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Evaluation of the Availability and Utilization of Visual and Audio Instructional Resources in Public and Private Primary Schools in Rivers State

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Authors' contributions

This work was carried out in collaboration between both authors. Author IAGK designed the study, performed the statistical analysis, wrote the protocol and wrote the first draft of the manuscript. Author IFOE managed the analyses of the study and literature searches. Both read and approved the final manuscript.

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ABSTRACT

This study evaluated the availability and utilization of visual and audio instructional resources in public and private primary schools in Rivers State, Nigeria. Two research questions were stated to guide the study. The research design used for the study was an ex-post facto design. The population of the study comprised of eight thousand, two hundred and ninety-eight (8,298) teachers in public and private primary schools. A multi-stage sampling technique was used. A sample size of one thousand six hundred and sixty (1,660) teachers were used for the study. Checklist titled Availability and Utilization of Instructional Resources (AUIRC) was used for data collection. Descriptive statistics (percentages, mean and standard deviation) was used for data analysis. The result revealed that, availability and utilization of instructional resources is relatively low in public schools and high in private schools. Conclusion was drawn in line with the result of the study. It was therefore recommended that the Ministry of Education in Rivers State through relevant agencies should organize regular orientation/workshops on the improvisation and utilization of instructional resources in order to enhance effective teaching and learning in primary schools.

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Keywords: Evaluation; availability; utilization; visual/audio; instructional resources; public/private schools; Rivers State.

1. INTRODUCTION

Education is a key investment in any nation with social and economic benefits accruing from it. It is seen as a prerequisite for quality man power development and creation of wealth as well as a sure path to success in life and service to humanity. This explains why one of the national education goals is the acquisition of appropriate skills and development of mental, physical and social abilities and competences as equipment for the individual to live and contribute to the development of the society [1].

In terms of qualitative delivery, the type of education imparted to majority of primary school children is ill-suited to the development need of Nigerians. It is perceived that, the appropriate education approach is yet to be given attention. To affirm this, Oloruntoyin [2] posited that at present, the quality of education offered to children in primary schools in Nigeria is below the required standard and this has an adverse effect on the quality of output in primary schools. The education of the child at the primary level is a fundamental necessity for the transformation of any society. FRN [1] recognizing this role declared that since the rest of the educational system is built upon it, the primary level of education is the key to the whole system.

Unfortunately, the poor condition of schools in Nigeria particularly the primary schools today raises a lot of concerns. For instance, the poor performance of pupils in primary schools both in common entrance examination and other academic challenges such as inability to read, write and comprehend basic issues at that level has raised so many questions about the quality of education imparted to primary schools pupils. The government and especially parents are much concerned with the quality and volume of learning acquired by their children, wards and citizens [3].

The Government of Rivers State has in recent time increased the access to education in the primary schools by building more schools and providing more facilities as well as recruiting more teachers and expanding primary schools in Local communities. However, the increasing threat to the optimization of educational result in Rivers State today due to poor quality of basic education of school leavers is a matter that requires concerted efforts of all stake holders to ensure that the quality of teaching and learning is improved. Researchers have attributed the problem of poor performance of pupils in primary schools to dilapidated buildings, the absence of adequate furniture and equipment and the lack of teachers in specific subject areas.

In this regard, so many researches such as teachers' motivation, provision of school facilities and teachers job satisfaction on pupils' academic performance have been carried out to see how the problems of pupils' poor performance can be ameliorated. The plethora of research include that of teachers' motivation by Han and Yin [4], provision of school facilities by Duyar [5] yet this problem is still persisting in the study area. It is the assumption of this study that the availability and utilization of instructional resources in primary schools may provide a solution to the problems of poor academic performance in primary schools in Rivers State.

The primary purpose of the teaching and learning process is to bring a significant change in behaviour through active participation and critical thinking of the learners. This cannot take place without the availability and utilization of instructional resources [6]. Adeogun [7] also discovered a low level of instructional resources availability in public schools and stated that public schools are starved of both teaching and learning resources. Amadioha [8] defined instructional resources as objects, devices or alternative means, which help the teacher to make lesson much clearer to the learner. Instructional resources are also described as concrete or physical objects which provide sound, visual or both to the sense organs during teaching. While there are many factors which can contribute to the good performance of learners, these facilities are important factors that cannot be ignored. Instructional resources are usually grouped into textual and non-textual. Textual materials include printed materials such as textbooks; syllabi modules and manuals, reference books, charts and maps, newspapers, journals and encyclopedia, text in Braille, posters, fliers, photographs, booklets and brochures. On the other hand, non-textual materials include laboratory apparatus, prototypes, Braille machines, writing boards, weather stations and samples of actual materials, ICT resources such as computers,

internet connectivity, photocopying machines, printers and scanners [9].

For teaching and learning activities to be effective and purposeful, the teachers have to make use of appropriate visual and audio instructional resources. The teacher must know the visual and audio instructional resources that are available for teaching and be able to utilize them to achieve educational objectives. This implies that the use of visual and audio instructional resources is inevitable if effective teaching and learning must be achieved. The availability and utilization of visual and audio instructional resources therefore, becomes very crucial in improving the overall quality of the learning experiences for pupils. It is based on this that this study is aimed at evaluating the availability and utilization of visual and audio instructional resources in public and private primary schools in Rivers State, Nigeria.

2. THEORETICAL BACKGROUND

This study adopted the cumulative learning theory by Robert Mills Gagne [10] as the basis for its theoretical framework. Gagne's theory stipulates that different types of learning exist and that different instructional approaches are required to maximize the achievement objectives of each specific learner. The focus of this theory is on the retention and homing of intellectual skills. The assumptions of Gagne's theory are:

1. Gain attention- present stimulus to ensure reception of instruction.
2. State the learning objective- what will the pupil gain from the instruction?
3. Stimulate recall of prior learning –Ask for recall of existing relevant knowledge
4. Present the stimulus-Display the context
5. Provide learning guidance
6. Elicit performance: learners respond to demonstrate knowledge
7. Provide Feedback-Give in format feedback on the learners' performance
8. Assess performance – More performance and more feedback to reinforce information.
9. Enhance retention and transfer to other contexts.

The implication of this theory to this study is that availability and utilization of visual and audio instructional resources may help the teacher to capture the attention and interest of the learners. These instructional resources may help pupils recall prior knowledge and make the lesson to be interactive. The theory is also relevant in that the availability and utilization of visual and audio instructional resources may supply the pupils with a learning environment that encourage them to initiate and complete their own activities.

2.1 Research Questions

The following research questions were stated to guide this study:

1. What is the extent of availability and utilization of visual instructional materials in public and private primary school?
2. What is the extent of availability and utilization of Audio- materials in public and private primary schools?

3. RESEARCH METHODOLOGY

3.1 Research Design

The research design adopted for this study was ex-post facto design. This design is used in a study where the researcher does not have control of the variables and as such could not manipulate them because they had already occurred before the desire to conduct the research became evident [11].

The choice of this design was predicated on the fact that the variables under investigation (availability and utilization of visual and audio instructional resources) had taken place before the researcher's interest to conduct this research came to light. As a result, the variables in the study could not be manipulated or controlled by the researcher. Influences about relations among variables were made without direct intervention from concomitant variation of independent and dependent variables.

3.2 Area of the Study

The area of study was River State in Nigeria. River State is one of the states in the Niger Delta Region situated at the South-south Geo-political Zone of the Federal Republic of Nigeria. Ekpo [12] and United Nation Development Programme [13] in their Niger Delta human development report" confirmed that "Rivers State has a land area of 10,378 square kilometers made up of dry lands, water and creeks. The state shares a boundary to the North with Imo State, to the North-East with Abia State, to the East with Akwa Ibom State, to the South-West with Bayelsa

State, to the North-West with Delta State and to the South with the Atlantic Ocean." It has a population of about 4.5. million people and every community have a primary school and each local government has a model secondary school. The state has built several institutions of high learning to cater for its citizens and those residents in the state. Presently the state has three polytechnic, one college of health technology, one school of nursing, two state universities and a federal university.

This area was chosen due to its educationally advantaged environment in terms of natural resources. In addition, it is believed that Rivers State being a state naturally endowed with physical amenities, such an environment would facilitate the attainment of the laudable Universal Basic Education (U.B.E) objectives in terms of availability and utilization of visual and audio instructional resources among the pupils in the basic education programmes.

3.3 Population of the Study

The population of this study consists of all the teachers and all the schools in public and private primary schools in Rivers State. The population specifically consisted of a total of eight thousand, two hundred and ninety-eight (8,298) teachers (7,149 teachers in public schools and 1,149 teachers in private schools) in one thousand and eleven (1,011) public primary schools and three hundred and twenty-nine (329) private primary schools [14]. The distribution of the population of the study is presented in Table 1.

3.4 Sampling Techniques

In order to obtain a true representative sample for the study, a multi-stage sampling technique was adopted. First proportional stratified sampling technique was adopted to select the number of schools. The bases for stratification was on education zones (Rivers East, Rivers South and Rivers South West). Twenty percent (20%) of the schools were selected from each zone. More so, simple random sampling technique utilizing the table of random numbers was used to select 20% of teachers in the sampled schools (Table 2).

3.5 Sample

The sample size for this study consists of one thousand six hundred and sixty teachers (1,660) in public and private primary schools, and two hundred and fifty-six public and private primary schools (256) and this was used for the study.

3.6 Instrumentation

A checklist titled Availability and Utilization of Instructional Resources (AUIRC) was used for data collection. The checklist was divided into two sections A and B. Section A was designed to receive responses from the respondents based on demographic characteristics, while section B was divided into two sections 1 and 2. Section 1 was assessed on the spot based on observation of the availability of instructional resources while teachers were used to provide information on the utilization of instructional resources in the schools.

3.7 Validation of the Instrument

The questionnaire items on Availability and Utilization of Instructional Resources Questionnaire (AUIRQ) was constructed. Draft copies of the instrument were presented to experts to vet the items in terms of their face validity and ensured that every question item used measured what they were supposed to measure.

3.8 Date Collection Procedure

The instruments were administered to the teachers through the assistance of the Head teachers in all the selected public and private schools. Research assistance were also employed to assist in the data collection process.

3.9 Data Preparation and Scoring

A key was developed in which numbers were assigned as a way of scoring them. The numbers were assigned to the demographic variables according to their sequence of occurrence. For other variables in section B, the key for scoring was six (6) points highest, while one (1) was for the lowest key.

3.10 Procedure for Data Analysis

The procedure for data analysis was carried out by research questions. Below are the statistical tools that was used in analyzing the data.

1. To what extent is the availability and utilization of instructional resources in terms of visual materials in public and private primary schools?
   Statistical tool: Percentages

2. What is the extent of availability and utilization of instructional resources in terms of Audio- materials in public and private primary schools?
   Statistical tool: Percentages

4. RESULTS AND DISCUSSION

The presentation of the data was done by given a general description of the demographic characteristics of the respondents (teachers), the research variables as well as following the trends of two research questions. These line of thought directed the study.

4.1 General Description of the Demographic Characteristics of the Respondents

The population used for the study comprised one thousand six hundred and sixty (1,660 teachers - 794 males and 866 females). A total of two hundred and fifty-six (256) schools (191 public and 65 private) were involved in the study. Two hundred and forty-nine (249) teachers representing 15% of the population of the teachers have a working experience of 1 - 10 years. Nine hundred and ninety-six (996) teachers representing 60% of the population of the teachers have a working experience of 11 - 20 years. Four hundred and fifteen (415) teachers representing 25% of the population of the teachers have a working experience of 21 - 30 years. Their educational qualifications were: NCE/OND (415, representing 25% of the population of teachers), BSc/B.Ed (913, representing 55% of the population of teachers) and MSc/MEd (332, representing 20% of the population of teachers). One hundred and sixty-six (166) teachers representing 10% of the population of the teachers fall within the age brackets of 25 - 30 years. Four hundred and fifteen (415) teachers representing 25% of the population of the teachers fall within the age brackets of 31 - 35 years. Five hundred and eighty-one (581) teachers representing 35% of the population of the teachers fall within the age brackets of 36 - 40 years, while four hundred and ninety-eight (498) teachers representing 30% of the population of the teachers fall within the age brackets of 40 years and above.

4.2 General Description of Research Variables

The study evaluated the availability and utilization of instructional resources in public and private primary schools in Rivers state. The major variables in the study were sub-divided into two namely; availability and utilization of visual resources and audio resources. Mean and standard deviation were used in data analysis.

4.3 Research Question One

What is the extent of availability and utilization of visual instructional resources?
The result of this research question is presented using percentages, mean and standard deviation.

Table 3 presents the availability of visual resources in public and private primary schools. The visual resources such as textbooks, chalkboard, whiteboard, pictures, projectors, projectors and film strips are expressed in terms of availability, non-availability, adequate, inadequate and functionality. The cumulative percentage for availability of visual resources for the public primary schools are available (10.75%), non-available (30.76%), adequate (15.58%), inadequate (28.33%), functionality (13.44%) with a mean of 3.16 and standard deviation of 1.24. The cumulative average mean for the private primary schools is available (28.6%), non-available (12.66%), adequate (23.3%), inadequate (18.5%), functionality (15.8%), with a mean 3.16, and standard deviation of 1.24. Similarly, the at a glance response of the respondents to the availability of visual resources in both public and private primary schools is presented in Fig. 1.

Table 4 shows the utilization of visual resources such as textbooks, chalkboard, whiteboard, pictures, projectors, projectors and film strips by public and private primary schools in terms of very often, less often, rarely used and not used at all. The cumulative percentage for public schools as regards the utilization of visual resources is very often (17.11%), often (26.89%), less often (31.58%), rarely (15.35%), not at all (9.0%), with a cumulative mean of 3.44 and standard deviation of 1.16 respectively. The cumulative average mean for the utilization of visual resources such as textbooks, chalkboard, whiteboard, pictures, projectors, projectors and film strips by private schools is very often (24.0%), often (28.33%), less often (27.83%), rarely (12.17%), not at all (7.17%), with a mean of 3.44 and standard deviation 1.16 respectively. Similarly, the at a glance response of the respondents for the utilization of visual resources in both public and private primary schools is also represented in Fig. 2.

Table 1. Distribution of study population by Education Zone (private and public schools) in Rivers State

S/N	Education zone	No of LGA selected	No of public schools	No of private schools	Total no of school (public/private)	Total no of teacher in public schools	Total no of teacher in private schools	Total no of teachers (public& private)
1	River East	Obio-Akpor	53	16	69	795	82	877
		Emohua	54	17	71	404	57	461
		Okirika	38	12	50	351	62	413
		Port Harcout	57	21	78	690	121	811
		Etche	80	30	110	476	74	550
		Omuma	28	8	36	149	67	216
		Ogu-Bolo	9	4	13	69	27	96
		Ikwere	42	17	59	416	42	458
2	River south	Eleme	24	10	34	215	30	245
		Oyigbo	28	12	40	276	30	306
		Tai	30	11	41	192	33	225
		Bonny	22	8	30	138	38	176
		Gokhana	43	19	62	314	54	368
		Andoni	58	15	73	273	31	304
		Opobo	17	9	26	92	29	121
		Khana	19	18	97	350	44	394
3	River south West	Ogba-Egbema Ndonu	77	21	98	546	36	582
		Ahoada West	58	14	72	298	31	329
		Ahoada East	40	12	52	299	48	347
		Asaritoru	28	10	38	183	63	246
		Akukutoru	72	18	90	154	52	206
		Degema	24	9	33	215	54	269
		Abua-odum	50	18	68	254	44	298
			951	329	1,280	7149	1149	8298

Source: River State Universal Basic Education Board (SUBEB) 2018

Table 2. Distribution of study sample by education zone (public and private schools) in Rivers State

S/N	Education zone	No of LGA selected	No of public schools	No of private schools	Total no of schools (public/private)	20% of schools selected	Total no of teacher's in public schools Selected	Total no of teachers in private schools Selected	Total no of teachers (public& private) selected	20 % teachers (public & private) school selected
1	River East	Obio-Akpor	53	16	69	14	795	82	877	175
		Emohua	54	17	71	14	404	57	461	92
		Okirika	38	12	50	10	351	62	413	83
		Port Harcout	57	21	78	16	690	121	811	162
		Etche	80	30	110	22	476	74	550	110
		Omuma	28	8	36	7	149	67	216	43
		Ogu-Bolo	9	4	13	3	69	27	96	19
		Ikwere	42	17	59	12	416	42	458	92
2	River south	Eleme	24	10	34	7	215	30	245	49
		Oyigbo	28	12	40	8	276	30	306	61
		Tai	30	11	41	8	192	33	225	45
		Bonny	22	8	30	6	138	38	176	35
		Gokhana	43	19	62	12	314	54	368	74
		Andoni	58	15	73	15	273	31	304	61
		Opobo	17	9	26	5	92	29	121	24
		Khana	19	18	37	7	350	44	394	79
3	River south west	Ogba-Egbema Ndoni	77	21	98	20	546	36	582	116
		Ahoada West	58	14	72	14	298	31	329	66
		Ahoada East	40	12	52	10	299	48	347	70
		Asaritoru	28	10	38	8	183	63	246	49
		Akukutoru	72	18	90	18	154	52	206	41
		Degema	24	9	33	7	215	54	269	54
		Abua-odual	50	18	68	14	254	44	298	60
			951	329	1,280	256	7149	1149	8298	1,660

Source: River State Universal Basic Education Board (SUBEB) 2018

Table 3. Visual resources Availability in public and private schools of Rivers State

S/N	Items	Available		Non-available		Adequate		Inadequate		Functionality		Mean	SD
		Public	Private	Public	Private	Public	Private	Public	Private	Public	Private		
1	Textbooks	113	70	197	21	436	40	425	40	230	29	3.26	1.22
		13.1%	35.0%	14.1%	10.5%	31.1%	20.0%	30.3%	20.0%	16.4%	14.5%	3.14	1.35
2	Chalkboard	133	50	440	20	307	51	406	49	115	30	2.95	1.15
		9.5%	25.0%	31.4%	10.0%	21.9%	25.5%	29.0%	24.5%	8.2%	15.0%	3.10	1.22
3	Whiteboard	191	90	444	20	131	40	425	10	210	40	3.28	1.16
		13.6%	45.0%	31.7%	10.0%	9.4%	20.0%	30.3%	5.0%	15.0%	20.0%	3.35	1.16
4	Pictures	113	31	425	30	197	50	436	50	230	39	3.33	1.15
		8.1%	15.5%	30.3%	15.0%	14.1%	25.0%	31.1%	20.0%	16.4%	19.5%	3.19	1.33
5	Projectors	169	30	457	30	232	60	364	49	179	31	3.17	1.21
		12.1%	15.0%	32.6%	15.0%	16.5%	30.0%	26.0%	24.5%	12.8%	15.5%	3.11	1.27
6	Film strip	195	90	624	30	91	37	325	20	166	21	3.20	1.03
		13.9%	45.5%	44.5%	15.0%	6.5%	19.5%	23.2%	10.0%	11.8%	10.5%	3.06	1.08
	Total Av. Mean	914	361	2587	151	1394	280	2381	218	1130	190	3.18	1.15
	SD	10.75	28.6	30.76	12.66	16.58	23.31	28.33	18.5	13.44	15.82	3.16	1.24

Table 4. Visual resources utilization in public and private schools of Rivers State

S/N	Items	Very often		Often		Less often		Rarely		Not at all		Mean	SD
		Public	Private	Public	Private	Public	Private	Public	Private	Public	Private		
1	Textbooks	215	58	448	58	388	44	178	22	171	18	3.26	1.22
		15.4%	29.0%	32.0%	29.0%	27.7%	22.0%	12.7%	11.0%	12.2%		3.58	1.26
2	Chalkboard	440	64	405	60	307	38	115	20	133	18	2.95	1.15
		31.4%	32.0%	28.9%	30.0%	21.9%	19.0%	8.5%	10.0%	9.5%	9.0%	3.00	1.18
3	Whiteboard	209	42	425	60	537	68	149	22	80	8	3.38	1.05
		14.9%	21.0%	30.4%	30.0%	38.4%	34.0%	10.6%	11.0%	5.7%	4.0%	3.53	1.07
4	Pictures	230	48	425	58	435	60	197	26	113	8	3.33	1.48
		16.4%	24.0%	30.4%	29.0%	31.4%	30.0%	14.1%	13.0%	8.1%	4.0%	3.56	1.11
5	Projectors	179	38	232	64	364	44	456	30	169	24	3.17	1.21
		12.8%	19.0%	16.6%	32.0%	26.0%	22.0%	32.0%	15.0%	12.1%	12.0%	3.31	1.27
6	Film strip	165	38	325	46	624	80	195	26	91	10	3.20	1.03
		11.8%	19.0%	23.2%	23.0%	44.6%	40.0%	13.9%	13.0%	6.5%	5.0%	3.38	1.09
	Total Av. Mean	1438	288	2260	346	2655	334	1290	146	757	86	3.22	1.19
	SD	17.11	24.00	26.89	28.33	31.58	27.83	15.35	12.17	9.00	7.17	3.44	1.16

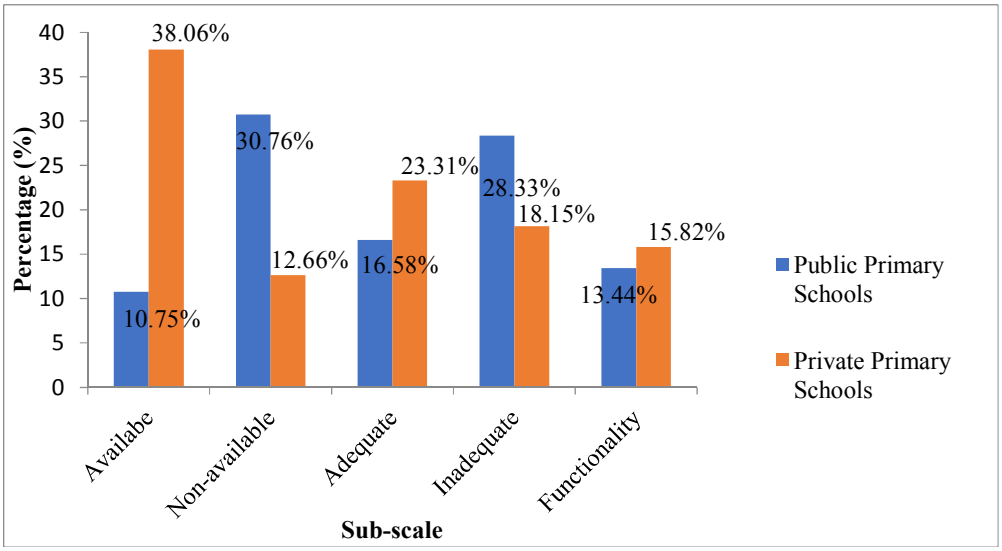

Fig. 1. Availability of visual resources in both public and private primary schools

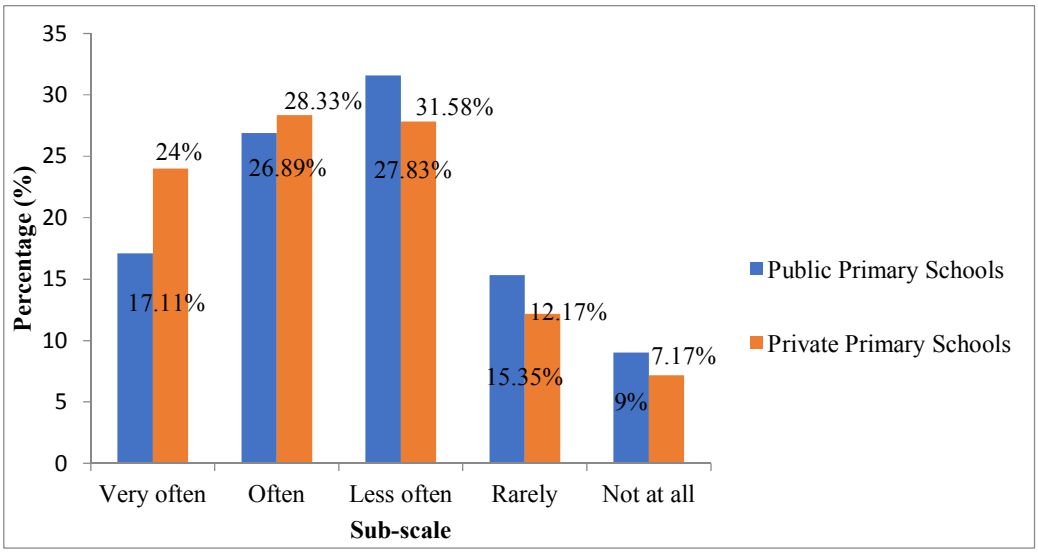

Fig. 2. Utilization of visual resources in both public and private primary schools

4.4 Research Question Two

To what extent is the availability and utilization of audio resources in public and private primary schools?

The result of Table 5 shows the availability of audio resources, such as Audio cassette, audio cassette recorder, compact disc, speakers and telephones in terms of available, non-available, adequate and inadequate in public and private primary schools of Rivers State. The cumulative average mean for public primary schools is available 12.67%, non-available (38.33%), adequate (11.0%), inadequate (25.26%), functionality (12.75%), with a mean of 2.93 and standard deviation of 1.46 respectively. The cumulative percentage for availability of audio resources in private primary schools is available 37.42%, non-available 15.25%, adequate 15.33%. inadequate 19. 25%, functionality 12.75% with a mean of 2.93 and standard deviation of 1.46 respectively. The at a glance response of the respondents for the availability of audio resources in both public and private primary schools is represented in Fig. 3.

Table 6 shows the responses by the respondents on the utilization of audio resources in public and private schools such as audio cassette, audio cassette recorders, compact disc, speakers and telephones in terms of frequency of usage as very often used, often used, less often used, rarely used and not used at all. The cumulative percentage for the utilization of audio resources for the public schools are very often used (12.65%), often used (21.43%), less often used (14.31%), rarely used (13.79%), not used at all 37.65% with a mean of 2.89 and standard deviation of 1.27 respectively. The cumulative percentages for the utilization of the utilization of audio resources for the private primary schools are very often 21.58%, often 32.50%, less often 22.25%, rarely 11.97%, not at all 11.75% with a mean of 1.27 respectively. The at a glance response of the respondents for the availability of audio resources in both public and private primary schools is represented in Fig. 4.

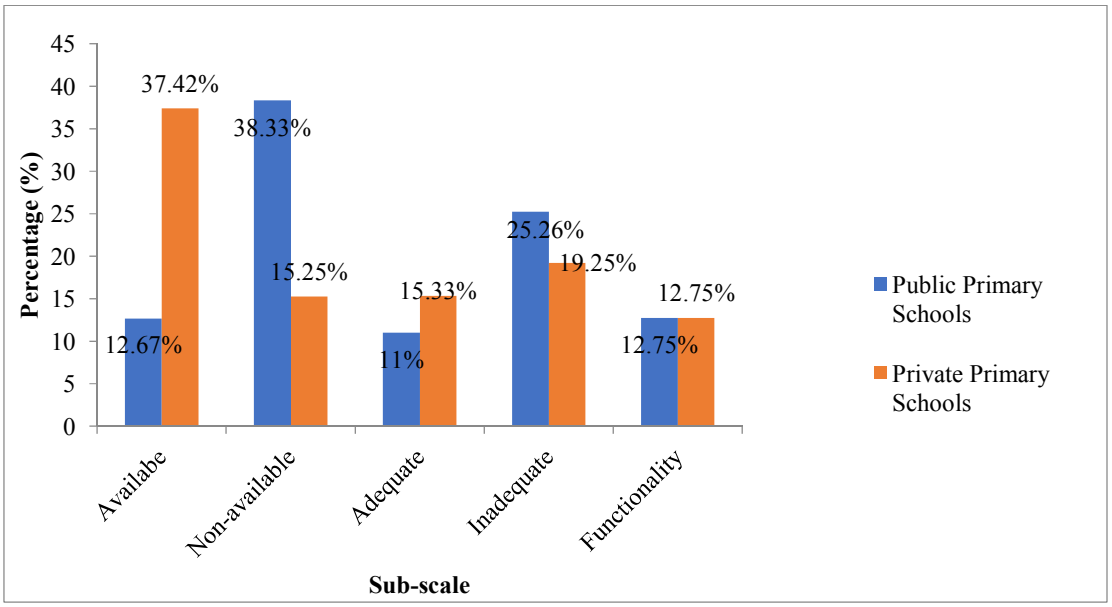

Fig. 3. Availability of audio resources

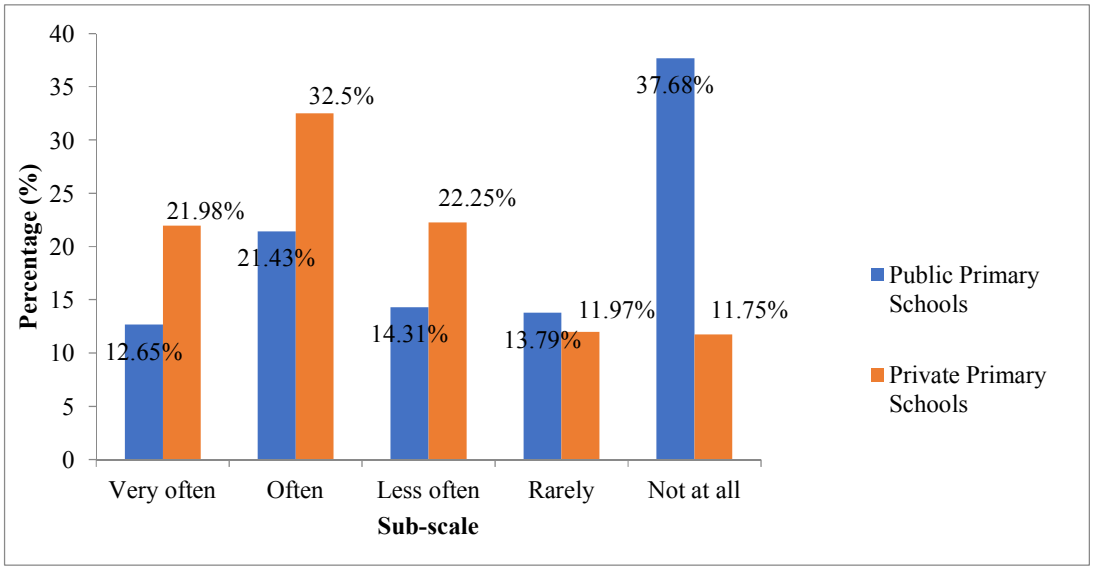

Fig. 4. Utilization of audio resources

Table 5. Availability of audio resources in public and private schools of Rivers State

S/N	Items	Available		Non-available		Adequate		Inadequate		Functionality		Mean	SD
		Public	Private	Public	Private	Public	Private	Public	Private	Public	Private		
1	Audio cassette	198	89	442	20	169	31	454	50	138	10	2.75	1.44
		14.1%	44.5%	31.5%	10.0%	12.1%	15.5%	32.4%	25.0%	9.9%	5.0%	2.36	1.39
2	Audio Cassette Recorder	174	80	458	20	230	30	378	50	161	20	2.72	1.44
		12.4%	40.0%	32.7%	10.0%	16.4%	15.0%	27.0%	25.0%	11.5%	10.0%	2.56	1.48
3	Audio Compact Disc	136	70	475	32	168	43	392	20	230	35	2.67	1.46
		9.7%	35.0%	33.9%	16.0%	12,0%	21.5%	28.0%	10.0%	16.4%	17.5%	2.59	1.48
4	Radio	209	61	662	51	52	30	305	30	173	28	2.23	1.47
		14.9%	30.5%	47.3%	25.5%	3.7%	15.0%	21.8%	15.0%	12.3%	14.0%	2.40	1.36
5	Speaker	149	69	598	30	205	40	258	31	191	30	2.50	1.51
		10.6%	34.5%	42.7%	15.0%	14.6%	20.0%	18.4%	15.5%	13.6%	15.0%	2.62	1.47
6	Telephone	198	80	587	30	101	10	336	50	179	30	2.52	1.53
		7.2%	40.0%	41.9%	15.0%	7.2%	5.0%	24.0%	25.0%	12.8%	15.0%	2.60	1.57
	Total Av. Mean	1064	449	3222	183	925	184	2123	231	1072	153	2.57	1.48
	SD	12.67	37.42	38.33	15.25	11.00	15.33	25.26	19.25	12.75	12.75	2.93	1.46

Table 6. Utilization of audio resources in public and private schools of Rivers State

S/N	Items	Very often		Often		Less often		Rarely		Not at all		Mean	SD
		Public	Private	Public	Private	Public	Private	Public	Private	Public	Private		
1	Audio cassette	137	34	454	66	169	52	198	28	442	20	2.75	1.43
		9.8%	17.0%	32.4%	33.0%	12.1%	26.0%	14.1%	14.0%	31.6%	10.0%	3.01	1.48
2	Audio Cassette Recorder	160	56	378	54	230	32	174	22	458	36	2.72	1.44
		14.4%	28.0%	27.0%	27.0%	16.4%	16.0%	12.4%	11.0%	32.7%	18.0%	2.96	1.49
3	Audio Compact Disc	230	50	167	56	392	56	136	14	475	24	2.67	1.46
		16.4%	25.0%	11.9%	28.0%	28.0%	28.0%	9.7%	7.0%	33.9%	12.0%	2.99	1.52
4	Radio	173	42	209	80	107	34	304	30	607	14	2.31	1.46
		12.4%	21.0%	14.9%	40%	7.6%	17.0%	21.7%	15.0%	43.4%	7.0%	2.70	1.61
5	Speaker	191	38	258	71	204	44	149	17	598	30	2.50	1.51
		13.6%	19.0%	18.4%	35.5%	14.6%	22.0%	10.6%	8.5%	42.7%	15.0%	2.81	1.57
6	Telephone	179	39	335	63	101	49	198	32	587	17	2.52	1.63
		12.8%	19.5%	23.9%	31.5%	7.2%	24.5%	14.1%	16.0%	41.9%	8.5%	2.85	1.56
	Total Av. Mean	1070	259	1801	390	1203	267	1159	143	3167	141	2.58	1.25
	SD	12.65	21.58	21.43	32.50	14.31	22.25	13.79	11.97	37.68	11.75	2.89	1.27

5. DISCUSSIONS OF FINDINGS

5.1 Research Question one

What is the extent of availability and utilization of visual instructional resources?

Results from Tables 3 and 4 and Figs 1 and 2 respectively based on the findings of this study shows the extent of availability and utilization of visual resources such as textbooks, chalkboard, whiteboard, pictures, projectors, projectors and film strips in both the public and private schools investigated. With the availability and utilization of these resources, it is obvious that teachers can draw upon creating an effective lesson as well as offer a framework of guidance and orientation during class room teaching. The results revealed that teachers in the public and private primary schools utilize textbooks, chalkboards, whiteboard and pictures and these has simplified their class preparation for effective delivery of their lessons. This is in agreement with the findings of Rather [15], who stated that visual aids are effective tools that invest the past with an air of actuality. Visual resources demand to the mind through the visual auditory senses. This is support of Gopal [16], who explained that visual resources can play a major role of making learning permanent, by facilitating the acquisition, retention and recall of lessons taught. Similarly, from the result of this study there is proof that good learning resources can help solve language barrier problems as they provide accurate visual images and make learning easier for the students. This agrees with the findings of Mannan [17] who pointed out that visual instructional resources help the teacher to clarify, establish correlate and coordinate accurate concepts, interpretations and appreciations as well as enabling teaching more concrete, effective, interesting, inspirational, meaningful and vivid. Similarly, visual learning techniques help learners to clarify thoughts and information, reinforce understanding through connection, assist learners to integrate knowledge with prior learning [18]. Visuals tools likewise provide direction for thinking [18]. Furthermore, they are effective in conveying ideas and content more easily than verbal descriptions and are important learning environment in the classroom [19]. According to Cassady [19], course contents enriched with charts, diagrams, photographs, visual presentations, videos and maps are more easily absorbed by pupils.

5.2 Research Question Two

What is the extent of availability and utilization of audio resources?

The availability and utilization of audio resources in public and private primary schools is presented in Tables 5 and 6 and the illustration in Figures 3 and 4 respectively. The result revealed that, availability and utilization of audio resources such as cassette, audio cassette recorder, audio compact disc, radio speaker and telephone in public and private primary schools is relatively low. This is agreement with the studies of Ashaver and Igyuve [20] who reported that in colleges the collection of audio resource materials is fairly adequate and as such lecturers in the colleges rarely use them in teaching.

Similarly, through the results of this study it is now known that classroom audio can in many cases reduce a child's sensitivity to distractions. It is explained that, when a teacher's voice is amplified for up to 5 to 15 decibels above ambient noise by improving articulation and enhancing speech intelligibility, the amplified instruction can better capture a child's attention and tends to suppress their sensitivity to the normal sounds and movement within the classroom [21]. From the results of this study it therefore followed that with the use of audio resources in classrooms, teachers are able to speak in a conversational voice and all students hear them easily and most, if not all, voice strains are eliminated.

6. CONCLUSION AND RECOMMENDATIONS

This study based on results obtained reveals that availability and utilization of visual and audio instructional resources are low in public and private primary schools in Rivers State. Despite the usefulness of this instructional resources many teachers are very reluctant to use them. Consequently, the unavailability and inadequate use of these instructional resources will militate against effective teaching and learning in public and private primary schools. Based on the negative impacts these will create in public and private primary schools in Rivers State, the following recommendations are proffered:

1. The Ministry of Education should organize orientation/workshops on regular basis on the improvisation and utilization of instructional resources in order to enhance

effective teaching and learning in primary schools.

2. The Federal, State and Local Government organs should provide instructional resources to the schools since the utilization of these materials may be attributed to non-availability as a result of lack of provisions of these materials by these organs of Government.
3. The Ministry of Education and other stakeholders should facilitate and provide some support to the collection and use of local instructional materials that are lacking in the schools.
4. Instructional facilitators should be involved in the selection of materials/resources that bear meaning and relevance to the learners' interest.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

1. Federal Republic of Nigeria (FRN). National policy on education and major reforms and innovations recently introduced into the Nigerian Educational System (n.p); 2012.
2. Oloruntoyin ST. Quality assurance in rural primary schools in Nigeria. Journal of Research in Education and Sociology. 2011;2 (3):122 – 132.
3. Adeyemi O. Moving Nigeria Forward, the Development Planning Approach. Ibadan: Ibadan University Press Publishing House; 2001.
4. Han J, Yin H. Teacher motivation: Definition, research development and implications for teachers. Cogent Education. 2016; 3:1 – 19.
5. Duyar I. Relationship between school facility conditions and the delivery of instruction Evidence from a national survey of school principals. Journal of Facility Management. 2010;8 (1):9 – 25.
6. Afework T, Hailu, Asfaw M. Biyabeyen. The Availability of School Facilities and their Effects on the quality of education in Government Primary Schools of Harari Regional State and East Hararghe Zone, Ethiopia. Middle Eastern and African Journal Research. 2004;11: 21-28.
7. Adeogun AA. Instructional Resources and School Effectiveness in Private and Public Schools in Lagos State. Journal of Educational Administration and Planning. 2001;1 :78 – 81.
8. Amadioha SW. The importance of instructional materials in our schools an overview. New Era Research Journal of Human, Educational and Sustainable Development. 2009;2(3 & 4): 61 – 63.
9. URT (United Republic of Tanzania). Ministry of Education and Vocational Training Tanzania Institute of Education. Dares salaam: Tanzania Institute of Education (TIE); 2013.
10. Gagné R. The conditions of learning. New York, NY: Holt, Rinehart and Winston, Inc; 1965.
11. Isangedighi JA, Joshua MT, Asim AE, Ekuri EE. Fundamentals of Research and Statistics in Education and Social Sciences. Calabar: University of Calabar Press; 2004.
12. Ekpo U. The Niger Delta and Oil Politics. Quadro Impressions Limited, Nigeria; 2004.
13. United Nations Development Programme (UNDP). A Review of Niger Delta Human Development Report. In: Niger Delta Human Development Report. UNDP Publishers, Abuja, Nigeria; 2006.
14. Rivers State Universal Basic Education Board (SUBEB). Rivers State Ministry of Education; 2018.
15. Rather AR. Essential Technology. Danya Gang Publishers, New Delhi; 2004.
16. Gopal VP. Importance of Audio-Visual in teaching methodology. Mahourastra, India; 2010.
17. Mannan A. Modern Education: Audio-visual Aids. New Delhi Anmol publications; 2005.
18. Foliaki V. Developing Learning Resources: Visual-aids in the Classroom; 2012.
    15th July, 2017:
    Available:
    http://repository.usp.ac.fj/5521/1/EDG14__Criteria_for_Visuals_(V._Foliaki).pdf
19. Cassady L. Visual materials enhance learning; 2014.
    Retrieved on 15th July, 2017
    Available: http://www.e.how.com/info-8246564-visual–materials-enhancelearning .Html
20. Ashaver D, Igyuve SM. The Use of Audio-Visual Materials in the Teaching and

Learning Processes in Colleges of Education in Benue State-Nigeria. IOSR Journal of Research & Method in Education (IOSR-JRME). 2013;1(6):44-55.

21. Ross M, Ross M. sound-field FM amplification theory and practical Amplifications. 2nd edition, 2004, Clifton Heights, NY. Thompson-Delmer Learning; 2005.

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