Managing Secondary Education for Sustainable Development in Anambra State through Adequate Resources Mobilisation: Challenges and Strategies for Improvement

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Abstract

The purpose of this study was to examine the need towards managing secondary education for sustainable development in Anambra State through adequate resources mobilisation: challenges and strategies for improvement. Four research questions guided this study. The descriptive survey research design was employed in the study. Population for the study consisted of 259 principals and 5,867 teachers from the 259 public secondary schools within 6 education zones in Anambra State. Sample size of the study constituted a total of 371 respondents, which comprised 78 principals and 293 teachers selected from 78 public secondary schools within the 6 education zones using stratified random sampling technique. A researchers-developed 33-item questionnaire titled: "Managing Secondary Education for Sustainable Development through Adequate Resources Mobilisation Questionnaire (MSESDARMQ)" was the instrument for data collection. The research instrument was validated by three experts from the Department of Educational Management and Policy. A pilot-test was carried out in order to establish reliability of the questionnaire which gave reliability coefficient index 'r' value of 0.80 after the entire process. Data collated were analysed using mean scores and standard deviation. The findings of the study revealed among others that, many of the school plant resources and teaching-learning resources were not mobilised and adequate for managing secondary education for sustainable development in Anambra State. This is usually caused by some challenges as discovered in the study. Among the recommendations which were proffered from the findings of the study were that the Anambra State Government should improve on managing sustainable development of secondary education in Anambra State through adequate funding which is very crucial for the mobilisation of the school plant resources and teaching-learning resources.

Keywords: Managing, Development, Resources, Mobilisation

Introduction

Educational resources form important hub for quality instructional delivery in the education system. No quality or effective teaching and learning can take place without sufficient and efficient use of school resources. Resources however, can be described as efficient tools, devices and teaching aids which enable the classroom teacher to deliver instructions to students. They support students' active and interactive learning in the classroom. According to Nwaham (2011), educational resources are the things or facilities in the school and learning environment, which are used to attain the goals and objectives of the school organisation. This also includes the material resources which deal with facilities, equipment, time, land, transport and so on. Miller and Spoolman (2011) asserted that educational resources can be a source, material, substance or

supply from which benefit is produced. They are materials, instruments, energy, services, staff, knowledge, or other assets that are transformed to produce benefit and, in the process, may be consumed or made unavailable. They can likewise be broadly grouped into two as human and material resources. The human resource is human beings such as the teachers, school heads, administrative staff, among others; while the material resources include finance and other machineries like machines, equipment, buildings, laboratories, classroom, technological appliances such as computers, projectors, printers and scanners, etc (Miller & Spoolman, 2011). Therefore, no educational institution including the secondary schools can survive or become effective without adequate provision of resources. Moreover, secondary education prepares students for the world of work. It prepares students for higher education in the tertiary institutions. The Federal Republic of Nigeria (FRN, 2014:17), stated the goals of secondary education in the National Policy on Education (NPE) document, as they include to:

- i. provide holders of the basic education certificate and junior Arabic and Islamic studies certificate with opportunity for education of a higher level, irrespective of gender, social status, religious or ethnic background;
- ii. offer diversified curriculum to cater for the differences in talents, disposition, opportunities and future roles;
- iii. provide trained manpower in the applied sciences, technology and commerce at subprofessional grades;
- iv. provide entrepreneurial, technical and vocational job-specific skills for self-reliance, and for agricultural, industrial, commercial and economic development;
- v. develop and promote Nigerian languages, art and culture in the context of worlds' cultural heritage;
- vi. inspire students with a desire for self-improvement and achievement of excellence;
- vii. foster patriotism, national unity and security education with emphasis on the common ties in spite of our diversity; and
- viii. raise morally upright and well-adjusted individuals who can think independently and rationally, respect the views and feelings of others and appreciate the dignity of labour.

Achievement of the above goals will not be possible if secondary schools are not effectively managed for sustainable development through adequate deployment of educational resources. Besides, sustainable development according to Emas (2015) entails development that meets the needs of the present without compromising the ability of future generations to meet their own needs. Sustainable development as further described by Emas, aims to maintain economic advancement and progress while protecting the long-term value of the environment; and it provides a framework for the integration of environment policies and development strategies. The overall goal of sustainable development (SD) is the long-term stability of the economy and

environment; this is only achievable through the integration and acknowledgement of economic, environmental, and social concerns throughout the decision-making process. The key principle of sustainable development underlying all others is the integration of environmental, social, and economic concerns into all aspects of decision making (Stoddart, 2011). Different resources exist in the school premises in order to support teaching and learning in the classroom for its sustainable development. According to Macalino (2014), resources can be grouped as: physical plant resources, printed and non-printed resources. The physical plants resources refer to all the physical properties of a school, consisting of the site, grounds, buildings, and the various facilities and equipment within the school grounds and inside the school buildings (Macalino, 2014). To Macalino, these physical plant resources include; the site, buildings, laboratories, libraries, furniture, equipment, among others. They are further described as the site, buildings, equipment and all the essential structures, permanent and semi-permanent as well as such machines and laboratory equipment, the blackboard, chalkboard needed for effective teaching and learning. Printed resources in the secondary school according to Nzeneri (2010) are instructional materials on pen, black and white or coloured prints like pamphlets, workbook, study materials, brochures, memo-graphs, periodicals, newspapers, dictionary, teachers' manual and guide, textbooks, notebooks, diagrams, flash cards, charts, cartoons, posters, pictures, journals, note of lesson, lesson plan, scheme of work, curriculum syllabus, downloaded materials for the internet and graphs. Non-printed resources on the other hand, are those durable materials that do last and they include real objects, hard wares, equipment and high-technology/digital materials that provides educational information and act as excellent tool for instructional delivery. These resources equally appeal to all the five senses of sight (seeing), hearing, touching, tasting and smelling. Many of these non-printed machineries apart from the real objects operate with electricity or batteries (Nzeneri, 2010). In addition, the magnitude and amount of school resources effectively mobilised within the school environment determines effective management of that school, teachers' attitude to work, level of work, competency, commitment, dedication, effort, self-efficacy and productivity. Most times these school resources seem to look as if they are scarce and lacking in many schools, owing to different challenges responsible for the situation, which necessitates deploying important strategies for improvement. Simiyu and Wanjala (2019) confirmed existence of challenges in the teaching and learning which range from lack of instructional resources, inadequate resources and facilities, shortage of well trained teachers, poor motivation among teachers, poor remuneration/payment, non-availability of materials, laziness of the teachers, lack of skill and strategies, financial constraint, lack of appropriate materials in textbook, time constraint, lack of support from authority, lack of resource room, lack of terms of service for teachers and generally lack of managerial and professional support to teachers (Simiyu & Wanjala, 2019).

Given the above challenges, certain strategies are necessary for improvement as they include adequate funding, adequate mobilisation of resources, among other. Cheryan, Ziegler, Plant and Meltozoff (2014) contended that governments should use funds to restructure appropriate physical resources like classrooms and to provide schools with sufficient space for

effective teaching and learning. From all the foregoing discussions, management of secondary education for sustainable development of both the present and future generations through adequate mobilisation of educational resources is very crucial. Mobilisation of resources according to Qadir and Quadri (2016) means enabling access to authorized information or resources to those who need them. It is the ability to make information and related physical and logical resources accessible as needed, when they are needed, and where they are needed. Never minding the relevance and importance of resources for management of educational programmes such as secondary education, yet many secondary schools in the country including those in Anambra State have been found to lack many of the resources that will enhance quality teaching delivery for sustainable development. Observations from most secondary schools in Anambra State, especially in the rural areas showcases students learning under difficult conditions. Most of the schools lack sufficient resources such as well-equipped and standard laboratories, classrooms, workshops, studios, among others. In some cases, students' study under the shade of trees or under dilapidated school building. All these shortcomings have negative consequences on students' academic performances and achievements therefore, affecting sustainable development in the society. This means that the schools will keep on producing graduates who are incapable of facing the 21st century challenges in the Nigerian environment. The poor nature of many secondary schools in Anambra State has warranted the researchers to investigate the essence of managing secondary education for sustainable development in Anambra State through adequate resources mobilisation, also looking at the challenges and strategies for improvement. Several empirical studies which includes those of Andambi and Kariuki (2013), Atieno (2014), Mbugua (2011), Ntui and Udah (2015), Owate and Iroha (2013), Wanjiku (2013), among others, have been conducted in the area of educational resources. All these studies have their own mix and shortcomings which warrants conducting the present study. It is however, upon this background that the present study is conducted.

Statement of the Problem

Educational or school resources help to enhance effective teaching and learning delivery in school. They are also very important in supporting teachers' work and job performance. Considering the importance of educational resources for sustainable development in the secondary schools, many schools lack the requisite resources which is necessary for educational goals achievement. Besides, the poor conditions coupled with the inadequate resources found within most schools including those in Anambra State seem to be responsible by some factors such as inadequate funding, poor maintenance, among others. These challenges necessitate investigating several possible strategies that will lead to improvement in the situation of things. However, the issues relating to poor mobilisation of resources which affects sustainable development in the secondary schools has become the major concern and knowledge gap in which the present study intends to fill. The need towards managing secondary education for sustainable development in Anambra State through adequate resources mobilisation; coupled

with the challenges inhibiting adequate mobilisation of resources together with the strategies for improvement; has become the problem of this present study.

Purpose of the Study

The purpose of this study was to examine the need towards managing secondary education for sustainable development in Anambra State through adequate resources mobilisation: challenges and strategies for improvement. Specifically, the objectives of this study sought to:

- 1. find out how adequate the school plant resources are mobilised for managing secondary education for sustainable development in Anambra State.
- 2. ascertain how adequate the teaching-learning resources are mobilised for managing secondary education for sustainable development in Anambra State.
- 4. determine the challenges inhibiting adequate mobilisation of the various resources for managing secondary education for sustainable development in Anambra State.
- 5. assess the possible strategies for improvement of adequate mobilisation of the various resources for managing secondary education for sustainable development in Anambra State.

Research Questions

The following three research questions guided the study;

- 1. How adequate are the school plant resources mobilised for managing secondary education for sustainable development in Anambra State?
- 2. How adequate are the teaching-learning resources mobilised for managing secondary education for sustainable development in Anambra State?
- 3. What are the challenges inhibiting adequate mobilisation of the various resources for managing secondary education for sustainable development in Anambra State?
- 4. What are the possible strategies for improvement of the adequate mobilisation of the various resources for managing secondary education for sustainable development in Anambra State?

Methods

The descriptive survey research design was employed for the study. This research design entailed using a research instrument, the questionnaire, to collect data from a sample of principals and teachers within a large population of principals and teachers in public secondary schools in Anambra State. Information retrieved from the sample of principals and teachers was thereafter analysed using a statistical tool in other to generate data and draw generalisation given based on the findings. Population for the study consisted of 259 principals and 5,867 teachers from the 259 public secondary schools within 6 education zones in Anambra State. Sample size of the study constituted a total of 371 respondents, which comprised 78 principals and 293 teachers selected from 78 public secondary schools within the 6 education zones using stratified random sampling technique. Sample of the principals and teachers were drawn at 30% and 5% respectively. A researchers-developed 33-item questionnaire titled: "Managing Secondary

Education for Sustainable Development through Adequate Resources Mobilisation Questionnaire (MSESDARMQ)" served as instrument for data collection. The questionnaire was structured on a 4-point scale of Adequately Mobilised (AM) - 4 points, Mobilised (M) - 3 points, Fairly Mobilised (FM) - 2 points and Not Mobilised (NM) -1 point in order to answer research questions 1 and 2. While such response items as Strongly Agree (SA) - 4 points, Agree (A) - 3 points, Disagree (D) - 2 points and Strongly Disagree (SD) -1 point in order to answer research questions 3 and 4. The research instrument was validated by three experts from the Department of Educational Management and Policy. The experts determined the face and content validity of the questionnaire to make some necessary corrections on few items on the instrument and which were equally incorporated before the final distribution of the questionnaire. A pilot-test was carried out in order to establish reliability of the questionnaire. This involved sampling 10 principals and 30 teachers from 10 public secondary schools in Anambra State which were not part of the sample. After the pilot-test, scores obtained were collated and computed using Cronbach Alpha statistics which gave internal consistency reliability value 0.77, 0.83, 0.79 and 0.81 for each of the four clusters respectively and summed up to yield an overall reliability value of 0.80, showcasing that the questionnaire was reliable for conducting the study. Method of data analysis was through a personal contact with the respondents. An on-the-spot method was also adopted in distributing all the copies of the questionnaire involving the help of six research assistants representing each of the 6 education zones in this area. These research assistants who were familiar with area of study received directives and instructions on how to collect the necessary information from the principals and teachers using the questionnaire. Distribution of the questionnaire to the respondents took a period of 5 working days. A total of 371copies of the questionnaire were distributed to 371 principals and teachers and all of them were retrieved at a 100% rate of return. Data collated were analysed using mean scores and standard deviation. The decision rule for taking decisions on the items on the questionnaire which was rated at 2.50 was that any mean score which rated at 2.50 and above was regarded to be in support of the statement and termed as mobilised (M) or agree (A). Any mean score that rated below 2.50 was regarded as not in support of the statement and termed not mobilised (NM) or disagree (D).

Results

Research Question 1. How adequate are the school plant resources mobilised for managing secondary education for sustainable development in Anambra State?

Table 1: Mean Scores and SD of Respondents on How Adequate the School Plant Resources Are Mobilised for Managing Secondary Schools for Sustainable Development in Anambra State

S/N	Please indicate how adequate the following school plant	Principals			Teachers			
	resources are mobilised for sustainable development of	X	SD	Decision	X	SD	Decision	
	your school. Mobilisation of:							
1.	Standard building with well-ventilated, spacious classrooms							
	having shelves and cupboards	1.91	0.99	Not Mobilised	1.60	0.78	Not Mobilised	
2.	Well-equipped science laboratories with adequate tools and							
	specimens	1.96	0.82	Not Mobilised	1.75	0.78	Not Mobilised	
3.	Well-furbished workshops with adequate equipment and tools							
	for basic technology and vocational subjects	2.18	0.93	Not Mobilised	1.66	0.83	Not Mobilised	
4.	Standard e-libraries with updated reading materials	2.08	0.98	Not Mobilised	1.77	0.80	Not Mobilised	
5.	Internet facilities with adequate network connectivity	1.76	1.12	Not Mobilised	1.73	0.81	Not Mobilised	
6.	Well-furnished art studio for creative arts subjects	1.86	0.89	Not Mobilised	1.77	0.81	Not Mobilised	
7.	Adequate social amenities such as electricity, gen set, bore							
	holes, etc	2.18	1.13	Not Mobilised	1.77	0.81	Not Mobilised	
8.	Sanitary facilities such as standard school clinic and sick bay							
	with adequate drugs, etc.	1.94	0.94	Not Mobilised	1.94	0.73	Not Mobilised	
	Overall Mean Score & SD =	1.98	0.99	Not Mobilised	1.75	0.80	Not Mobilised	

Analysis of data in Table 1 revealed all the items from 1 to 8 were rated below 2.50 of the accepted mean score by the principals and teachers in order to show their disagreements with all these statements. None of the items was rated above 2.50 of the accepted mean score by the principals and teachers in order to show their agreement with any of the statements. Their overall mean score and standard deviation (SD) of 1.98 and 0.99; likewise, 1.75 and 0.80 of both the principals and teachers respectively showcased closeness in their mean responses. Therefore, this result indicates that many of these school plant resources were not mobilised, more or less being adequate for managing secondary education for sustainable development in Anambra State.

Research Question 2. How adequate are the teaching-learning resources mobilised for managing secondary education for sustainable development in Anambra State?

Table 2: Mean Scores and SD of Respondents on How Adequate the Teaching-Learning Resources Are Mobilised for Managing Secondary Schools for Sustainable Development in Anambra State

S/N	Please indicate how adequate the following teaching-	Principals			Teachers		
	learning resources are mobilised for sustainable	X	SD	Decision	X	SD	Decision
	development of your school. Mobilisation of:						
9.	Digital resources such as laptops, projectors, desktops, smart						
	television, DVD, CDs, tape recorders, cameras, printers, etc						
	mobilised in the school	1.74	0.82	Not Mobilised	1.61	0.71	Not Mobilised
10.	Graphic resources for managing teaching and learning in the						
	classroom	1.78	0.65	Not Mobilised	1.70	0.70	Not Mobilised
11.	Printed resources such as textbooks, teachers' guide, students						
	workbook, dictionary, pictures, charts, graphs, maps,						
	dictionaries, memo-graphs, etc	3.12	0.75	Mobilised	2.61	1.17	Mobilised
12.	Dimensional objects in the classroom in the form of two, three						
	and four dimensional objects	2.04	0.97	Not Mobilised	1.67	0.67	Not Mobilised
13.	Nature corner in the classroom with real objects	1.58	0.99	Not Mobilised	1.61	0.65	Not Mobilised
14.	Instructional resources such as chalkboards, whiteboards with						
	chalks and markers	2.67	0.92	Mobilised	2.65	1.05	Mobilised
15.	Teaching resources such as lesson plan, lesson note, syllabus,						
	curriculum, etc for managing teaching-learning in school	2.58	1.01	Mobilised	2.31	1.20	Mobilised
	Overall Mean Score & SD =	2.21	1.03	Not Mobilised	2.02	1.01	Not Mobilised

Analysis of data in Table 2 revealed all the items from 9, 10, 12 and 13 were rated below 2.50 of the accepted mean score by the principals and teachers in order to show their disagreements with all these statements. Except for items 11, 14 and 15 which were rated above 2.50 of the accepted mean score by the principals and teachers in order to show their agreement with these statements. Their overall mean score and standard deviation (SD) of 2.21 and 1.03; likewise, 2.02 and 1.01 of both the principals and teachers respectively showcased closeness in their mean responses. Therefore, this result indicates that most of the teaching-learning resources were not mobilised and adequate for managing secondary education for sustainable development in Anambra State.

Research Question 3. What are the challenges inhibiting adequate mobilisation of the various resources for managing secondary education for sustainable development in Anambra State?

Table 3: Mean Scores and SD of Respondents on the Challenges Inhibiting Adequate Mobilisation of the Various Resources for Managing Secondary Education for Sustainable Development in Anambra State

S/N	Please indicate the challenges inhibiting adequate mobilisation of		Principals			Teachers			
	the various resources for managing secondary education for	X	SD	Decision	X	SD	Decision		
	sustainable development of your school.								
16.	Poor funding from the government including other respective								
	stakeholders	3.51	0.50	Agree	3.08	1.13	Agree		
17.	Poor maintenance culture of resources from school administrators	3.31	0.70	Agree	2.95	1.24	Agree		
18.	Lack of synergy between schools and the private individuals								
	including financial institutions	3.44	0.55	Agree	2.94	1.22	Agree		
19.	Poor accountability from school administrators	3.42	0.49	Agree	3.11	1.04	Agree		
20.	High cost of the digital technology resources affecting their			J			Ü		
	mobilisation	3.03	0.95	Agree	2.76	1.31	Agree		
21.	Inadequate constant retraining of staff on utilisation of resources	3.36	0.48	Agree	3.20	0.88	Agree		
22.	Poor electricity supply couple with inadequate generator set in school	3.17	0.54	Agree	2.96	1.04	Agree		
23.	Lack of skills or competence to operate school resources	3.47	0.57	Agree	2.87	1.06	Agree		
24.	Poor motivation	3.21	0.40	Agree	2.75	1.14	Agree		
25.	Inadequate use of participatory decision making process by school			-			-		
	administrators	3.14	0.61	Agree	2.88	1.01	Agree		
	Overall Mean Score & SD =	3.31	0.62	Agree	2.95	1.12	Agree		

Analysis of data in Table 3 revealed all the items from 16 to 25 were rated above 2.50 of the accepted mean score by the principals and teachers in order to show their agreement with all these statements. None of the items was rated above 2.50 of the accepted mean score by the principals and teachers in order to show their disagreement with any of the statements. Their overall mean score and standard deviation (SD) of 3.31 and 0.62; likewise, 2.95 and 1.12 of both the principals and teachers respectively showcased closeness in their mean responses. Therefore, this result identified the challenges inhibiting adequate mobilisation of the various resources for managing secondary education for sustainable development in Anambra State.

Research Question 4. What are the possible strategies for improvement of adequate mobilisation of the various resources for managing secondary education for sustainable development in Anambra State?

Table 4: Mean Scores and SD of Respondents on the Possible Strategies for Improvement of Adequate Mobilisation of the Various Resources for Managing Secondary Education for Sustainable Development in Anambra State

S/N	Please indicate the possible strategies for improvement of adequate	Principals		rincipals Teach		ners	
	mobilisation of various resources for managing sustainable	X	SD	Decision	X	SD	Decision
	development of your school.						
26.	Adequate funding of schools for resources mobilisation	3.56	0.50	Agree	3.42	0.57	Agree
27.	School administrators constant application of different resource maintenance strategies using emergency, preventive, corrective,			Agree			Agree
	predictive strategies, among others	3.68	0.57		3.30	0.72	
28.	Support from external sources such as non-governmental organisation,	0.00	0.07	Agree	2.20	01.72	Agree
	private sector and international organisations	3.62	0.49	8	3.80	0.40	8
29.	Financial support for teachers to constantly mobilize the resources they			Agree			Agree
	need in the classroom	3.64	0.51	C	3.69	0.46	C
30.	Regular mobilisation of various in-service training for staff in the use			Agree			Agree
	of most of these digital technology resources	3.29	0.68	C	2.92	1.01	<u> </u>
31.	Constant checking of school administrators for appropriate			Agree			Agree
	accountability	3.28	0.53		3.15	0.99	
32.	Regular school supervision to determine their effectiveness and			Agree			
	challenges	3.21	0.63		3.40	0.52	Agree
33.	Active involvement of all stakeholders in the general school						
	management including in the decision making process	3.15	0.80	Agree	3.17	0.91	Agree
	Overall Mean Score & SD =	3.43	0.63	Agree	3.36	0.78	Agree

Analysis of data in Table 4 revealed all the items from 26 to 33 were rated above 2.50 of the accepted mean score by the principals and teachers in order to show their agreement with all these statements. None of the items was rated above 2.50 of the accepted mean score by the principals and teachers in order to show their disagreement with any of the statements. Their overall mean score and standard deviation (SD) of 3.43 and 0.63; likewise, 3.36 and 0.78 of both the principals and teachers respectively showcased closeness in their mean responses. Therefore, this result identified the possible strategies for improvement of adequate mobilisation of the various resources for managing secondary education for sustainable development in Anambra State.

Discussion of Findings

Findings of this study revealed that many of the school plant resources and teaching-learning resources were not mobilised and adequate for managing secondary education for sustainable development in Anambra State. The findings equally revealed the challenges inhibiting adequate mobilisation of the various resources coupled with the possible strategies for improvement of adequate mobilisation of the various resources for managing secondary education for sustainable development in Anambra State. It was however, found out that many of the schools' plant resources were not mobilised, more or less being adequate for managing secondary education for sustainable development in Anambra State. Such school plant resources as standard building with well-ventilated, spacious classrooms having shelves and cupboards, well-equipped science laboratories with adequate tools and specimens, well-furbished workshops with adequate equipment and tools for basic technology and vocational subjects, standard e-libraries with

updated reading materials, internet facilities with adequate network connectivity, well-furnished art studio for creative arts subjects, adequate social amenities such as electricity, generator set, bore holes, etc, and sanitary facilities such as standard school clinic and sick bay with adequate drugs, etc, were not mobilised and adequate for managing secondary education for sustainable development in Anambra State. This finding corroborates with the studies of Owate and Iroha (2013) and Atieno (2014) which found out that physical plant facilities were lacking and grossly inadequate in schools. The finding of this presents study also agrees and concurs with Wanjiku (2013) study which found out that physical plant resources in almost all the secondary schools observed were largely inadequate. Whereby the school plant resources are inadequate and not mobilised, this would create difficulty towards managing secondary education for sustainable development.

It was further discovered through the present study that most of the teaching-learning resources were not mobilised and adequate for managing secondary education for sustainable development in Anambra State. Such teaching and learning resources as digital resources such as laptops, projectors, desktops, smart television, DVD, CDs, tape recorders, cameras and printers, graphic resources, dimensional objects in the classroom in the form of two, three and four dimensional objects, and nature corner in the classroom with real objects; all were not mobilised in the schools. However, the finding indicated that although such teaching and learning resources like the printed resources such as textbooks, teachers' guide, students' workbook, dictionary, pictures, charts, graphs, maps, dictionaries and memo-graphs, instructional resources such as chalkboards, whiteboards with chalks and markers, and teaching resources such as lesson plan, lesson note, syllabus, and curriculum were mobilised for managing teaching-learning in school, but they were still not adequate. This finding corroborates and is equally in line with Andambi and Kariuki (2013) study which found out that the various types of learning resources for teaching were not adequately available in secondary schools. Mbugua (2011) found that secondary schools (both rural and urban schools) were poorly equipped with teaching and learning resources especially in subject areas like mathematics which required these materials to facilitate abstraction of concepts by the learners. Ntui and Udah (2015) study found out that the visual and audio-visual materials were inadequate and they significantly influenced utilisation by teachers in the school. The situation of inadequate mobilisation of the teaching and learning resources has led to managing the sector poorly and not sustainable in Anambra state.

The finding of the study further indicated the challenges inhibiting adequate mobilisation of the various resources for managing secondary education for sustainable development in Anambra State. They include poor funding from the government including other respective stakeholders, poor maintenance culture of resources from school administrators, lack of synergy between schools and the private individuals including financial institutions, poor accountability from school administrators, high cost of the digital technology resources affecting their mobilisation, inadequate constant retraining of staff on utilisation of resources, poor electricity supply couple with inadequate generator set in schools, lack of skills or competence to operate school resources, poor motivation, and inadequate use of participatory decision making process

by school administrators. This finding agree with Simiyu and Wanjala (2019) study which confirmed existence of challenges in the teaching and learning which range from lack of instructional resources, inadequate resources and facilities, shortage of well trained teachers, poor motivation among teachers, poor remuneration/payment, non-availability of materials, laziness of the teachers, lack of skill and strategies, financial constraint, lack of appropriate materials in textbook, time constraint, lack of support from authority, lack of resource room, lack of terms of service for teachers and generally lack of managerial and professional support to teachers.

It was also discovered through this present study that some of the possible strategies that will aid the improvement of adequate mobilisation of the various resources for managing secondary education for sustainable development in Anambra State include adequate funding of schools for resources mobilisation, school administrators' constant application of different resource maintenance strategies using emergency, preventive, corrective, predictive strategies, among others, support from external sources such as non-governmental organisation, private sector and international organisations, financial support for teachers to constantly mobilize the resources they need in the classroom, regular mobilisation of various in-service training for staff in the use of most of these digital technology resources, constant checking of school administrators for appropriate accountability, regular school supervision to determine their effectiveness and challenges, and active involvement of all stakeholders in the general school management including in the decision making process. Applying all these strategies will strengthen the management of secondary education for sustainable development in Anambra State. This finding agrees and concurs with the previous study of Cheryan, Ziegler, Plant and Meltozoff (2014) which found out that with adequate funding, thorough supervision and programme monitoring, among other strategies, this will enhance effective management of secondary schools for sustainable development in the society. Hence, based on all these findings, priority concern should adequately and substantially drive towards effective management of secondary education in Anambra State.

Conclusion

Secondary education is known for the preparation of young ones for higher education and the world of work. The efficiency and effectiveness of the secondary schools which has been found very difficult to attain in the present study highly depends on effective management of the system. The study however, submits and concludes that many of the school plant resources and teaching-learning resources were not mobilised and adequate for managing secondary education for sustainable development in Anambra State. This is usually caused by some challenges found out in the study. More so, several possible strategies were indicated through the findings of this present study. For effective management of secondary education in Anambra State, priority focus and attention should be given towards adequate mobilisation of school resources and facilities for sustainable development. Thus, the recommendations made below.

Recommendations

From the findings of this present study, the following recommendations were proffered:

- 1. Anambra State Government should improve on managing secondary education in Anambra State through adequate funding which is very crucial for adequate mobilisation of the school plant resources and teaching-learning resources for sustainable development.
- 2. Secondary school principals should solicit financial support from private sector, Parents Teachers Association, and other non-governmental agencies through active event planning for the mobilisation of teaching and learning resources which will aid managing the secondary schools for sustainable development in Anambra State.
- 3. The Post Primary Schools Service Commission in strong collaborations with the government and leadership in secondary schools should resolve, if possible eradicate, all the challenges inhibiting adequate mobilisation of the various resources for managing secondary education for sustainable development in Anambra State.
- 5. Anambra State Government should financially support and encourage the principals and regulatory agency to apply all the possible strategies that will positively impact on adequate mobilisation of the various resources for managing secondary education for sustainable development in Anambra State.

References

- Andambi, R. & Kariuki, B. (2013). The effect of use of learning resources in teaching social education and ethics in Bungoma District, Kenya. *Journal of Emerging Trends in Educational Research and Policy Studies (JETERAPS)*, 4 (1), 157-163. jeteraps.scholarlinkresearch.org.
- Atieno, A. J. (2014). *Influence of teaching and learning resources on students' performance in Kenya certificate of secondary education in free day secondary education in Embakasi District, Kenya*. Unpublished M. Ed project. Submitted to the Department of Educational Administration and Planning, University of Nairobi, Kenya. www.eap.uonbi.ac.k.
- Cheryan, S., Ziegler, S.A., Plant, V.C. & Meltozoff, A.N. (2014). Designing the classroom to maximize student achievement. *Policy Insights Forum the Behavioral and Brain Science*, 1 (1), 4-12.
- Emas, R. (2015). *The concept of sustainable development. Definition and defining principles.* https://www.researchgate.net/publication/339003550.
- Federal Republic of Nigeria (2014). National policy on education, (6th edition). Abuja: NERDC
- Macalino, P.P. (2014). Physical plant and facilities in educational management. https://www.slideshare.net/popsmacalino/physical-plant-and-facilities-in-educational-management.

- Mbugua, Z.K. (2011). Adequacy and the extent to which teaching and learning resources for mathematics are available and used for achievement in the subject in secondary school in Kenya. *American International Journal of Contemporary Research*, 1 (3), 112-116.
- Miller, G.T. & Spoolman, S. (2011). *Living in the environment: Principles, connections, and solutions* (17th ed). Belmont, CA: Brooks-Cole.
- Ntui, A.I. & Udah, A.E. (2015). Accessibility and utilisation of library resources by teachers in secondary schools in Calabar education zone of Cross River State, Nigeria. *Global Journal of Human-Social Science: Arts & Humanities Psychology, 15* (8) 1-12, *Version 1.0.* U.S.A.: Global Journals Inc.
- Nwaham, C.O. (2011). School administration and supervision of instruction in Nigeria (revised and enlarged edition). Agbor: Progress Printing Associates.
- Nzeneri, I.S. (2010). *Handbook on adult education. Principles and practices (New edition)*. Uyo: Abigab Associates Limited.
- Owate, C.N. & Iroha, O. (2013). The availability and utilisation of school library resources in some selected secondary schools (high school) in Rivers State. *Educational Research Reviews*, 8 (16), 1449-1460. http://www.academicjournals.org/ERR.
- Qadir S. & Quadri S. M. K. (2016). Information availability: An insight into the most important attribute of information security. *Journal of Information Security*, 7, 185-194. http://file.scirp.org/pdf/.
- Simiyu, C.P. & Wanjala, M.M.S. (2019). Challenges to effective utilisation of instructional resources in early childhood education and development centres in Bungoma County, Kenya.
- Stoddart, H. (2011). A Pocket guide to sustainable development governance. Stakeholder Forum.
- Wanjiku, M.E. (2013). Availability and utilisation of educational resources in influencing students' performance in secondary schools in Mbeere South, Embu County, Kenya. Unpublished Master's Degree thesis, submitted to curriculum studies of Kenyatta University. http://ir-library.ku.ac.ke/.