Development Module*. Retrieved July 11th, 2018, from: <http://dfat.gov.au/aid/topics/investment-priorities/education-health/education/Documents/basic-education-practitioner-level.pdf>
- Baba, B. (2015). *Assessment of Social Studies curriculum implementation in junior secondary schools in Yobe State, Nigeria*. (Unpublished M.Ed Thesis), Ahmadu Bello University, Zaria.
- Domike, G.C & Odey, E.O. (2014). An Evaluation of the Major Implementation Problems of Primary School Curriculum in Cross River State, Nigeria. *American Journal of Educational Research*, 2 (6), 397-401.
- Education Research Network for West and Central Africa (ERNWACA). (2009). *A Critical Appraisal of the Mode of Implementation of Nigerian Secondary School Curriculum: Towards Socio-economic Empowerment of Youth*. Retrieved July 11th, 2018, from: <http://www.rocare.org/grants/2009/Implementation%20of%20Nigerian%20Secondary%20School%20Curriculum.pdf>
- Elejo, C.E. (2011). *Problems Militating Against the Teaching and Implementation of Social Studies Curriculum in Secondary Schools in the Federal Capital Territory, Abuja*. (M. Ed. Thesis) Zaria: Ahmadu Bello University.
- Francis, E.R. (2011). *An Assessment of the Implementation of Social Studies Curriculum for Effective Citizenship in Primary Schools in Kaduna State*. (M. Ed. Thesis), Ahmadu Bello University, Zaria.
- Idoko, C. E. (2001). *Evaluation of the implementation of the primary education science core curriculum*. (Unpublished Doctorial Thesis), University of Nigeria, Nsukka.
- Jomtiem Declaration (1990). *World conference of education for all*. Jomtiem Thailand: UNESCO.
- Kochhar, S. K, (2008). *Methods and Techniques of Teaching*. (2nd Ed). New Dehli: Sterling Publishers Private, Limited.
- Nwafor. C.E. & Eze, S.O. (2014). Availability and utilization of instructional materials in teaching basic science in selected secondary schools in Abakaliki education zone of Ebonyi state, Nigeria. *Global Journal of Bio-science and Biotechnology* 3(3),292-295.
- Nwankwo, O. C. (2010). Universal Basic Education as a basis for sustainable development in Nigeria. *Journal of Research in Education and Society* , 1 (1), 114-128.

- Nzekwe, O. J.(2013). *The Impact of the Implementation of the Nigerian Curriculum Initiatives on Secondary School Administrators and Teachers in Enugu State*. (Unpublished Doctorial Thesis), Graduate Division of Educational Research Calgary, Alberta.
- Okobia, E. O. (2011). *Availability and Teachers Use of Instructional Materials and Resources in The Implementation of Social Studies in Junior Secondary Schools in Edo State, Nigeria*. Retrieved August 11th ,2016, from: <http://www.ccsenet.org/resv ol3,No2>.
- Shields, B.D. (2007). Teacher Efficacy in the Implementation of New Curriculum Supported by Professional Development. *Graduate Student Theses, Dissertations, & Professional Papers*. 946, University of Montana.
- Sustainable Development Commission (2004). *Shows promise but must try Harder*. London: SDC.
- Ubah, M.C. & Shu'aibu, K. (2014). Evaluation of the Implementation of Nigeria Certificate in Education Social Studies Programme in Federal Colleges of Education in North-Western Political Zone of Nigeria. *International Journal of Humanities, Arts, Medicine and Sciences (BEST:IJHAMS)* Vol.2.
- UNESCO (2003). *United Nations decade for sustainable development frame work for a draft international implementations schemes*. UNESCO.
- United Nations Educational, Scientific and Cultural Organization (UNESCO). (2017). *Education for Sustainable Development Goals Learning Objectives*. Paris, France: UNESCO.
- World commission on environment and development (1987). *Our common future*. Oxford: University Press.

