



Strategic Resources for Curriculum Implementation Practices for Sustainable Development Goals (SDGs) Achievement in Rivers State

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ABSTRACT

Good educational philosophy, policies and strategies are not farfetched: but educational resources and capacity development of the teachers for curriculum implementation practices are never always easy to come by. The study investigated strategic resources for curriculum implementation practices for sustainable development goals achievement in Rivers State. Research questions and hypotheses were formulated to guide the study, descriptive research design was used and 195 teachers were used which comprises 73 Science and 122 Arts teachers. 26 item self-constructed questionnaire of 4-point Likert scale was used to collect data. Mean and standard deviation was used to answer research questions while Z-test was used to analyzed hypotheses at 0.05 significant level. The finding showed that science teachers and Arts teachers agreed in their opinion that there were no available facilities instructional strategies and sufficient capacity development for curriculum implementation practices for sustainable development goals achievement in Rivers State.

Keywords: Strategic resources, curriculum implementation practices, sustainable development goals achievement.

INTRODUCTION

Knowledge, attitudes and skills which are imparted to the learners by the school are referred to as curriculum. This embraces what is to be taught and how it should be taught. Knowledge means facts, information and understanding which learners need to acquire through experience in the course of instruction. This requires the learner to cultivate competency in his discipline. In the acquisition of attitude, the learners need to acquire a particular way of thinking or behaving which is initiated by feelings, interests, emotions, in the course of instruction. Again, curriculum products also have acquisition of skills. Skills refer to the ability to expertly use our hands, legs, entire body in combination with facts in our brains, in order to perform a task. It goes beyond mere recalls of facts to applying them along with body movement to perform a task, (Eze, 2009). Deducing from the above definitions, instances can be given with dancers, drummers, typists etc as they perform their tasks dancing, drumming, and typing by coordinating the movements of the eyes, "hands/legs, and body movements, among others. Take for instance, a computer operator coordinates the activities of the fingers (dexterity), eyes navigation, reading ability and speed in typing and his competency is recognized with his efficiency on the above qualities.

It could be seen here that curriculum is visualized as a force that produces change, action or effects. To this, Agusiobo (2009) in Okoro (2007) considers curriculum as an organized framework that sets out the content that children are to learn; the processes through which children achieve goals which the curriculum sets for them; what educators do to help children to achieve these goals and the contexts in which teaching and learning occur. In addition to this, Ivowi (2010) opined that curriculum is a tool designed for educating a person in order to change the orientation, behaviour, actions and values of that person whose concern is not only to develop self but also the world around him. It is an instructional

guide which is documented to be utilized for teaching and learning for the realization of desirable changes in the learners under the guidance and supervision of the school. One may pose to know what is meant by the utilization of the mentioned document and this leads us to the concept of curriculum

Defining curriculum is complex. It has been defined by different educators to imply the totality of the learning experiences offered by an institution of learning. It includes subject for study and out-of-class activities, all of which are geared towards the physical, intellectual, emotional and effective development of the child (Dada, 2006). Teachers as well as parents are interested in all-round development of the child, through the curriculum, therefore, curriculum becomes means of fulfilling the millennium development goals for the entire society. Igwe (2009) perceived curriculum as consisting of the continuous chain of activities necessary for translating educational goals into concrete activities, materials, and observable behavioral change. He further stressed that it is the totality of activities carried out under the auspices of a school, in response to the societal demands. Curriculum also could be termed a programme of learning planned for a target group of learners for a specific period of time in order to achieve certain predetermined goals. Dada (2006) further stressed that one can identify a curriculum by its components, the aims, the content, the learning experiences and the evaluation. In other words, it is a tool for teacher's effective teaching activities; most especially when it is being broken down into syllabus, scheme of work and lesson note. It is on this premise that Oyekan (2008) opined that curriculum and instruction are dualistic and reciprocating concepts that should be well ingrained into the instructional technology, teacher-education and general training programmes of all the professionals concerned with human resources development. Hence, the functional strategy for implementing the curriculum is also relevant to any functional strategy that can improve the fulfillments of Millennium Development Goals (MDGs). It is pertinent to note that, there is no institution such as primary, secondary, technical schools/ Colleges of Education, Polytechnics or University without an operational curriculum as the mainstay of classroom practices and instruction. As such, curriculum operates within the mainstream of a living society. The society is dynamic as well as the curriculum and when these changes are incorporated into learning activities and lesson plans for the students; curriculum implementation provides meaningful instruction for the realization of educational objectives through classroom practices.

Concept of Curriculum Implementation

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 implementation 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. Iwovi (2004) has no contrary view 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, instructional strategies 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 (2007) defined implementation of curriculum as day-to-day activities which school management and classroom teachers undertake in the pursuit of the objective 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. The adequacy of qualified teachers’ adoption of instructional strategies, and infrastructural facilities are reviewed to see how they influence curriculum implementation in Nigeria secondary education. The importance of teacher in curriculum planning, development and most importantly implementation cannot be over-emphasized.

Why is the sustainable development goals taken a crucial position today in spite of the progress that is claimed to have been made in millennium development goals? Why do we require quality education, formal and non-formal, in promoting the SDGs? Why is it necessary for the developing countries to attend to the crucial ones such as ensuring an end to poverty and hunger, promote life-long education, ensure healthy lives and well-being, and promote sustainable use of the ecosystems, in spite of the universal nature of the goals? It was claimed that the SDGs are universal in nature and were meant to apply to all countries (Leadership for Environment and Development, [LEAD], 2016). The adoption of sustainable development goals is meant to consolidate on the achievement of MDGs. In spite of the essential nature of all the goals, their achievements may prove very difficult for the developing countries. Countries whose economy is run on aid and whose education does not promote the 21 education competencies are not likely to achieve most of these SDGs. If education in the developing countries fails to align with the demands of the 21 century education to meet the challenges in the workforce and to ensure the well-beings of the workers, how do we use such education to promote sustainable development? Bokova (2017), The Director General, UNESCO, avers:

A fundamental change is needed in the way we think about education's role in global development ...education has a responsibility to be geared with 21 century challenges and aspirations, and foster the right types of values and skills that will lead to sustainable and inclusive growth, and peaceful living together. (p.7)

The basic pedagogical strategies for achieving the SDGs have been well articulated under the Education for Sustainable Development (Rieckmann, 2017).

It is necessary to say that education, in this sense, is not meant to push economic growth alone, education has now been tailored to assist in social justice, global citizenship, and sustainability Laurie, (2016). This is the form education for sustainable development (ESD) takes. ESD now promotes competencies that empower individuals to reflect on their own actions and see the impacts of such actions on the environment (UNESCO, 2017)

The problem of poor access to quality education by Nigerian children may stall their ambition to achieve meaningful lifestyles and well-being. The problem also spilled into how the country prepares to meet the SDGs. Thus, poor access to quality education is likely to prevent the country from participating in the current global drive to achieve the sustainable development goals. This is one of the problems the country is facing today. Verspoor (2008) uses Cameroon, Kenya and Niger to illustrate his point while explaining the problem of poor access to education in Africa. According to him, no children from the poorest income quintile, in these countries, are enrolled in tertiary institutions, yet Berthelem, as cited in Verspoor, (2008) believes that crossing the human capital threshold and moving to higher levels of economic performance will require ambitious investment in education'. Berthelem's study seems to suggest that countries in Africa affected by poor budgetary allocation to education risk further deprivation in human capital development.

The issue of quality education in sustainable development programme entails providing adequate learning experience for the young people. UNESCO (2012) declared in chapter 36 of Agenda 21 four goals of education to be provided as follows:

1. To promote and improve the quality of education- to refocus lifelong education on knowledge, skills and values which the citizens need to improve the quality of their life.
2. To reorient the existing education programmes from primary to university- to serve as a vehicle of knowledge, thought patterns and values needed to build a sustainable world.
3. To raise public awareness and understanding of the concept of sustainable development- to develop enlighten, active and responsible citizenship locally, nationally and internationally.
4. To train the work force - continuing technical and vocational education involving directors and workers – to enable them to adopt sustainable modes of production and consumption

In order to promote the four goals, Nigeria may have to adopt a policy reform option. The basic policy reform option may be to make teacher education rigorous enough to emphasize adequate knowledge of the content area and mastery of teaching methods. The emphasis should be to prepare students adequately for the contemporary challenges in the global community, and to make the teaching of fundamental skills and competencies teacher's teaching/learning paradigm.

The quality dimension in education implies that students are adequately prepared for their future. It implies that the needs of individual students are considered and addressed in both content and methods to be used in schools (UNESCO, 2005, as cited in UNESCO, 2012). It may be recommended that attempts should be made to discourage rote memorization; while participatory learning should be encouraged. School managements must ensure that a strict adherence to policy implementation is followed especially the one that exposes students to skills and competencies. There is a need to monitor the implementation of a policy of this sort to ensure that it does not create a vacuum in the system.

The National Policy on Education, either in its earlier form or in its present form, has never reflected what Imam calls this social and political environment to fashion its educational system. Its root has been America's, hence foreign in spirit. In order to Africanize its content and structure, the policy should incorporate the input of teachers, community, experts in different fields so that in methods, contents, and principles it can reflect the need and aspirations of the people

Application of Physical Facilities: Instructional facilities refer to the basic structures and facilities necessary for effective teaching and learning in the school. Facilities are plants, equipment, buildings, furniture which enable teachers to deliver effective teaching thereby leading to attainment of behavioural objectives. According to Ehiametalor (2011), facilities are those factors which enable production workers to achieve the goals of an organization. Olorok (2006) observed that the use of instructional facilities enhances learning experiences and leads to interaction within the learning environment.

Facilities are not provided adequately: What is found in most secondary schools in Nigeria are dilapidated buildings, leaking roofs, lack of chairs and desks for students and teachers to use. This has negative effect on effective implementation of new secondary school curriculum. Overbaugh (2010) in her study on the relationship of the physical environment to teachers' professionalism revealed that physical environment or facilities affect teachers in their performance. She mentioned further that the most important environmental features which affect teachers' performance are classrooms, furniture and class equipment. Marianhi (2009) commented that a simply, dignified, artistic exterior is suggestive of the purpose for which school building exists, make the scholars proud of their school and will have an impressive influence on their performance at school. Lamenting on the type of building found in our secondary school, Nwachuku (2005) remarked that the public sector of education has witnessed stagnation and decay. Stating further that most schools are a caricature of what schools should be in a modern state. Ehiametalor (2011) argued that school facilities are the operational inputs of every instructional programme. The school is like a manufacturing organization where plants and equipment must be in a top operational shape to produce result. Ivowi (2004) noted that to ensure that curriculum must be effectively implemented, infrastructural facilities, equipment, tools and materials must be provided sufficiently.

Nwagwu (2004) affirmed that quality of education that our children receive bear direct relevance to the availability and lack of physical facilities and overall atmosphere in which

Capacity building is the ability of individuals, organization and societies to perform functions solve problems and achieve goals. Capacity development entails the sustainable creation; utilization and retention of that capacity, in order to reduce poverty, enhanced self-reliance and improve people live. Capacity development builds on existing skills and harnesses them toward achieving growth, rather than replacing indigenous capacity. Capacity building as a means of promoting sustainable development is broad as can encompass a multitude of activities. Capacity building for sustainable development (UNEP, 2006) described capacity building as building abilities, relationship and values that will enable organizations, groups and individual to improve their performance and achieve their development objectives. Capacity building was also described as initiating and sustaining a process of individual and organizational change that can equally refer to change within a state civil society or the private sector as well as a change in processes that enhance cooperation between different groups of society.

A wide range of approaches is available to build capacity including training, formal education, capacity building projects, networking and others. Which approach will be most effective strongly depends on the specific objectives to be achieved. A training workshop usually can go as far as building human capacities as in awareness raising level. If specifically designed, training may also succeed in building analytical capacity. However, there is a tendency to call a wide range of activities capacity building which rather are policy dialogues, discussion workshop, regional meeting for those activities usually no clear capacity building objectives are defined as no capacity building methodologies are used. It takes much more for an adult to acquire new knowledge and skills than listening to a power point presentation in a workshop. In addition to seeing and listening adult usually need real life experience to acquire new abilities. Thus, any workshop which is held with a capacity building objective needs to be carefully designed, moving as much as possible from the presentation discussion style into an interactive workshop style. Using exercise case studies, field visit and other elements of experiential learning to actually build capacities (UNEP, 2006)

Statement of the Problem

Despite the awareness of teachers' capacity development programme which have been proved to enable teachers to acquire skills for classroom instruction and to improve students' performance, the authorities in the Rivers State are yet to imbed this laudable programme for teachers. Thus, the resultant effect is poor performance of students' attributing it to low capacity development of teachers and lack of facilities to enhance teaching and learning in schools. This paper therefore, was aimed at investigating facilities, and teachers' capacity development for curriculum implementation practices for sustainable development goals.

Purpose of the Study:

The main purpose of the study was to determine the extent to which the strategic resources for curriculum implement practices for sustainable Development goals have been achieved. Specifically the sought objectives of the study were as follow:

1. To determine the extent of facilities availability for curriculum implementation practices in achieving sustainable development goals for enhanced basic education in Rivers State.
2. To determine the extent of teachers capacity development for curriculum implementation practices in achieving sustainable development goal for enhanced basic education in Rivers State.
3. To determine the extent of instructional strategies adopted for curriculum implementation practices in achieving sustainable development goals for enhanced basic education in Rivers State.

Research Questions:

1. What is the mean rating of Science teachers and Arts teachers on the extent of facilities availability for curriculum implementation practices in achieving sustainable development goals for enhanced basic education in Rivers State?

2. What is the mean rating of Science teachers and Arts teachers on the extent of capacity development for curriculum implementation practices in achieving sustainable development goals for enhanced basic education in Rivers State?
3. What is the mean rating of Science teachers and Arts teachers on the extent of instructional strategies adopted for curriculum implementation practices in achieving sustainable development goals for enhanced basic education in Rivers State?

Hypotheses

Ho 1: There is no significant difference between the mean rating of Science teachers and Arts teachers regarding the extent of facilities availability for curriculum implementation for practices in achieving sustainable development goals for enhanced basic education in Rivers State?

Ho 2: There is no significant difference between the mean rating of Science teachers and Arts teachers regarding the extent of capacity development for curriculum implementation practices for achieving sustainable development goals for enhanced basic education in Rivers State

Ho 3: There is no significant difference between the mean rating of Science teachers and Arts teachers regarding the extent of instructional strategies adopted for curriculum implementation practices for achieving sustainable development goals for enhanced basic education in Rivers State

METHODOLOGY

This research used a descriptive survey design. The study was conducted in senior secondary schools in Khana and Opobo/Nkoro local Government Areas of Rivers State, Nigeria. The population of the study comprised of 980 teachers consisting 175 Science teachers, and 325 Arts teachers from Khana and 194 Science teachers and 286 Arts teachers from Opobo/Nkoro local government areas of the State.

Simple random sampling technique was adopted to select 73 Science teachers and 122 Arts teachers which represented 20% of the respective populations for Science and Arts teachers. A 15 item, 4-point Likert type scale of well-structured questionnaire was used. A reliability of 0.75 was established using Cronbach alpha method. The questionnaire was validated by two experts from the Rivers State University, Port Harcourt. Means and standard deviations were used to answer the research questions while Z-test was used to test the hypotheses at 0.05 level of significant

RESULTS

Research question 1: *What is the mean rating of Science teachers and Arts teachers on the extent of facilities availability for curriculum implementation practices in achieving sustainable development goals for enhanced basic education in Rivers State?*

Table 1. Mean rating of Science teachers and Arts teachers on the availability of facilities for curriculum implementation practices for achieving Sustainable Development Goals
N = 195

S/N	Availability of facilities for Curriculum implementation for achieving SDGs	Science =73				Arts =122			
		Total RSP	\bar{X}	SD	RMK	Total REP	\bar{X}	SD	RMK
1	Relevant text books for students / teachers	153	2.1	0.28	LE	244	2.0	0.22	LE
2	Integration of information & communication technology in the school	139	1.9	0.30	LE	195	1.6	0.26	LE
3	Provision of teaching & learning materials such as wall charts, computers, television etc	170	2.3	0.27	LE	268	2.2	0.21	LE
4	Educational film shows for students	131	1.8	0.31	LE	244	2.0	0.22	LE
5	Adequate & conducive classroom for teaching and learning	117	1.6	0.34	LE	232	1.9	0.23	LE
6	Provision of regular power for the 21 st generation teaching and learning	102	1.4	0.37	LE	281	2.3	0.21	LE
7	Good serenity & ambiance that facilitate good reading culture among students & teachers	124	1.7	0.32	LE	293	2.4	0.20	LE
8	A functional school library with current books / e-books	175	2.4	0.26	LE	268	2.2	0.21	LE
9	A functional science laboratory with relevant apparatus	168	2.3	0.27	LE	256	2.1	0.22	LE
10	The school building with proper conveniences for teachers and students	161	2.2	0.27	LE	281	2.3	0.21	LE
Grand Mean			2.0	0.30	LE		2.1	0.22	LE

Decision X \geq 2.5 High Extent

Table 1.revealed that schools in Rivers state do not have adequate facilities needed for curriculum implementation for achieving sustainable development goals in the state. The mean response to all items relating to availability of facilities for curriculum implementation fall below the decision mean of 2.5, indicating low extent. On the whole, the grand mean also was far below the bench mark mean, implying that all or majority of the respondents rated the extent of availability of facilities for curriculum implementation as low.

Research question 2: *What is the mean rating of Science teachers and Arts teachers on the extent of capacity development for curriculum implementation practices in achieving sustainable development goals for enhanced basic education in Rivers State?*

Table 2: Mean rating of Science and Arts teachers capacity development of curriculum implementation for achieving Sustainable Development Goals

N= 195

S/N	Capacity development for curriculum implementation for achieving SDGs	Science = 73			Arts = 122				
		Total RES	\bar{X}	SD	RMK	Total RES	\bar{X}	SD	RMK
1.	Teachers are giving opportunity for in-service training for professional development	204	2.8	0.27	HE	317	2.6	0.20	HE
2.	Teachers are promoted as at when due	131	2.3	0.27	LE	244	2.0	0.22	LE
3.	Provision for free health care service for teachers	124	2.2	0.27	LE	232	2.3	0.21	LE
4.	Teachers are given their leave bonus, gratuity and pension as at when due	139	2.3	0.27	LE	195	2.2	0.21	LE
5.	Teachers are expose to modern technologies in teaching	146	2.3	0.27	LE	268	2.4	0.20	LE
	Grand mean		2.4	0.27	LE		2.3	0.21	LE

Result from table 2 shows that Science and Arts teachers' capacity development for curriculum implementation practices was low. The mean response for each of the items dealing with capacity development was lower than the decision mean of 2.5; and on the whole, the grand means for both Science and Arts teachers was lower than the decision mean, suggesting that there was low capacity development for curriculum implementation practices.

Research question 3: *What is the mean rating of Science teachers and Arts teachers on the extent of instructional strategies adopted for curriculum implementation practices in achieving sustainable development goals for enhanced basic education in Rivers State?*

Table 3. Mean rating of Science and Art teachers on extent of instructional strategies adopted for curriculum implementation practices for achieving sustainable for Development goals

N = 195

S/N	Instructional strategies adopted for curriculum implementation for achieving SDGs	Science=73				Arts=122			
		Total RSP	\bar{X}	SD	RMK	Total RSP	\bar{X}	SD	RMK
1.	Promotes lifelong learning opportunities for learners	131	1.8	0.31	LE	232	1.9	0.23	LE
2.	Provides knowledge, skills, values and attitudes that empower students to contribute to sustainable development education	185	2.5	0.26	HE	318	2.61	0.24	HE
3.	Addresses Learning content and outcome, pedagogy and the learning environment for holistic and transformational Learning	139	1.9	0.30	LE	293	2.4	0.20	HE
4.	Creates interactive learner – centered teaching and learning settings	187	2.6	0.32	HE	268	2.2	0.21	LE
5.	Provides Learning which supports self-directed Learner	175	2.4	0.26	LE	256	2.1	0.21	LE
6.	Encourages participatory and collaborator learning	102	1.4	0.37	VLE	195	1.6	0.26	LE
7.	Provides problem-orientation methodology	168	2.3	0.27	LE	281	2.3	0.21	LE
8.	Creates opportunities to Linking of formal and informal learning	153	2.1	0.28	LE	317	2.59	0.22	HE
9.	Integrates contents such as climate change, poverty and sustainable consumption into the curriculum	124	1.7	0.32	LE	268	2.2	0.21	LE
10.	Provides opportunities for a shift from teaching to learning	170	2.3	0.27	LE	281	2.3	0.21	LE
11.	Challenges teachers for action oriented, transformative pedagogy	117	1.6	0.34	LE	244	2.0	0.22	LE
Grand Mean			2.1	0.30	LE		2.2	0.22	LE

Decision X <2.5 High Extent

Table 3 shows a grand mean of 2.1 and a criterion mean of 2.50. By this, it was adduced that the Schools in Rivers State could not adopt the instructional strategies for curriculum implementation practices for achieving sustainable development goals, except in items 2 and 4 for Science teaching and items 2 and 3 for Arts teaching

Hypothesis 1: There is no significant difference between the mean rating of Science and Arts teachers regarding the availability of curriculum implementation facilities for achieving sustainable development goals.

Table 4 Z-test analysis of difference between mean rating Science and Arts teachers on the availability of facilities for curriculum implementation practices for achieving the Sustainable Development goals

Teachers	N	\bar{X}	SD	SE	Z cal	Z crit
Science	73	2.0	0.30			
				0.04	2.48	1.96
Arts	122	2.1	0.22			

At 5% level of significance

The Table 4 reveals a computed z-value of 2.48 at 0.05 level of significant. The value is higher than the tabulated value, hence the null hypothesis is rejected and the alternative hypothesis accepted. The implication is that Science and Arts teachers differ in their rating of available facilities for curriculum implementation practice for sustainable development goals and this suggests differing opinions. This supports the earlier agreement that there is absolutely inadequate facilities in the schools for achieving the sustainable development goals in Rivers state.

Hypothesis 2: There is no significant difference between the mean rating of Science and Arts teachers on capacity development for curriculum implementation for achieving sustainable development goals.

Table 5 Z-test analysis of difference between mean rating Science and Arts teachers on the capacity Development for curriculum implementation practices for achieving the Sustainable Development goals

Teachers	N	\bar{X}	SD	SE	Z cal	Z crit
Science	73	2.4	0.27			
				0.03	2.71	1.96
Arts	122	2.3	0.21			

At 5% level of significance

From the above table it would be observed that the calculated z-value is greater than the critical value and is too significance to be attributed to sampling error. Therefore the null hypothesis is not accepted. The implication is that Science and Arts teachers do not agree that there is sufficient capacity development for curriculum implementation for sustainable development goals.

Hypothesis 3. There is no significant difference in the mean ratings of Science and Arts teachers on the extent of their adoption of instructional strategies for curriculum, implement practices for achieving the Sustainable development goals

Table 6. Z- test of difference between mean ratings of Science and Arts teachers on the extent adopting instructional strategies for curriculum implementation practices for sustainable development goals

Teachers	N	\bar{X}	SD	SE	Z-Cal	Z-Crit
Science	73	2.1	0.30			
				0.06	-2.47	1.96
Arts	122	2.2	0.22			

At 5% level of significance

Table 6 shows a calculated Z- Value (-2.47) and the critical Z-Value (1.96) at 0.05 level of significance. Since the calculated Z- Value was not greater than the Z- critical value, we do not reject the null hypothesis. Therefore, there was no significant difference in the extent of instructional strategies adopted by the Science and Arts teachers for curriculum implementation practices in achieving sustainable development goals for enhanced basic education in Rivers State.

DISCUSSION OF FINDINGS

The finding of hypothesis 1 of this study was consonance with Overbaugh (2010) in her study on the relationship of the physical environment to teachers' professionalism revealed that physical environment or facilities affect teachers in their performance. She mentioned further that the most important environmental features which affect teachers' performance are classrooms, furniture and class equipment. Marianhi (2009) in his finding commented that a simply, dignified, artistic exterior is suggestive of the purpose for which school building exists, make the scholars proud of their school and will have an impressive influence on their performance at school. Lamenting on the type of building found in our secondary school, Nwachuku (2005) remarked in his findings that the public sector of education has witnessed stagnation and decay. Stating further he said that most schools are a caricature of what schools should be in a modern state. Ehiamentolor (2011) in his finding argued that school facilities are the operational inputs of every instructional programme. The school is like a manufacturing organization where plants and equipment must be in a top operational shape to produce result. Ivowi (2004) in his finding noted that to ensure that curriculum must be effectively implemented, infrastructural facilities, equipment, tools and materials must be provided sufficiently. Nwagu (2004) affirmed this in his finding that quality of education that our children receive bears direct relevance to the availability and lack of physical facilities and overall atmosphere in which learning take place. Capacity development is a key in curriculum implementation for sustainable development goals. Nenty, (2008) in his study on teachers' capacity building found out that teachers capacity development enhanced their competency and skills in classroom instructional delivery while lack of teachers' capacity building undermined students learning as Forehand (2005) found that incompetent teachers are major problem affecting students achievement.

CONCLUSION

Achieving strategic resources for curriculum implementation practices for sustainable development goals achievement in Rivers State is a great task and the challenges towards achieving such a national goal pose a lot of challenges to all professional teachers in general. This is due to non-availability of appropriate strategic resources and capacity development of teachers and non-compliance to instructional pedagogical strategies in curriculum implementation practices in Rivers State Secondary schools.

RECOMMENDATIONS

1. The authority concern should wake up and engage in improvising of relevant resources and compliance of the prescribed Sustainable Development Education instructional pedagogical strategies to achieve Sustainable Development Goals that will enhance teaching and effective curriculum implementation practices.
2. The government should organize a cohesive state-wide implementation training programme, which will involve all the participants in curriculum development. This will articulate and inform all the implementers on all the relevant strategic resources; which include facilities availability, teachers' capacity development and instructional pedagogical strategies to achieve sustainable development goals for effective curriculum implementation practices in schools in Rivers state.

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