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UTILIZATION OF INSTRUCTIONAL MATERIALS AS TOOLS FOR EFFECTIVE ACADEMIC PERFORMANCE OF SECONDARY SCHOOL STUDENTS IN ANAMBRA STATE

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Abstract

The study investigated the utilization of instructional materials as tools for effective academic performance of students in secondary schools. Survey research method was used and the study sampled the total number of 100 respondents in five selected secondary schools. A questionnaire constructed by the researcher and re-structured by two experts was used for data collection. The reliability was confirmed with the use of split-half method with 0.63 alpha level of significance got. The questionnaire was stered to the respondents with the assistance of the school heads. The findings revealed inadequate use of instructional materials in most schools and majority of the teachers did not take cognisance of the importance derived from the use of instructional materials while teaching. Those that adopted the utilisation, did not use them appropriately. No wonder the high rate of students' failure in external examinations. Based on the findings, the professional counsellors in the state should sensitize all heads of schools and teachers through seminars and workshops on the importance and good utilisation of instructional materials. Among other recommendations, the government should endeavour to release enough funds.

Keywords: Utilization, instructional, materials, effective, academic performance

Introduction

In the modern world today, functional education provides the basic instrument for gainful employment, personality progress, economic prosperity, and development moral built up, and positive interpersonal relationships; while lack of its signifies ignorance, underdevelopment, maladjustment, crime, poverty, frustration, among others. Effective teaching may be unavoidable without functional instructional materials to enhance innovative production in modern fields such as science and technology, among others Idris, 2018. Education is the focal point to a country genuine growth and development for every Nigerian child in whatever moral, mental, emotional, psychological and condition of health. The teachers, who are to implement the (U.B.E) curriculum, are also expected to use a wide range and

quality instructional materials for effective and efficient teaching and learning classroom activities. What then is Instructional Material? Instructional materials are essential tools in learning every subject in the school curriculum. They allow the students to interact with words, symbols and ideas in ways that develop their abilities in reading, listening, solving, viewing, thinking, speaking, writing, using media and technology.
According to Faize and Dahan (2011) instructional materials are print and non-print items that are designed to impact information to students in the educational process. Instructional materials include items such as prints, textbooks, magazines, newspapers, slides, pictures, workbooks, electronic media, among others.

Instructional materials play a very important role in the teaching-learning process the availabilities of textbook, appropriate chalkboard, Mathematics kits, Science kit, teaching guide, science guide, audio-visual aids, overhead projector, among others are the important instructional materials (Yusuf, 2015), However many facilities are missing in approximately almost all secondary schools in the state.

According to Raw (2010) the first instructional material is the textbook. Various definitions to textbook emphasize the role of textbook as tool for learning. Textbook is the nucleus to all the learning activities related to a particular curriculum. Textbook plays a vital role in imparting knowledge to the students in the third world countries.
Yusuf (2015) opined that the next instructional materials is the educational board. The educational board is the teaching aid that teachers frequently used; particularly during the lectures and discussions. There are different kinds such as, blackboard, maker board, write board, felt board and magic board. The teachers use it in classrooms to write the important words, statement, to draw diagrams, figures and maps. Other prominent instructional material include; mathematics kits. This is usually study kit; it is a box containing a variety of visual aids artistically assembles and displayed pertaining to a single topic (Nichollos, 2013).

There is also science kit. Science kit is a study kit for science subjects such as; physics, chemistry, and biology. It includes all the necessary aids useful for the teaching of science subjects like charts, maps, and apparatus, among others. According to Raw (2013), teaching guide as an aid or material is a booklet provided to teachers. It provides guidance to teachers about the matters regarding teaching learning process completely. Raw (2013) also said that Audio-visual aids are the teaching aids use for the teaching learning process. It assists in the teaching-learning processes. The use of audio visual aids. It can be used to encourage teaching and learning activities. It can also help to reduce the rate of forgetting example of this, include maps, graph, diagrams among others.

Computer is also used as an instructional materials and it serves as tool for learning. Faize and Dahan (2011) mentioned that map and chart are generally used during lecture and discussions about the relationships of things; like colour clothes, among others. Another is the overhead projector. It is a device that projects the small transparencies into large view on the board. Through overhead projector, the students are able to read, look, react and understand the text, graph, picture or anything written or drawn on the transparencies. According to Usman (2011) overhead projectors are becoming common and popular, and are widely used in normal teaching-learning processes; for example in seminars, workshops, among others. The lists of instructional materials are inexhaustible in line with the teacher's level of creativity and resourcefulness.

Roles Played By Instructional Materials in Teaching Activities:

Instructional materials played a very important role in the teaching processes which include;

i. Enhancement of the memory level of the students.
ii. To facilitate the teaching-learning process.
iii. For the improvement of student rate of accumulation.
iv. Serve as tools used by the teachers to correct wrong impression and illustration things that, learners cannot forget easily.
v. Assist in giving sense of reality to the body of knowledge under discussions.
vi. It gives lessons a personal look and encourages teacher's creativity.
vii. Permit the students and teachers to experience in concrete terms the learning activities that can promote the idea of self-evaluation.

The Principles for Selecting Instructional Material for Effective Academic Performance

Instructional materials: According to Ololobou, Jacob and Ndazhaga (2019), some of the things the teachers must consider before selecting instructional materials include;

A. Consideration for the age and abilities of the learner: It is very important for the teacher to put into consideration the age and abilities of his students. If the instructional materials chosen and used are above, it can inhibit learning rather than promoting effective learning.
B. Instructional materials must be related to the lesson objectives: any instructional material that is not geared towards helping in the

achievement of the lesson objectives is not worthy to be used in the lesson.

C. Currency of information: any instructional materials that is worthy of use in the classroom must be current.

Statement of the problem

Despite the desire for technological development, coupled with the fact that, subjects in secondary Schools are very vital to technological development and as such, its teaching and learning as well as students' poor academic performance, have become a sort of concern to all stakeholders. Education stakeholders in schools blame the teachers; the teachers on their part blame the government for failing in their responsibilities. It is the responsibility of the government to provide instructional materials to enhance students' academic performance in public schools, the teachers argue that apart from the knowledge they acquired from training and developmental programmes organized for teachers, there are not adequate, functional and effective utilization of instructional materials that can enhance student academic performance. Almost60%ofNigerianschoolclassroomareovercrowdedand55%ofchildrenlearnlittlefrom teacher due to non-availability of instructional materials. The few schools (35%) with instructional are noticed to be irrelevant and outdated (Alege, 1995). According to Joseph (2001) 52% of schools in most state have classrooms with not enough space for displaying instructional material even where they are overable.

Purpose of the study

The purpose of this study was to find out the utilization of instructional materials as tools for effective academic performance of students.

Specifically, the study intends to find out:

1. The use of instructional materials on students' academic performance;
2. Availability of instructional materials in secondary schools for teachers utilization and
3. Effective utilization of the available instructional materials for the students in government and those in private schools

Research Questions

1. What are the uses of instructional materials on students' academic performance?
2. How adequate are instructional materials in secondary schools for teacher's utilization?
3. How effective is utilization of instructional materials to the students in government and those in private secondary schools?

Hypotheses

1. There is no significant difference between the students in public schools and those in private owned schools towards the availability of instructional materials in their schools.
2. There is no significant difference between the responses of students in government owned schools and those in private owned schools towards the utilization of instructional materials in their schools.

Research Method

Survey research design was considered for this study. A total number of one hundred (100) students participated in the study, however, 100 students' questionnaire was used for data collection, one hundred (100) students (20 males and 20 females) were randomly selected in each of the secondary schools considered for the study. A well-structured instrument by experts tagged UIMTFEAPQ designed by the researcher was used for data collection; this instrument has two sections A and B.

The reliability of the instrument was determined through split- half method. The instrument was administered on 20 respondents. All the items on even numbers were scored separately likewise, the scores on the odd items. The two scores were correlated using Pearson r correlation Co-efficient, which yielded 0.63 Alpha level of significance, which was confirmed high enough. A four points Likert type scale was adopted for rating the items; strongly agree (4) agree = 3, Disagree = 1, copies of questionnaire forms were personally administered by the researcher with the assistance of the school heads. The entire one hundred (100) administered questionnaire forms were retrieved and analysed. For the purpose of analysis, frequency counts and simple percentage were used for demographical data. Means and standard deviation were used to confirm the availability and utilization of instructional materials in schools while, t-test was used for the formulated hypotheses.

Results

From Table 1 every school was equally represented with the same population of 20 (20%) students

Table 1. Showing distribution of respondents by school and sex.

S/No	Variables	Frequency	Percentage
	School		
1.	Sapati International School, Ilorin.	20	20%
2.	Government Secondary School, Ilorin	20	20%
3.	Government Girls' Day Secondary School, Lapai.	20	20%
4.	Baptist Model Secondary School, Lapai.	20	20%
5.	Islamic College, Bida	20	20%
	Total	100	100%

Table 2 also revealed that 50 (50%) of males were considered for the study likewise 50 (50%) females as well considered.

Table 2. Showing distribution of respondents by sex.

S/No	Variables	Frequency	Percentage
1.	Male	50	50%
2.	Female	50	50%
	Total	100	100%

Table 3 showed the availability of instructional materials in both government and private owned schools. It could be seen in the table that, textbooks and blackboards were agreed to in the two categories of school as available with high means and high standard deviation as seen in items 1 and 2.

Also, tape recording and mathematics kits are also responded to as available in the two categories of schools as seen in items 7 and 12. More so, overhead projectors and televisions are the two materials responded not to be available for use as instructional materials in both categories of school. The respondents in the two schools disagreed to their availability as seen in items 9 and 11. It was also revealed from the table that the government schools lack behind in making more instructional materials available for use in their schools as seen in items 3, 4, 5, 6, 8, 10 and 13, while the private schools are better of.

Table 3. Showing the mean scores and standard deviation of available instructional materials in government and private owned schools.

S/No	Instructional Materials Available in My School Include;	Government Owned Schools		Decisions	Privately Owned Schools		Decisions
		Mean (X)	SD		Mean (X)	SD	
1.	Textbooks	5.16	2.44	Agree	5.65	2.57	Agree
2.	Blackboards	5.50	3.01	Agree	3.64	2.31	Agree
3.	White boards	2.33	2.02	Disagree	6.86	4.15	Agree
4.	Picture maps	2.11	1.52	Disagree	3.50	2.73	Agree
5.	News papers	2.01	1.33	Disagree	4.42	2.56	Agree
6.	Audio Visual Material	2.15	2.01	Disagree	4.45	3.32	Agree
7.	Tape recordings	3.01	2.50	Agree	4.33	2.75	Agree
8.	Filmstrips	1.77	0.71	Disagree	3.64	2.88	Agree
9.	Overhead projection	1.01	0.31	Disagree	2.28	1.73	Disagree
10.	Computers	2.03	1.72	Disagree	3.25	2.43	Agree
11.	Televisions	2.03	2.10	Disagree	2.37	2.25	Disagree
12.	Mathematics kits	3.11	2.02	Agree	4.67	3.11	Agree
13.	Science kits	2.15	1.91	Disagree	4.71	3.03	Agree

The data reported in the Table 4 showed that items 1, 2, 12, and 13 (textbooks, blackboard, mathematics kits and science kits) are available in the two categories of schools and are well utilized as responded to by the respondents. while the private schools have in their possession white board, picture maps, newspapers, audio-visual materials, tape recordings, filmstrips, computers, televisions, among others and having all adequately utilized as responded to by the respondents; with their means of 4.25, 3.56, 3.01, 2.56, 3.21, 2.61, 3.10 and 2.60 respectively: which was above the accepted mean of 2.50. The government schools failed to put the few available materials into good utilization as responded by the respondents and as indicated through the means.

Table 4. Showing the rate of utilization of available instructional materials in both government and private owned school.

S/No	The Rate of Usage of Instructional Materials Available in My School Include;	Government Owned Schools		Decisions	Privately Owned Schools		Decisions
		Mean (X)	SD		Mean (X)	SD	
1.	Textbooks	3.56	2.25	Highly used	4.81	3.11	Highly used
2.	Blackboards	4.07	2.15	Highly used	2.16	2.06	Rarely used
3.	White boards	1.01	0.45	Not used	4.25	2.46	Highly used
4.	Picture maps	2.18	1.02	Highly used	3.56	2.47	Highly used
5.	News papers	1.24	0.95	Not used	3.01	2.03	Highly used
6.	Audio Visual Material	2.10	1.00	Not used	2.56	2.07	Used
7.	Tape recordings	1.87	1.46	Not used	3.21	2.52	Used
8.	Filmstrips	2.14	0.97	Rarely used	2.61	2.14	Used
9.	Overhead projection	1.51	0.11	Not used	2.36	1.77	Used
10.	Computers	2.29	1.20	Rarely used	3.10	2.27	Used
11.	Televisions	1.00	0.17	Not used	2.60	2.00	Used
12.	Mathematics kits	4.13	2.31	Highly used	4.51	2.61	Highly used
13.	Science kits	2.50	1.09	Used	4.11	2.37	Highly used

Hypotheses Testing

Hypothesis 1 (H1). There is no significant difference in the respondents' responses towards availability of instructional materials in the government schools and that of private owned schools.

Table 5: showing the t-test analysis of responses towards the availability of instructional materials in government and private owned schools.

Variables	**Number**	**Mean (X)**	**SD**	**D. F**	**Calculated *t*-Value**	**Critical *t*-Value**
Males	50	4.34	3.04			
Females	50	2.01	3.07			
				98	3.58	2.00

In Table 5, it is evident that the calculated t-value of 3.58 is greater than the critical t-value of 2.0 at 0.5 alpha level of significance. The conclusion is therefore that, the hypothesis one is hereby rejected. The indication for this was that, both male and females students' respondent differed in their responses towards the availability of instructional materials in government owned schools and the private owned schools.

Hypothesis 2 (H2): There is no significant difference between the males and females student in the utilization of instructional materials in both government and private owned schools.

Table 6: showing *t*-test analysis of male and female students' responses towards the utilization of instructional materials in both government and private owned schools.

Variable	Number	Mean(X)	SD	D.F	Calculated *t*-Value	Critical *t*-Value
Males	50	6.11	2.45			
Females	50	3.33	1.55			

Table 6 revealed the calculate *t*-value of 2.36 is greater than the critical *t*-value of 2.0 therefore, hypothesis 2 is rejected. The indication for this was that, both male and female student respondents were insignificant in their responses towards the utilization of instructional materials in schools.

Discussion of Findings

The findings of the study revealed that, textbooks, blackboards, tape recordings and mathematics kits are the most available instructional materials in both categories of schools; despite that the, private owned schools made more instructional materials available for teachers use than the government owned schools. These included white board, pictures, maps, newspapers, audio-visual materials, tape recordings, computers, mathematics kits and science kits. It was also shown that the private owned schools also made effective utilization of the available instructional materials for teaching and learning effectiveness and for the enhancement of educational objectives.

This was not the case in government owned schools. No wonder, more failures in public schools than private owned schools as emphasized by Hassan (2015). The findings also revealed insignificant difference between the male and female student respondents towards the availability of enough and relevant materials for teachers used in both private and government owned schools. It was found that, the students in private owned schools confirmed the availability of varieties of instructional materials in schools, which was not the case in government owned schools. The findings was in support of Alege (2012) who affirmed that

instructional materials for the implementation of the UBE programme especially, in public schools were inadequate hence, serious negative effects on students' academic performance. The hypothesis two, revealed rejection of the hypothesis. That is, the respondents differed in their responses toward the utilization of the available instructional materials in schools. The reason for the differed responses might be because, the students in private owned schools vividly confirmed the utilization of these materials by their teachers during the teaching and learning activities in their classes. More so, they noticed the positive impacts of these teaching materials in their academic performance, which was not all that noticed in public schools. The findings was in support of Protocol (2011) who said that, various studies revealed the poor utilization of instructional materials in secondary schools and most schools in the country.

Conclusion of the Findings

The few available instructional materials were not judiciously utilized; this rightly prevent the objectives of education to be adequately attained.

- Both the students in government and private owned schools deferred in their responses to availability of instructional materials in their schools.
- Also insignificant difference was observed between the male and female students in the two categoriesofschoolstoutilizationofinstructionalmaterialsintheirvario usschools.

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