

Role of Instructional Materials in the Teaching of Basic Science in Primary Schools in Ilorin South Local Government Area of Kwara State

¹Adediran, B. A., ²Adediran, E. M. T. and ¹Solagberu, A. O.

1. Department of Adult and Primary Education, University of Ilorin, Nigeria

2. Department of Curriculum Studies and Educational Technology Federal College of Education, Osiele, Abeokuta, Ogun State Nigeria

ABSTRACT

This study evaluated the availability and utilization of instructional materials in the teaching of basic science in primary schools in Ilorin South Local Government Area of Kwara State. The sample for this study comprised of one hundred (100) primary school teachers in ten (10) selected primary schools in Ilorin south local government of Kwara state structured questionnaire was the instrument used for data collection and the instrument was face validated by the supervisor. Three research questions guided the study, the data were analyzed using simple percentage and chi-square, the researcher designed a questionnaire to carry out his research work which is termed the availability and utilization of instructional materials in the teaching of basic science in primary schools (AAUIMTBSIPS). The findings of this research work shows that there is a significant relationship between the availability and the use of instructional materials, based on these findings it was concluded that there is high extent to which the available instructional materials are utilized for teaching basic science in primary schools, there is an impact of instructional materials in teaching and learning of basic science in primary schools. It was recommended among others that; policy on instructional materials adaptation in school be reviewed and fully implemented and the need for recruitment of qualified personnel should be recruited to enhance effective utilization of instructional materials in primary schools, also non-governmental agencies and wealthy Nigerians should participate in the provision of instructional materials in primary schools.

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INTRODUCTION

Education is a combination of deliberate and purposeful acts and activities with formative and intervention effects on the behavior and character of an individual. In its technical sense, education is the process by which a society consciously transmits its accumulated stock of knowledge, skills and values from one generation to another. Such conscious and intentional efforts usually focus in part on character development, behavior modification and values orientation especially among the youths of the nation. Offorma (2009) defines education as the process of providing information to an inexperienced person to help him/her develop physically, mentally, socially emotionally, spiritually, politically and economically. According to her, the fact that at graduation ceremonies, one hears the vice-chancellors pronounce the words while awarding degrees to their institutions graduates "you have been found worthy in character and learning" can be attributed to the definition of education as given above. She added that it means that the individual has acquired adequate and appropriate knowledge, skills, attitudes and values, known as cognitive, psychomotor and effective behaviours to be able to function optimally as citizen. These behaviours are the focus of training individuals in institution of learning.

According to Chidebulu (2010), education is a process of cognitive, effective and psycho motive development of an individual with a view to moulding the individual for a total contribution to the development of the community and the promotion of cultural heritage. This means that if one is educated, he tends to develop himself and become productive in the society, thereby promoting his cultural heritage. Furthermore, according to Whitehead, "education is the acquisition of the art of the utilization of knowledge", that is, education is not just acquiring knowledge but, the utilization of knowledge acquired for the benefit of the society (Whitehead Cited in Oladipo, 2007).

The development of Basic Science and Technology as a subject area occurred in Nigeria in the late 1960s, and its teaching and learning have since been entrenched in schools. A child they say is the father of a man. The education which the child receives today will shape his understanding and vision of life and this in turn will enable him to play a significant role in the making of himself and in the development of his fatherland. The child learns to perform and improve on the quality of the activities and lifestyle of his forebears, thus, pushing forward the frontiers of the cultural disposition of the people. Formal Education is put in place to give some necessary and acceptable blending of the old and new societal order, and so positively advance the society. The child is the initial beneficiary of this kind of education and whatever he learns enables him to play defined role in the society. In all nations of the world (Nigeria inclusive), Science and Mathematics are given first class attention due to

numerous benefits derived from them. For instance, the knowledge of drugs, diseases (their transmission, control and cure), reproduction, child birth, environmental pollution, food production, number and numeracy, telecommunication, chemicals among many others are acquired through the study of Science and Mathematics (that is, technology) has led to the manufacture of many products and services computers, electronic gadgets air planes, ships, weapons, automobiles, printing press, electrical appliances, mobile phones to mention a few, are all derived from practical application of Science and Technology. In 1968, a Committee was formed under a cooperative agreement between the then Comparative Education Study and adaptation Centre (CESAC) now merged into the -Nigerian Education Research Development Council (NERDC) and the Science Teachers Association of Nigeria (STAN).

The Committee produced the first Basic Science and Technology Curriculum (STAN, 1990). The STAN document was far more comprehensive and integrated. It also used the nomenclature for the title of the subject in line with happenings in the developed countries of the world. According to the STAN document earlier referred to a number of questions informed the need for the Basic Science and Technology Curriculum. Why do we teach science? Is the science we teach appropriate and relevant to the scientific and educational needs of our children and or our society? There is no doubt that relevance and functionality have become the major consideration for teaching and learning basic science and technology. The consequence of these considerations made the association to design a science that would relate the child to the environment and develop in the child inquisitiveness and skill that relate to the discovery of science concepts and their applications. Every year, primary schools produce graduate who cannot meet up with current science trends in junior secondary school class, especially in the rural setting. This has serious social implications. The root causes of the problems need to be identified so that a solution could be sought for it. Serious efforts have been made by the Government to improve students in our primary schools in that state. Such efforts include the declaration of free and Compulsory Education to Senior Secondary Level by the present administration. It must not be assumed that all is well with the study of Basic Science and Technology in basic Schools. There is the need to critically examine the input put to the programme. This study is therefore aimed at investigating the availability and utilization of instructional materials on the teaching of basic science in Primary Schools in Ilorin south local government of kwara state.

Instructional materials range from homemade devices to sophisticated machines and also people who assist the teacher in disseminating knowledge and information to help learners learn meaningfully (Ololobou, 2008). Since the sense organs of pupils are gateways to learning, materials provide learners the opportunity to become actively involved intellectually, perceptually and physically in the instructional process (Jekayinfa, 2005). The National Teachers Institute (NTI) teacher training manual quoted in Ololobou (2008), categorized instructional materials into print materials, audio-materials, audio-visuals, static/displays and electronic materials. The materials are derived from various sources, including collection of items from the community, improvised materials by teachers and pupils, distribution of materials by government and non-governmental organizations, donations from various agencies and creation of resource centres. Any effective utilization of instructional materials requires the instructional process to be organized with a combination of people, materials, facilities and equipment for the realization of stated objectives. To ensure quality instructional delivery for the benefit of both teacher and learner, basic education requires the appropriate use of a judicious mix of both print, audio, visual, audio-visual and other materials. These materials include; textbooks, journals, magazines, periodicals, wall charts, posters, pictures, maps, globes, filmstrips, slides projectors, graphs, radio, tape-recorders and televisions, (Adebule, 2008; Okam, 2013). Some of the mentioned materials like pictures, posters, charts and globes appeal to the sense of sight (visuals), while some like television, films and slide projector are audio visuals, as they appeal to both sense of sight and hearing. Garba (2004), affirms that material resources help bridge the gap between reality and the abstract. For effective instructional delivery, the teacher is encouraged and expected to effectively utilize relevant instructional materials. Such materials make the teaching and learning process more interesting, more effective, more lively, appealing to the learner, instructional delivery simpler and easier.

In Nigeria, the government pronouncement and activities geared towards encouraging secondary school students to study the science abound. Towards this development, the Nigeria Educational Research and Development Council (NERDC) was mandated to develop science curricula for use in Junior Secondary education and indeed all levels of educational system in Nigeria. In line with government declaration for Universal Basic Education Programme, The NERDC was directed by the National Council on Education (NCE) to re-structure and re-align the existing Junior secondary school science curricula to meet the target of the Nine (9) year Basic Education which seeks to achieve the Millennium Development Goals (MDG). The curriculum reflects depth, appropriateness, and interrelatedness of the science curricula content. Since the curricula presents the total experience to which learners must be exposed, the contents, performance objectives, activities and instructional materials were provided. This may have resulted from lack of or underutilization of instructional materials by teachers. It is against this background that this study intends to ascertain the availability and utilization of instructional materials in teaching Basic science in primary school in Ilorin South Local

Government area of Kwara state.

Statement of the Problem

In Nigeria, Education is seen as an instrument for National Development. The National Policy on Education (NPE 1998) stated categorically, that Education is the most important instrument of change in the intellectual and social outlook that Nigerians must have to proceed in their educational revolution. The National Policy on Education also identified as a one of the national educational goals "the inculcation of the right of values and attitudes for the survival of the individual and the society". These are indeed very laudable goals. However, the extent to which they are achievable depends on the relevance and contents of various subjects taught in schools and the socio-cultural needs of Nigeria as well as how effectively those subjects are being taught. This research opines that basic Science and Technology is a very important subject and could be used for promoting the knowledge of our pupils if effectively taught. The problem of pupils' drawback in the science especially in the basic science at a higher level calls for a research into the area, at the grassroots level (primary school level). There is therefore need for a research to investigate the availability and utilization of instructional materials in the teaching of basic science in primary schools. This will identify such factors that affect teaching of basic science and technology in primary schools and lead to recommendation that will improve the situation.

Purpose of the Study

The main purpose of this study is to investigate the availability and utilization of instructional materials in teaching basic science in primary schools in Ilorin South local Government area of Ilorin, Kwara State.

Specifically, this intends to:

- i. Determine the Availability of instructional materials in the teaching of basic Science in primary Schools in Ilorin south Local Government.
- ii. Assess the extent to which Instructional materials are utilized for the teaching of basic science in Ilorin South Local Government.
- iii. Determine the academic performance of pupils taught in Basic Science with the use of adequate instructional materials.

Research Questions

The following questions were generated for the purpose of the study:

- i. What are available instructional materials for teaching of basic science in basic schools in Ilorin South Local Government Area of Kwara State.
- ii. What instructional materials are utilized for teaching basic science in primary schools in Ilorin South Local Government Area of Kara State.
- iii. What are the impact of instructional materials in teaching and learning of basic science in Basic Schools in Ilorin South Local Government

Research Hypotheses

H01: There is no significant difference in the response of male and female teachers on the availability of instructional materials in teaching, basic science

H02: There is no significant difference between the utilization of instructional materials of male and female teachers on the teaching basic science.

Significance of the Study

This study is expected to be of great advantages and importance to the teaching and learning of Basic Science offered in the Primary school. Instructional materials help to facilitate teaching, creation and distribution of contents during learning. Thus, a study focusing on the use of Instructional materials based on contents would definitely ensure quality materials for effectives teaching and learning to achieve educational goals and objectives. This study might guide the Educational service Divisions of the Federal and State Ministries of Education, Local Government Areas; officials in charge of materials selection for teaching and learning in selecting appropriate materials to teach Basic Science. This study could gear up designers of materials to review some aspects of their works towards achieving the goal of contributing to students' adequate acquisition of the necessary skills in science and technology. Also, the result from this study might enable the designers to improve the contents of the materials to make the users of the materials gain more from the materials. Similarly, for a teacher to succeed in the classroom, instructional materials should be used to complement the teachers work and to open channels for communication. Findings from this study would contribute significantly to the effective learning of basic science in primary schools. The result of the research would help education stakeholder such as students, teachers, schools, administrators, parents, government and society to better understanding the benefit of relating basic science curriculum with instructional basic science materials. This study might open up science

teachers' mind to the effectiveness of the materials they use for Basic Science. This study would make teachers to see the need to use the materials and make necessary suggestions to ()Calais from Ministry of Education as guides in selecting materials.

Scope the Study

This study focuses mainly on the availability and utilization of instructional materials in teaching basic science in primary schools in florin South Local Government Area. The researcher shall consider one hundred (100) samples for the study. Frequency counts and percentage, and t-test statistical tools shall be used to analyze the data. However, the researcher found this study more difficult as a result of short time frame, coupled with academic rigors and high financial involvement beyond capacity.

RESEARCH METHODOLOGY

This chapter explains the design and the procedure that would be used in conducting this study. The procedure is explained under the following sub-headings:

- a. Research design
- b. Population of the study
- c. Sample and Sampling techniques
- d. Instrumentation
- e. Validity of the Research Instrument
- f. Procedure for Data collection and
- g. Data Analysis technique

Research Design

A descriptive research design will be adopted for this study, descriptive design according to Burns and Groove (2003) is a method designed to provide a picture of a situation as it naturally happens. The design entails the collection and use of data systematically from a given population to describe certain characteristics features of the population. The design is considered appropriate for this study being that the work is intended to collect data from small group with a view to describing the entire population vice versa determining the availability and utilization of instructional materials on the teaching of basic science in florin South Local Government Area of Kwara State.

Population Sample and Sampling Techniques

The population of this study will consist of all public basic school teachers in Kwara State. However, the target population for this study will consist of Five (5) basic public schools in Ilorin South Local Government. This is because these set of teachers have cognitive capacity to understand the concept of instructional materials and its utilization. A total number of one hundred teachers were randomly selected from the five (5) public basic schools. The sample size of this study will be randomly selected with the use of simple random sampling technique from the selected public basic schools in Morin South Local Government Area. Ten (10) teachers will be selected from each of the selected ten (10) schools which will make a total number of 100 teachers.

Instrumentation

The instrumentation that would be used for the study would be a questionnaire which is designed towards obtaining relevant information on the availability and utilization of instructional materials on the teaching of basic science in Ilorin South Local Government Area of Kwara State and this Would be tagged "Availability and Utilization Of Instructional Materials in Teaching Basic Science in Ilorin South Local Government, Kwara State (AUIMTBS)". The questionnaire would be divided into two (2) sections; Section A requires some personal information about the teachers (Bio- data), Section B will comprise of items on Availability and Utilization Of Instructional Materials in Teaching Basic Science in Ilorin South Local Government, Kwara State (AUIMTBS). The questionnaire response is designed in the liken scale format;

SA- Strongly Agreed

A- Agreed

D- Disagreed

SD- Strongly Disagreed

In order to ensure validity, the instrument was given to the experts in which useful and constructive suggestions, observations and corrections were made before they were administered. The total of 15 questions were designed and used based on expert input.

Procedure for Data Collection

In administering the instrument, the researcher will collect an introductory letter from the Head of Department of

Adult and Primary Education, which will be presented to the principal of each of the selected schools to seek permission of the school authorities. Date and time slated for the administering of the questionnaire will be fixed; the administration of the questionnaire was carried out by the researcher. A total of 100 copies of the questionnaire were distributed to elicit responses from the principals, teachers, and adolescents and retrieved on the spot by the researcher.

Data Analysis Techniques

Responses from the questionnaire were analyzed using the descriptive statistics of frequency counts and percentage, and inferential statistics of Chi-square(x²). Descriptive statistics of frequency counts and percentages were used in analyzing demographic variables and research questions while the inferential statistics of Chi-square(x²) was also used to test the stated hypotheses at 0.05 level of significance.

Results and discussion

Demographic Description of Respondents

The section describes demographic characteristics of the respondents using frequency count and percentage as illustrated below;

Table 1: Frequency and Percentage distribution showing the gender of the respondents

Gender	Frequency	Percentage
Male	47	47.0
Female	53	53.0
Total	100	100.0

Table 1 shows that out of 100 respondents that participated in the study, 47 (47%) were male, while 53 (53%) were female. From this it can be deduced that although the study sampled gender, majority of the respondents were female.

Table 2: Frequency and Percentage distribution showing the school type of the respondents

School type	Frequency	Percentage (%)
Public	52	52.0
Private	48	48.0
Total	100	100.0

Table 2 shows that out of 100 respondents that participated in the study, 52 (52%) were from public school, while 48 (48%) were from private school. It can be deduced that although the study sampled school type, majority of the respondents were from public school.

Table 3: Frequency and Percentage distribution showing the academic qualification of the respondents

Academic qualification	Frequency	Percentage (%)
Below first degree	17	17.0
First degree and its equivalence	31	31.0
Above first degree	52	52.0
Total	100	100.0

Table 3 shows that out of 100 respondents that participated in the study, 17 (17%) have below first degree, 31 (31%) have first degree and its equivalence, while 52 (52%) have above first degree. From this it can be deduced that although the study sampled academic qualification, majority of the respondents have below first degree.

Table 4: Frequency and Percentage distribution showing the teaching experience of the respondents

Academic qualification	Frequency	Percentage (%)
Below 5 years	28	28.0
5-10 years	25	25.0
Above 10 years	47	47.0
Total	100	100.0

Table 4 shows that out of 100 respondents that participated in the study, 28 (28%) have 5 years teaching experience, 25 (25%) have between 5-10 years teaching experience, while 47 (47%) have above 10 years of teaching experience. From this it can be deduced that although the study sampled teaching experience, majority of the respondents have above 10 years teaching experience.

Answering of Research questions

Three research questions were generated, and all were answered with the use of mean and standard deviation.

Research question 1: *what are the available instructional materials for teaching of basic science in basic school in Ilorin South Local Government Area of Kwara state?*

In order to answer this research question, frequency and percentage of response of the teachers to each item on

the questionnaire that addressed the available instructional materials for teaching of basic science in basic schools were calculated.

Table 5: frequency and percentage distribution showing the available instructional materials for teaching of basic science in basic schools

SN	Items	F	Available (%)	F	Not Available (%)	Total (%)
1.	Thermometer	52	52.0	48	48.0	100
2.	Microscope	45	45.0	55	55.0	100
3.	Maps	66	66.0	34	34.0	100
4.	Magnifying glass	62	62.0	38	38.0	100
5.	Atlases	70	70.0	30	30.0	100
6.	Globes	40	40.0	60	60.0	100
7.	Electronic (computer system)	73	73.0	27	27.0	100
8.	Overhead projector	80	80.0	20	20.0	100
9.	Two dimension instructional materials (picture, chart, diagram, poster etc).	59	59.0	41	41.0	100
10.	Three dimension instructional materials (specimen, models and games	45	45.0	41	41.0	100

Table 5 reveals available instructional materials for teaching of basic science in basic schools. It can be deduced from the table above that the available instructional materials like thermometer, magnifying glass, atlases, electronic (computer system), overhead projector, two dimensional instructional materials (pictures, chart, digram, posters etc) measure with the following frequency and percentage of 52 (52.0%), 66 (66,0%), 62 (62.0%), 70 (70.0%), 73 (73.0%), 80 (80.0%) and 59 (59.0%) respectively, microscope, globe and three dimensional instructional materials (specimen, models and games) with the following frequency and percentage of 55 (55.0%), 60 (60.0%) and 55 (55.0%) respectively.

Research question 2: To what extent are the available instructional materials utilized for teaching basic science in primary schools in Ilorin South Local Government Area of Kwara State.

In order to answer this research question, means of response of the teachers to each item on the questionnaire that addressed the extent to which the available instructional materials are utilized for teaching basic science in primary schools were calculated and 2.5 was used as cut off because of the four (4) likert response format of SA (4), A (3), D(2) and SD(1).

Table 6: Mean and standard deviation analysis showing the extent to which the available instructional materials are utilized for teaching basic science in primary schools.

S/N	ITEMS	X-	SD
1.	The two-dimensional materials (pictures, chart, posters etc) are always available for teaching and learning of basic science	2.75	4.314
2.	I often make use of thermometer, magnifying glass, microscope to teach the students whenever needed.	2.47	1.150
3.	The three-dimensional instructional materials (specimen, model and games) are always available for teaching and learning of basic science,	2.35	1.193
4.	I often use the computer, overhead projector to teach the students whenever needed.	2.94	4.313
5.	The available instructional materials are always utilized whenever they are needed to teach the students.	2.70	1.133
	Grand Mean	2.64	

Table 6 reveals the extents to which the available instructional materials are utilized for teaching basic science in primary schools, this is evident by the mean value of item one (1) to five (5) in table 6 above which are greater than 2.5, except item two (2) and three (3) with the mean value of 2.47 and 2.35 respectively lesser than the benchmark men of 2.5. The overall mean of 2.64 also indicates that there is high extent to which the available instructional materials area utilized for teaching basic science in primary schools.

Research questions 3: *what is the impact of instructional materials in teaching and learning of basic science in primary schools in Ilorin South Local Government?*

In order to answer this research question, mean of responses of the teachers to each items on the questionnaire that addressed the impact of instructional materials in teaching and learning of basic science in primary schools were calculated and 2.5 was used as cut off because of the four (4) likert response format of SA(4), A(3), D(2) and SD(1). The output of the analysis reveals thus:

Table 7: means and standard deviation analysis showing the impact of instructional materials in teaching and learning of basic science in primary schools.

S/N	ITEMS	X̄	SD
1.	The use of instructional materials in the teaching and learning of basic science improve academic performance of pupils.	2.67	1.138
2.	Availability and utilization of instructional media motivate pupil's interest in teaching and learning of basic science.	3.34	4.997
3.	The use of instructional materials help improve interest and participation of students in science related subjects.	2.59	1.016
4.	Students taught with instructional materials perform better than students taught without instructional materials.	3.27	1.024
5.	Instructional materials can be misused and thereby lead to mass failure of pupils.	2.85	1.192
	Grand Mean	2.94	

Table 7 reveals the impact of instructional materials in teaching and learning of basic in primary schools, this is evident by the mean value of items one (1) to five (5) in table 6 above which are greater than 2.5. The overall mean of 2.94 also indicates that there is an impact of instructional materials in teaching and learning of basic science in primary schools.

Research Hypothesis

Two research hypothesis were generated in the course of this study and they were tested the independents t-test at 0.05 alpha level.

H₀₁: *There is no significant difference in the response of male and female teachers on the availability of instructional materials in teaching basic science.*

In order to answer this hypothesis, independent t-test of response of the teachers to each item on the questionnaire that ensuring the difference in the response of male and female teachers on the availability of instructional materials in teaching basic science were calculated.

Table 8: Summary table of independents t-test analysis of the difference in the response of male and female teachers on the availability of instructional materials in teaching of basic science

Gender	N	X	SD	DF	Cal. Value	P. Value
Decision						
Male	47	15.04	1.654	98	0.174	0.862
Female	53	14.98	1.844			

Table 8 shows a non-significant result. Hence the null hypothesis **H₀₁** accepted. Thus, there is no significant difference in the response of male and female teachers on the availability of instructional materials in teaching basic science.

H₀₂: *There is no significant difference between the utilization of instructional materials of male and female teachers on the teaching of basic science.*

In order to answer these hypothesis, independents t-test of response of the teachers to each items on the questionnaire that ensuring the difference between the utilization of instructional materials of male and female teachers on the teaching basic science were calculated.

Table 9: Summary Table of independent t-test analysis of the difference in the response of male and female teachers on the availability of instructional materials in teaching basic science

Gender	N	X	SD	DF	Cal. Value
P. Value					
Male	47	12.77	6.551	98	-0.649
Female	53	13.60	6.340		

Table 9 shows a non-significant result. Hence, the null hypothesis **H₀₂** is accepted. Thus, there is no significant difference between the utilization of instructional materials of male and female teachers on the teaching of basic science.

Discussion of Findings

Based on the analyzed data, the findings from the study revealed that it is clear from the findings that the available instructional materials like thermometer, maps, magnifying glass, atlases, electronic (computer system), overhead projector, two dimensional instructional materials (pictures, chart, diagrams, poster etc) measure with the following frequency and percentage of 52 (52.0%), 66 (66.0%), 62 (62.0%), 70 (70.0%), 73 (73.0%), 80 (80.0%) and 59 (59.0%) respectively, microscope, Globes and three dimensional instructional materials (specimen, models and games) with the following frequency and percentage of 55 (55.0%), 60 (60.0%) and 55

(55.0%) respectively.

Findings also reveals that there is high extent to which the available instructional materials are utilized for teaching basic science in primary schools, this is evident by the mean value of all the items used to test the extent to which the available instructional materials are utilized for teaching basic science in primary schools greater than 2.5. The grand mean value of 2.64 of the responses to the statement also indicates that the extent to which the available instructional materials are utilized for teaching basic science in primary schools is high. This finding corroborates the submission of Fafunwa (2010) which states that “instructional materials could be regarded as the information dissemination devices used in the classroom for easy transfer of learning. They proved first-hand experience where possible or of vicarious one where only that is feasible. The instructional materials as the name suggests, are materials of visual audio and audio-visual category that help to make concepts abstract and ideas concrete in the teaching/learning process”.

It is equally seen from the findings that there is an impact of instructional materials in teaching and learning of basic science in primary schools, this is evident by the mean value of all the items used to test the impact of instructional materials in teaching and learning of basic science in primary schools greater than 2.5. The grand mean value of 2.94 of the responses to the statement also indicates that teaching with an instructional materials has an impact on the learning process of pupils. This finding corroborates that submission of Osalusi (2012) which states that “instructional materials help the teachers with the means of extending his horizon of experience as well as providing the teacher with rich sources of procuring communicative materials which could be produced jointly by the teacher and the students”.

Summary

The findings from the analysis revealed that there is correlation between the available instructional materials and their utilization. Also, it was revealed from the findings that the available instructional materials like Thermometer, Maps,, Magnifying glass, Atlases, Electronic (computer system), Overhead projector. Two dimensional instructional materials (pictures, chart, diagrams, posters etc.) measure with the following frequency and percentage of 52(52.0%), 66 (66.0%), 62 (62.0%), 70 (70.0%). 73 (73.0%), 80 (80.0%) and 59(59.0%) respectively, Microscope, Globes and Three dimensional instructional materials (specimen, models & games) with the following frequency and percentage of 5_5(55.0%), 60 (60.0%) and 55 (55.0%) respectively. There is high extent to \which the available instructional materials are utilized for teaching basic science in primary schools. There is an impact of instructional materials in teaching and learning of basic science in primary schools.

Conclusion

The available instructional materials like Thermometer, Maps, Magnifying glass, Atlases, Electronic (computer system), Overhead projector, Two instructional materials (pictures, chart, diagrams, posters etc.) measure with the following frequency and percentage of 52 (52.0%), 66 (66.0%), 80 (80.0%) and 59 (59.0%) respectively. Microscope, Globes and Three dimensional instructional materials (specimen, models & games) with the following frequency and percentage of 55(55.0%), 60 (60.0%) and 55 (55.0%) respectively, there is high extent to which the available instructional materials are utilized for teaching basic science in primal schools, there is an impact of instructional materials in teaching and learning of basic science in primary schools.

Recommendations

The following suggestions are hereby proffered if teachers, government and school want teachers to improve in the availability and utilization of instructional materials in the teaching of basic science in primary schools.

1. Policy on instructional materials adaptation in school be reviewed and Fully implemented
2. Non-governmental agencies and wealthy Nigerians should participate in the provision of instructional materials in primary schools.
3. Qualified personnel should be recruited to enhance effective utilization of instructional material in secondary schools.
4. Researcher education curriculum should be reviewed to ensure not only that the would-be-teachers are taught but helped to develop the a competence knowledge and skills to apply themselves to the real p situation of instructional materials later in life.
5. Teachers should inculcate the habit of improvising instructional material that are not available in the school and classroom.

REFERENCES

- AACJC (1988). "Building Communities: A, Vision for a New Century," pp. 27- 18. Washington, DC. American Association of Colleges and Junior Colleges.
- Adedijo, E. NI. (2000) Availability and utilization of instructional materials in business subjects in Nigeria. Unpublished thesis submitted to the post graduate school ,Ahmadu Bellow university, zone. Retrieved

- June 8. /)013.
- American Association of School Librarians (2001). Policies and procedures for selection of instructional materials, Chicago.
- Anderson, Ronald H. (1976). Selecting and developing media for instruction. New York, Van Nostrand.
- Annenberg/CPB Project (2009). Research on Student Uses of the Annenberg:CM Telecourses, Washington, DC., Annenberg/CPB Project.
- Armstrong, Jenny R. (1973). A sourcebook for the evaluation of instructional materials and media. Special Education Instructional Materials Center, University of Wisconsin, Madison, WI. ED 107 050.
- Armstrong, M., D. Toebe and Watson, M. (2003). Strengthening the instructional role in self-directed learning activities. *Journal of continuing education in basic science* 16(3): 75-84
- Arokwu. T. (2M3) Availability and utilization of instructional materials (textbooks) in teaching biology in selected secondary schools in Agwu local government of Enugu state. Unpublished dissertation submitted to Science and Computer Education Enugu State University of Science & Technology.
- Barron, D. D. (1999) Use and Barriers to Use. "Jour. Ed. Lib. Inf. Sc' 27, p. 4, Bates, Anthony, (2004). Obstacles to the effective use of communication media in a learning system. Keynote address to the Internatiomil API I. Conference, Liverpool University. Paper No. ”.
- Bates. Anthony, (2000, July). Designing multi-media courses for individualized study: the Open University model and its relevance to conventional universities. Speech at the Northern Universities Working Party for Cooperation in Educational rfechnology at Grey College, University of Durham. July 7, 2000. IET papers on broadcasting; Paper No. 49. Open University, England.
- Bates. Anthony. (2008, November). The British Open University: Decision Oriented Research in Broadcasting. Speech to the National Association of Educational Broadcasters Convention, Washington, DC, November 17. 1975. Milton Keynes, Great Britain, Open University. LET papers on broadcasting: Paper No. 53. From: <http://WWW.T.kaduna.Abu.edu.ng> 8080/.../582
- Imosie, I. (2002) Improving Teaching and Learning: An Introduction to Instructional Technology Benin City. Josses press.
- Mundi. N.T. (2008) Using the Video-tape Instruction Technique in Teaching 'Saving your Energy" Science Teachers Association of Nigeria integrated science education series no 6 (36)
- National Teachers Institute Kaduna-Nigeria (2012) manual for the Re- training of junior secondary school researchers Millennium Development Lima's (MDGs) project. Kaduna: NIT press.
- Okogbuo. (2000) <http://cees.mak.n.ug/sites/defaultitiles/publication>. Olaitan S. O. 0984) Agriculture education in the tropics: london. Macmillan Publishers.
- Owens. 1., K. (2002) introduction to Survey Research Design. Survey Research Laboratory (SR) Fall 2002 seminars Series. Retrieved from ww.SrLuic.edu on 16th march, 2013.76