



Curriculum Implementation Practices and Sustainable Development Goals for Enhanced Basic Education Achievement in Rivers State

Hillary Wordu (Ph.D)¹ & Ethel Obiedima Pepple²

**Department of Educational Foundations, Faculty of Education
Rivers State University, Port Harcourt, Nigeria
Emails:drworduhillary@gmail.com¹: ethelpepple@gmail.com²**

ABSTRACT

Global attention to sustainable development has heightened with the adoption of the seventeen sustainable development goals in 2015. United Nations has set some sustainable development goals, viz., eradication of poverty, reduction of hunger, provision of good health, achieving well-being, and access to quality education etc. that can be exploited for sustainable future. To achieve some of these goals, different countries have been urged to embrace quality education, especially that which develops in students skills and competencies that could meet the demands of sustainable development goals. The purpose of this study was to assess curriculum implementation practice and sustainable development goals SDGs for enhanced basic education achievement in Rivers State, Nigeria. A research question and a hypothesis were formulated to guide the study. The survey research design was used. Participants were male 120 and female 270 totaling 390 secondary school teachers was used for the study. A 20-item researcher-developed questionnaire, designed on a 4-point scale, was used to collect data. Mean and standard deviation was used to analyses the research question while z-test was used to analyses the hypothesis. Findings indicated that in the opinions of male and female teachers, there was a statistical difference in the curriculum implementation practice, influence of classroom interaction in the schools for achieving sustainable development goals for achieving enhanced basic education. This indicates that irrespective gender, the teachers in this study held a similar view of the extent of curriculum implementation practice and influence of classroom interaction for achieving enhanced basic education in Rivers State.

Keywords: Curriculum implementation practice, sustainable development goals, enhanced basic education achievement.

INTRODUCTION

The word curriculum was coined from the Latin word “currere” meaning “race course”, referring to the course of deeds and experiences through which children grow to become mature adults Collins English Dictionary (2003). Curriculum is the set of courses and their contents offered at a school or university. A curriculum is prescriptive and is based on a more general syllabus, which merely specify what topics must be understood, and to what level to achieve a particular grade or standard. That is, a curriculum may be referred to as all courses offered at a school. According to Kelly (2003), “Curriculum is all the learning which is planned and guided by the school, whether it is carried out in groups or individually, inside or outside the school”. In other words, curriculum specifies in advance what we are seeking to achieve and how we are to go about it. Offorma (2005) sees curriculum as a planned learning experience offered to a learner in school, adding that it is made up of three components, program of studies, program of activities and programme of guidance. Hence the meaning of the term curriculum has also been charged to meet the needs of education of different courses of studies. Blenkin (2012) defined curriculum as a body of

knowledge contents and or subjects. That is, curriculum is the process by which knowledge and skills are transmitted or delivered to learners by the most effective methods that can be devised.

Curriculum is an organized plan of course outlined with the objectives and learning experience to be used for the achievement of these objectives. In a wider perspective, it is a way of preparing individuals to become productive citizens and useful member of the society to which they belong. Thus, curriculum is a tool of education to educate and humanize the whole man. Modern interpretation sees the curriculum as all the knowledge and experience got by a child in and out of the school walls, either on the time table or outside it i.e. the experiences the learner has regardless of when or how they take place (Akinsola & Abe, 2006). Jeffs & Smith (2010) argued that the notion of curriculum provides a central dividing line between formal and informal education. Recognizing the fact that some informal educators adopted curriculum theory and practice as a desire to be clear about content, and the approaches to the curriculum which focus on objectives and detailed programmes appear to be compatible with all round development of the learner. Prescriptive view of a curriculum is defined as a plan for action or written document that includes strategies for achieving desired goals or ends. In other words, curriculum means a written description of what happens in the course of study. Considering curriculum as the course of experiences that form human beings into persons, Kelly (2008) affirmed curriculum as those things which students learn because of the way in which the work of the school is planned and organized but which are not in themselves overtly included in the planning or even in the consciousness of those responsible for the school arrangements. This assertion recognizes the current appreciation of curriculum theory and practice emerged in the school and in relation to other schooling ideas such as subject and lesson. In this wise, curriculum could be seen in four ways as follows:

- i. Curriculum as a body of knowledge to be transmitted.
- ii. Curriculum as an attempt to achieve certain ends in students.
- iii. Curriculum as process.
- iv. Curriculum as praxis.

To achieve any of the above-mentioned, effective implementation of a well-planned curriculum cannot be overstretched.

Many educationists that have discussed the issue of curriculum implementation in Africa identified it as the major setback for attaining goals of education in Africa (Obanya, 2007). Curriculum implementation entails putting into practice the officially prescribed courses of study, syllabus and subjects (Chikumbi & Makamure, 2005). Mkpa (2007) defined curriculum implementation as the task of translating the curriculum document into the operating curriculum by the combined efforts of the students, teachers and others concerned

That is, curriculum demands concerted efforts of end-users of the curriculum for its effective implementation at all levels in order to achieve the desired goals. Garba (2004) described curriculum implementation as putting the curriculum into work for the achievement of the goals for which the curriculum is designed. In his conception of curriculum implementation, Okebukola (2004) defined it as the transition of the objectives of the curriculum from paper to practice. That is, only effective curriculum implementation ensures achievement of the objectives for which the curriculum was designed to attain. Ivowi (2004) supported the assertion by defining curriculum implementation as the translation of theory into practice, or proposal into action.

According to Onyeachu (2008), Curriculum implementation is the process of putting all that have been planned as a curriculum document into practice in the classroom through the combined efforts of teachers, learners, school administrators, parents as well as interaction with physical facilities, instructional materials, psychological and social environments. At this juncture, it could be said that putting the curriculum into operation requires an implementation agent. The teacher is identified as the agent in the curriculum implementation process. Curriculum implementation therefore refers to how the planned or officially designed course of study is translated by the teacher into syllabus, scheme of work and lessons to be delivered to students. The above definitions show that effective curriculum implementation involves interaction within the teachers, learners and other stakeholders in education geared towards achieving the objectives of education. Obanya (2004) defined implementation of curriculum as day-to-day activities

which school management and classroom teachers undertake in the pursuit of the objectives of any given curriculum. Obanya (2007) contends that effective curriculum is the one that reflects what “the learner” eventually takes away from an educational experience. Obanya noted that in many cases, there would be gap between the intended curriculum and the learned curriculum and defined effective curriculum implementation as concerned with narrowing such a gap as much as possible. Of course, this is the focus of this study.

Concept of Sustainable Development Goals (SDGs)

The history of the SDGs can be traced to 1972 when governments met in Stockholm, Sweden, for the United Nations Conference on the Human Environment, to consider the rights of the human family to a healthy and productive environment. It was not until 1983 that the United

Nations decided to create the World Commission on Environment and Development which defined sustainable development as "meeting the needs of the present without compromising the ability of future generations to meet their own needs." In 1992 the first United Nations Conference on Environment and Development was held in Rio. It was here that the first agenda for Environment and Development also known as Agenda 21 was developed and adopted.

The Sustainable Development Goals (SDGs), officially known as transforming our world: the 2030 Agenda for Sustainable Development is a set of seventeen inspirational "Global Goals" with 169 targets between them. Spearheaded by the United Nations, through a deliberative process involving its 194 Member States, as well as global civil society, the goals are contained in paragraph 54 United Nations Resolution A/RES/70/1 of 25 September 2015. The Resolution is broader intergovernmental agreement that, while acting as the Post 2015 Development Agenda (successor to the Millennium Development Goals), builds on the Principles agreed upon under Resolution A/RES/66/288, popularly known as the 'Future we Want'. The SDGs were in large measure informed by the quoted assertion by United Nations Secretary-General Ban Ki-moon that "there can be no Plan B, because there is no Planet B.

On 25 September 2015, the UN General Assembly adopted the 2030 Agenda for Sustainable Development (UN, 2015). This new global framework to redirect humanity towards a sustainable path was developed following the United Nations Conference on Sustainable Development (Rio+20) in Rio de Janeiro, Brazil in June 2012, in a three year process involving UN member states, national surveys engaging millions of people and thousands of actors from all over the world. At the core of the 2030 Agenda are 17 Sustainable Development Goals (SDGs). The universal, transformational and inclusive SDGs describe major development challenges for humanity. The aim of the 17 SDGs is to secure a sustainable, peaceful, prosperous and equitable life on earth for everyone now and in the future. The goals cover global challenges that are crucial for the survival of humanity. They set environmental limits and set critical thresholds for the use of natural resources. The goals recognize that ending poverty must go hand in hand with strategies that build economic development. They address a range of social needs including education, health, social protection and job opportunities while tackling climate change and environmental protection. The SDGs address key systemic barriers to sustainable development such as inequality, unsustainable consumption patterns, weak institutional capacity and environmental degradation. For the goals to be reached, everyone needs to do their part: government, the private sector, civil society and every human being across the world. Governments are expected to take ownership and establish national frameworks, policies and measures for the implementation of the 2030 Agenda.

A key feature of the 2030 Agenda for sustainable development is its universality and indivisibility. It addresses all countries from the Global South and the Global North as target countries. All countries subscribing to the 2030 Agenda are to align their own development efforts with the aim of promoting prosperity while protecting the planet in order to achieve sustainable development. Thus, with respect to the SDGs, all countries can be considered as developing and all countries need to take urgent action.

The sustainable development goals are:

(1)End poverty in all its forms everywhere (2)End hunger, achieve food security and improve nutrition and promote sustainable agriculture (3) Ensure healthy lives and promote well-being for all at all ages (4) Ensure inclusive and quality education for all and promote lifelong learning opportunities (5) Achieve gender equality and empower all women and girls (6)Ensure access to water and sanitation for all (7) Ensure access to affordable, reliable, sustainable and modern energy for all (8) Promote inclusive and sustainable economic growth, employment and decent work for all (9) Build resilient infrastructure, promote sustainable industrialization and foster innovation (10)Reduce inequality in and among countries (11) Make cities inclusive, safe, resilient and sustainable (12)Ensure sustainable consumption and production patterns (13) Take urgent action to combat climate change and its impacts. (14) Conserve and sustainably use the oceans, seas and marine resources. (15)Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss. (16) Promote just, peaceful and inclusive societies. (17) Revitalize the global partnership for sustainable development (www.un.org).

These are well-thought out goals that address critical needs in the society. How relevant the curriculum in the realization of these goals will determine the level of curriculum and the implementation practice by the stakeholders in the society. It becomes crucial therefore; that the Nigerian government should strategize on effective ways of supporting the attainment of the SDGs in Nigeria as scheduled.

The importance of teacher in curriculum planning, development and most importantly implementation cannot be over-emphasized. The teacher is identified as the agent in the curriculum implementation process. The teacher is a very vital and valuable element in school, in education and policy formulation and implementation as well as among other educational stakeholders (Emeke, 1999). The teacher is a learning mediator. The teacher effectively facilitates the learning in such a way that demonstrates a sound knowledge of the subject matter in a manner which is applicable to the diverse needs of learners. He employs various principles, strategies and resources appropriate for teaching. The teacher understands and interprets all learning programmes and materials as well as identifies requirements for specific context of learning and prepares suitable resources for learning (Kerene, 2018). The teacher is a manager, teacher and administrator who make appropriate decision in guiding the students. The teacher manages learning in the classroom and carries out classroom administrative duties effectively. The teacher is lifelong learning. The teacher should be grounded in knowledge, skills, values, principles, methods and procedure relevant to the learning area of practice. The teacher will have a well-developed understanding of knowledge appropriate to the learning area (Kerene, 2018).

Teachers most at times are not involved during policy formulation even though they are expected to implement this curriculum. A major setback in effective curriculum implementation is the problem of unqualified teachers especially specialist teacher in area like ICT and technical subjects. In recent times, curriculum is designed up to implementation without adequate manpower to translate these documents into reality.

Classroom interaction of teachers refers to the whole range of activities and experiences through which teachers; curriculum, materials, and learners interact. It has to do with the interactive processes through which teachers' implement the curriculum and impart learning to students using available materials Goh & Fraser, (2010). Studies have shown that teacher classroom interactions is central to effective curriculum implementation as it has a strong influence on students' learning outcomes Rickards, 2006; Alausa, (2007). Henderson, (2009) reported that students' perceptions of their teacher classroom interactions influenced attitudinal outcomes, adding that where students perceive teachers as initiating satisfactory classroom interactions, their feelings, motivation and attainment in the curriculum, were positively affected.

Statement of the Problem

Despite the wide recognition and acceptance accorded the role of curriculum as a career of the national philosophy in Nigerian educational system, there seems to be problems in the implementation of this important educational blue-print like the sustainable development goals. Many laudable goals of the curriculum have failed to pass the planning stage of the curriculum due to faulty implementation. Well-conceived curriculum ideas have remained virtually inert and dysfunctional. The outcome of this is the bred of graduates of higher institution who are found to be grossly deficient in practical and professional

competences Izuagba & Afurobi (2009). The result of this state of affair according to Idaka & Joshua (2005) is the production of half baked, ill-trained and sometimes confused graduates. This problem and other related problems should be a cause for concern to all patriotic and serious minded stake holder of the educational sub-sector. Against this background, this study was designed to investigate curriculum implementation practices and sustainable development goals for enhanced basic education in Rivers State.

Purpose of the Study

The main purpose of the study is to examine curriculum implementation practice in achieving sustainable development goals for enhanced basic education in Rivers State. Specifically the study seeks to;

1. To determine teachers curriculum implementation practices in achieving sustainable development goals for enhanced basic education.
2. To examine the influence of classroom interaction in achieving sustainable development goals for enhanced basic education.

Research Questions

1. What is the mean rating of male and female teachers on the curriculum implementation practices in achieving sustainable development goals for enhanced basic education?
2. What is the mean rating of male and female teachers on the influence of classroom interaction in achieving sustainable development goals for enhanced basic education?

Hypotheses

1. There is no significant difference between the mean rating of male and female teachers as regards curriculum implementation practice and sustainable development goals for enhanced basic education
2. There is no significant difference between the mean rating of male and female teachers with regards to the influence of classroom interaction in achieving sustainable development goals for enhanced basic education

METHODOLOGY

The descriptive survey design was adopted for the study. The study was conducted in senior secondary schools in Port Harcourt and Obio/Akpor Local Government Areas of Rivers State, Nigeria. The Population comprised 1954 teachers of which 602 are males while 1352 are females of Port Harcourt and Obio/Akpor Local Government Areas of Rivers State were used for the study. Simple random sampling technique was adopted in this study to select sample of teachers in Port Harcourt and Obio/Akpor Local Government Areas. To determine the sample size 20% of 602 male teachers and 20% of 1352 female teachers was used which amount to 390 used for the study. A well-structured questionnaire was constructed by the researcher to gather data that will aid in eliciting information for the research work. It consisted of 20 items with sections A, B, C and D, dealing with the respondents' bio data and the variables under study respectively. It takes the form of a 4 point Likert scale of very high extent, high extent, very low extent and low extent.

To ascertain the reliability of the instrument, copies of the questionnaire were administered on 20 teachers outside the sample used for the study. Data collected from the respondents were analyzed using the Cronbach Alpha reliability technique and a 0.86reliability coefficient was obtained indicating suitability of the questionnaire for the study. The mean and standard deviation were used to answer the research questions while Z-test was used to test the hypotheses at 0.05 significant levels.

RESULTS

Research Question 1: *What is the mean rating of male and female teachers on the curriculum implementation practices in achieving Sustainable Development Goals for enhanced basic education?*

Table 1: Mean rating of male and female teachers on curriculum implementation practices in achieving Sustainable Development Goals.

Decision $\bar{X} \geq 2.5$ High Extent		N= 390								
S/N	Curriculum Implementation Practices in achieving SDGs	TOT Rep	Males = 120			Females = 270				
			\bar{X}	SD	Rmk	TOT Rep	\bar{X}	SD	Rmk	
1	The curriculum is clearly spelt out	372	3.1	0.23	HE	810	3.0	0.15	HE	
2	The teacher had good knowledge of the interpretation of the curriculum	408	3.4	0.26	HE	783	2.9	0.14	HE	
3	Teacher had good understanding of the curriculum content	384	3.2	0.24	HE	810	3.0	0.15	HE	
4	Teacher had adequate time to cover the curriculum content	276	2.3	0.21	LE	594	2.2	0.14	LE	
5	Curriculum to be reviewed immediately to meet the taste of time	432	3.6	0.29	HE	945	3.5	0.18	HE	
6	Teachers are train in curriculum implementation techniques	288	2.4	0.20	LE	567	2.1	0.14	LE	
7	Proper monitoring of curriculum implementation to ensure quality control	264	2.2	0.21	LE	621	2.3	0.14	LE	
8	Provision of qualified teachers	252	2.1	0.22	LE	486	1.8	0.16	LE	
9	Enhanced teachers remuneration	228	1.9	0.23	LE	432	1.6	0.17	LE	
10	Reduction in the enrollment of students in a class	240	2.0	0.22	LE	567	2.1	0.14	LE	
Grand Mean			2.6	0.28	HE		2.5	0.15	HE	

Table 1 revealed that teachers are pivotal in the implementation of any given curriculum in the classroom. Thus the teachers agree that the curriculum is clearly spelt out but no time to cover the curriculum content, no proper training for curriculum implementation practices, inadequate monitoring mechanism, unqualified teachers, poor remuneration for teachers and large enrollment of students in a class are the challenges that will hinder the achievement of Sustainable Development Goals in Rivers State.

Research Question 2: *What is the mean rating of male and female teachers on the influence of classroom interaction in achieving Sustainable Development Goals for enhanced basic education?*

Table 2: Mean rating of male and female teachers on the influence of classroom interaction in achieving Sustainable Development Goals

Decision $\bar{X} \geq 2.5$ High Extent		N= 390							
S/N	Classroom Interaction in achieving SDGs	Males =120				Females = 270			
		TOT Rep	\bar{X}	SD	Rmk	TOT Rep	\bar{X}	SD	Rmk
1	Listened to students questions and comments	432	3.6	0.29	HE	756	2.8	0.14	HE
2	Used appropriate eye contact, body language movement and posture	360	3.0	0.22	HE	810	3.0	0.15	HE
3	Response quickly and appropriately to classroom disruption	372	3.1	0.23	HE	756	2.8	0.14	HE
4	Make clear statement of the purpose of the lesson	324	2.7	0.21	HE	756	2.8	0.14	HE
5	Placed lesson appropriately and relating it to future lesson	348	2.9	0.22	HE	810	3.0	0.15	HE
6	Demonstrate appropriate level of knowledge and skills in content areas	384	3.2	0.24	HE	837	3.1	0.15	HE
7	Showed awareness of errors and appropriately corrected identified errors	336	2.8	0.21	HE	729	2.7	0.14	HE
8	Voice clarity and good communication skills	348	2.9	0.22	HE	675	2.5	0.14	HE
9	Response to problems raised during lesson	360	3.0	0.22	HE	783	2.9	0.14	HE
10	Used multiple assessment techniques that addressed the divers learning methods of students	312	2.6	0.20	HE	648	2.4	0.14	LH
Grand Mean			3.0	0.23	HE		2.8	0.14	HE

Table 2 shows that there is cordial classroom interaction between the students and the teachers in the respective schools. This entails that the teachers had good knowledge and skills in the content areas of the curriculum with proper use of eye contact, body language movement, listen to students' questions and responding appropriately, while delivering the curriculum content in the classroom for achieving Sustainable Development Goals. However, the teachers are not exposed to multiple assessment techniques thereby subjecting the students to only classroom test which elicit information on the cognitive domain while the effective and psychomotor are rarely assessed.

Hypothesis 1: There is no significant difference between the mean rating of male and female teachers as regards curriculum implementation practice and sustainable development goals for enhanced basic education.

Table 3: Z-test analysis of curriculum implementation practice and sustainable development goals for enhanced basic education

Variable	N	\bar{X}	SD	A	Z-cal	Z-crit	Rmks
Male	120	2.6	0.28	0.05	3.68	1.96	Significant
Female	270	2.5	0.15				

Table 3 reveals that the z-test calculated is greater than the z-critical. Thus the null hypothesis is rejected. This implies that statistically there is a significant difference between the male and female teachers' opinion regarding curriculum implementation practice and sustainable development goals for enhanced basic education. This suggests that male and female differs in understanding the curriculum content, level of interpretation of the curriculum and extent implementation techniques.

Hypothesis 2: There is no significant difference between the mean rating of male and female teachers with regards to the influence of classroom interaction in achieving sustainable development goals for enhanced basic education.

Table 4: Z-test analysis of influence of classroom interaction and sustainable development goals for enhanced basic education

Variable	N	\bar{X}	SD	A	Z-cal	Z-crit	Rmks
Male	120	3.0	0.23				
				0.05	8.83	1.96	Significant
Female	270	2.8	0.14				

From table 4 it could be observed that z calculated value is greater than z critical and hence the null hypothesis of no significant difference is rejected. This implies that there is significant difference in the mean rating of male and female on the influence of classroom interaction in achieving sustainable development goals for enhanced basic education in Rivers state. While the mean rating for both males and females are higher than the decision mean, the rating for males is found to be higher and significantly too.

DISCUSSION OF FINDINGS

The research findings of hypothesis one in this study varies with Epstein, Sanders, Simon, Salinas, Jansorn, & Van Voorhis (2002) in their study found out that there was no significance difference between the mean ratings of male and female teachers on the extent of their involvement in curriculum implementation. This indicates that irrespective of gender, the teachers in this study hold a similar view of their involvement to curriculum implementation in schools. This could be due to lack of familiarity with curriculum content and lack of awareness and poor remunerations of teachers on how to effectively involve in curriculum implementation practice. Quinn (2002) found out that some principals find it difficult to provide curriculum leadership in a manner that would inspire teachers' involvement because of the loss of certain satisfying rituals such as coaching teachers and demonstrating expertise to a class, activities that in spite of making workload more onerous have always made direct instructional leadership so personally rewarding. Another reason might also because many teachers do not appear to value their role in their child's education.

The findings of hypothesis two of this study is in line with Onwuachu, (2009), in his study found out a the positive correlations exist when teachers interacted with students in a more leadership helping/friendly and understanding manner, students had more positive feelings about lessons. Other interpersonal behaviours impacted less but still statistically significantly such that if teachers were to be less dissatisfied, uncertain, and admonishing, as well as more understanding, students would be expected to have positive feeling and enjoy their lessons more. The students' feelings about their lessons could be attributed to their perceptions of their teachers' classroom interaction. Thus, the teachers' classroom interaction was an important factor in students' feelings about their lessons. This finding agrees with Scott (2008) who found positive relationships between teachers' interpersonal behavior and students' outcomes in Brunei. In essence, the more cooperative teachers were, the more students have positive feelings about their lessons and students' feelings decreased when teachers were more oppositional in their behaviour. It is also possible that students' feelings, or motivation and enthusiasm, may foster certain interpersonal teacher classroom interaction which in turn increases students' enjoyment of their lessons.

Similarly, the finding of the study is in agreement with Onwuachua, (2009), found out for proper curriculum delivery practices teachers in secondary schools, classroom interactions are in dire need of improvement. Unless teachers learn to use more friendly and helpful classroom interactions, students' enjoyment of lessons would continue to be adversely affected. This implies that the teacher should structure classroom activities in such a way that students are allowed freedom to participate in classes using a variety of activities, reinforcement and feedback. It is important for teachers to work towards a

classroom where responsibilities are shared with students. This does not imply that the teacher has to give up the role of /general class manager, to take on some sort of spurious equal participant role, but it does mean that he/she should encourage learners to manage their own learning, engage in co-operative tasks and learn how to learn.

Summary of Major Findings:

The following are the major findings of the study.

1. There is high, positive and significant difference between male and female responses regarding curriculum implementation practice and sustainable development goals for enhanced basic education in Rivers state.
2. The finding also reveals that there is a significant difference between the male and female influence on classroom interaction in achieving sustainable development goals for enhanced basic education in Rivers state.

CONCLUSION

It is concluded that there is no synergy among teachers in the implementation practices of the curriculum. This is as a result of poor understanding of curriculum implementation strategies among teachers. Classroom interactions are a significant aspect of curriculum implementation practices for sustainable development goals. Teachers adopt several strategies in the implementation practices of the school curriculum which do not really match the set content.

RECOMMENDATIONS

Based on the findings of this study, it was recommended that workshops should be organized whereby all categories of teachers will be exposed to the details of the curriculum and possible implementation strategies

REFERENCES

- Akinsola, A., & Abe, F. (2006). *A Guide to School Effectiveness in Nigeria*. Ibadan. Laville Publications
- Alausa, Y.A. (2007). Teachers' attitudinal variables in the implementation of the further-mathematics curriculum as correlates of students' learning outcomes. *Zimbabwe Journal of Educational Research* 10 (1), 621-640.
- Blenkin, G. M. (2012). *Change and The Curriculum*. London: Paul Chapman Cambridge, UK.
- Chikumbi, N. & Makamure, T. (2005). Training teachers for quality education in Europe. *European Journal of Teacher Education*. 25(1): p. 11-17.
- Collins English Dictionary (2003). *Complete and Unabridged*. Harper Collins Publishers
- Epstein, J. L. Sanders, M. G., Simon, B. S., Salinas, K. C., Jansorn, N. R., & Van Voorhis, F. L. (2002). *School, community, and community partnerships: Your Handbook for Action* (2nd ed.). Thousand Oaks, CA: Corwin Press.
- Garba, M. (2004). The Critical Role of Educational Resources on Curriculum Implementation in Noah, A.O.K., Shonibare, D.O., Ojo, A.A. and Olujuwon, T. (Eds) *curriculum implementation and professionalizing teaching in Nigeria*. Lagos: Central Educational Series.
- Goh, S. C. & Fraser, B. J. (2010). Adaptation of the questionnaire on teacher interaction for elementary grades. *Asia Pacific Journal of Education*, 17(2), 102-116
- Ivowi, U. M. O. (2004). *Curriculum implementation: Implication for school administration* in Noah, A.O.K., Shonibare, D. O., Ojo, A.A. & Olujuwon, T. (Eds) *curriculum implementation and professionalizing*.
- Jeffs, T. & Smith, M. (2010). *Using Informal Education: An Alternative to Casework, Teaching and Control*. Milton Keynes: Open University Press.
- Kelly, A. V. (2008). *The Curriculum Theory and practice* 4th edition. London: Paul Chapman.
- Kerene, A.K (2018). Assessment of teachers' usage of evaluation tools in grading students in Rivers State. *Journal of Technical and Science Education*.
- Mkpa, M. A. (2007). *Curriculum Development*. Owerri: Totan Publishers Ltd Montenegro-conference

- Obanya, P. (2004). *The Dilemma of Education in Africa*, Ibadan: Heinemann Educational Books Nigeria Plc
- Obanya, P. (2007). *The Dilemma of Education in Africa*, Ibadan: Heinemann Educational Books Nigeria Plc
- Offorma, D. (2005). *A Critical Appraisal of Mode of Implementation of Nigerian Secondary School Curriculum: Towards Socio-Economic Empowerment of Youth* (Published Research Work)
- Okebukola, C. (2004). Quality assurance in teacher selection among private secondary schools in Owerri municipal, Imo State for effective implementation of the UBE. *Journal of Curriculum Organization of Nigeria*. 37-44
- Onwuachu, W. C (2009). Students Evaluation of Classroom Interaction of their Biology Teacher: Implication for Curriculum Implementation. *An international Multi-Disciplinary journal vol 3*.
- Onyeachu, E. (2008). Teachers Characteristics and School Curriculum Implementation in Nigeria Secondary Schools: *A Theoretical Review in Journal of the Nigerian Academy of Education*. Nigeria Jonahed (1),
- Rickards, T. (2006). *Cultural factors and Sex Differences in Science Teacher– Student Interpersonal behaviour and associations with student attitude and achievement*. Gaong: University Brunei Darussalam: Gadong.
- Quinn, D. M. (2002). The Impact of Principal Leadership Behaviours on Instructional Practice and Student. *Journal of Teacher Education*.
- Scott, R. (2008). Students' Perceptions of Science Teachers' Classroom Interaction. In S. P. Loo, A. Aminah, S. Yoong, T. S. Azian, L. W. Lee & S. C. Toh (Eds). *World Conference on Science and Technology Education* (pp. 155-165). Penang: Malaysia. Senate Ceremonials Committee