

**UTILIZATION AND EFFECTS OF AUDIO-VISUAL MATERIALS IN THE TEACHING
AND LEARNING OF PHYSICAL AND HEALTH EDUCATION AMONG SECONDARY
SCHOOLS IN YABA LOCAL COUNCIL DEVELOPMENT AREA**

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Abstract

The study investigated the utilization and effects of audio-visual materials in the teaching and learning of physical and health education among secondary schools in Yaba Local Council Development Area, Lagos State. Three research questions and hypotheses were raised and formulated to guide this study. Literature relevant to this study were reviewed using journals, unpublished theses, and internet. The descriptive survey method was adopted for this study. The population comprised of female Secondary Schools' students in Yaba Local Council Development Area, Lagos State. The simple random sampling techniques were used in the selection of the sample for this study. The instrument used was a self-developed questionnaire and was administered to two hundred (200) respondents from four secondary schools in Yaba Local Council Development Area of Lagos State. Fifty (50) copies of the questionnaire were administered in each school. The data collected were analysed using frequency counts, percentage and inferential statistics of Chi-Square (X^2) was used to test the hypotheses at 0.05 level of significance. Findings from this study indicated that teacher's competency in utilization of audio-visual materials, time management and student's readiness significantly affect the utilization of audio-visual instructional materials in the teaching and learning of physical and health education among secondary schools. The study recommended that training and re-training exercise for secondary school teachers to get acquainted with the effective use of audio-visual materials and teaching methodology should be organized by government in partnership with the school management, the school facilities should be modified to accommodate the use of audio-visual by building audio-visual centres where students could be exposed to practical exercise. Curriculum planners should encourage the use of audio-visual materials by ensuring their inclusion in the educational syllabus of all levels of education.

KEYWORDS: Audio-visual, Audio, Chart, Education, Health, Student, Teacher.

Introduction

Audio-Visual act as an aid for educational materials directed at both the senses of hearing and the sense of sight, films, recordings, photographs, etc used in classroom instructions, library collections or the likes. The term has also been defined by Dike(2006) as those materials which do not depend solely upon reading to convey meaning. They may present information through the sense of hearing as in audio resources, sight, as in visual resources or through a combination of senses. Indeed, the variety of such resources is a striking characteristic. According to Anzaku, (2011), the term audio-visual material is commonly used to refer to those instructional materials that may be used to convey meaning without complete dependence upon verbal symbols or language. Thus, according to the above definition, a text book or a reference material does not fall within this grouping of instructional materials but an illustration in a book does. Some audio-visual components are in the nature of process and experience, for example, dramatizing an event or a procedure or making drama. Some of the audio-visual materials like the motion pictures require the use of equipment to release their latent value. Some do not need equipment at all like an exhibit or a study print. This term designates in common usage both material things as well as processes such as field trips. He further stated that audio-visual materials include materials and equipment alike, that materials are considered to be system, or body of content of potential value when put to work, while equipment or instructions, often referred to as hardware, components, are the means of presenting such content.

The importance of audio-visual materials in the teaching and learning processes cannot be over emphasized; basing learning in sense experience, extending experience, encouraging participation, stimulating interest, individualises instructions, serves as a source of information, making learning permanent. Some researchers unanimously agreed that audio-visual materials are very important and useful in education because, the normal learner in so far as the functions of his preceptor mechanisms are concerned, gains understanding in terms of multiple impression recorded through the eye, ear, touch and other series. This is to say that audio-visual materials are the equipment through which that function can occur, that is does not occur in isolation, rather through a balance pattern from any preceptor mechanism that are stimulated by external occurrences.

It was also stated that the human being learns more easily and faster by audio-visual processes than by verbal explanations alone. His ability to arrive at abstract concept through perceptual experience is however a phenomenon not clearly explained and perhaps not explicable. Furthermore, Oketunji (2010) stressed that audio-visual materials when effectively used have these advantages; they lessen major weakness of verbalism, humanize and vitalize subject matter, provide interesting approach to new topics and give initial correct impressions, economic time in learning, supply concrete materials needed, stimulate the initiative of the pupils. Swank (2011) stressed the effectiveness of visual materials in leaning, estimated that about 40% of our concepts are based upon visual experience, 25% upon auditory, 17% on tactile, 15% upon miscellaneous organic sensation and 3% upon taste smell. With the above assertion, it becomes clearer why audio-visual materials are important in the teaching and learning processes. This is because, they bring the different senses contributions together to get 100%

clarity.

Audio-visual materials help the teacher to overcome physical difficulties of presenting subject matter. With audio-visual materials, the barrier of communication and distance is broken. The culture and climatic conditions of other countries can be brought into the classroom with the aid of slides, films, filmstrips and projectors (Gopal, 2010). This is important because, according to Dike (2006) once the phenomenon is visualized, the picture and knowledge becomes very clear and permanent. Agreeing to this assertion, a 20th century Chinese philosopher stated that one picture is worth a thousand words. Natoli (2011) also added that audio-visual materials are rich opportunities for students to develop communication skill while actively engaged in solving meaningful problems". In other words, students certainly like it more and learn better if they are engaged in important and appealing activities. For example, involving students in bulletin board display will enhance their choice of colour and aid their understanding of the concept in question or when they join the teacher in dramatization of an event or a process.

Learning takes place effectively when the teacher sets out to provide learning situation in which a child will learn because of his natural reactions to the provided materials. During the process of learning, the teacher has to provide the learning situation to satisfy the natural reaction of the learner and this is through the use of instructional aids. The attention of the learner is caught, and his interest is also won and he is ready to learn. The role of audio-visual materials in stimulating interest stated that a friendly, accepting group climate is important in any learning situations, especially those materials that require students to reveal their ignorance and confront their fellow students. When there is a climate of acceptance for learning, then learning is stimulated.

Audio-visual resources can play a major role of making learning permanent. Gopal (2010) stressed that audio-visual methods do seem to facilitate the acquisition, the retention and the recall of lessons learned, because, they seem to evoke the maximum response of the whole organism to the situations in which learning is done. Perceptual materials readily associate themselves with the unique experiential background of each individual. Natoli(2011) stressed that audio-visual materials are important in the teaching and learning processes because having seen something, most people remember, for whatever that thing was, it conjures up an image at a mere mention and can be talked about freely. The researcher discovered some learning without the use of audio-visual materials at times does not encourage participation and lacks interest or stimulation, it is not based in sense experience nor does it extend their experience. Above all, such learning cannot be permanent. Yet, there is also evidence of low utilization and non-availability of audio-visual materials in schools. The blame of non-use or non-availability of teaching aids in the school is not only teachers but also, on the ministry of education in almost all the state of our country. The problem is either on the non-availability of these teaching aids or the ignorance of its practical application. There is therefore, that this neglect of the use of effective aids could be responsible

for in-effective teaching and learning various schools. In light of these, this study set to investigate the effect of audio/visual aid material in student's performance, identify some of the problem, which inhibit the use of audio/visual materials and offer suggestion on how effectively and efficiently to with the use of audio/visual material. These research questions were raised and answered in this study:

1. Will teachers' competency in utilizing audio-visual instructional materials have any effect in the teaching and learning of Physical and Health Education in Junior Secondary Schools in Yaba Local Council Development Area?
2. Will time management have any effect on the utilization of audio-visuals materials in teaching and learning of Physical and Health Education in Junior Secondary Schools in Yaba Local Council Development Area?
3. Will student's readiness have any effect on the utilization of audio-visual instructional materials in the teaching and learning of Physical and Health Education in Junior Secondary Schools in Yaba Local Council Development Area?

Research Hypotheses

1. Teacher's competency in utilisation of audio-visual materials will have no significant effect on the teaching and learning of physical and health education among secondary schools in Yaba Local Council Development Area.
2. Time management will have no significant effect on the utilisation of audio-visuals materials in teaching and learning of Physical and Health Education in Junior Secondary Schools in Yaba Local Council Development Area.
3. Student's readiness will have no significant effect on the utilisation of audio-visual instructional materials in the teaching and learning of Physical and Health Education in Junior Secondary Schools in Yaba Local Council Development Area.

Methodology

The descriptive research design was adopted for the study. The population comprised of all students in Yaba Local Council Development Area of Lagos state. The sample for the study consist of 200 students that were selected using the simple random sampling technique from four (4) selected secondary schools in Yaba Local Council Development Area. 50 respondents were selected from each school. A self-developed structured questionnaire was used as research instrument for the study. The research instrument was personally administered by the researcher and collected on the spot. The descriptive statistics of frequency count and percentage were used to analyse the demographic data of respondents

while inferential statistics of Chi-square (X^2) was used to test the formulated hypotheses at 0.05 level of significance.

Results

Analysis of Demographic Variable of Respondents

Table 1: Distribution of Respondents by School

School	Frequency	Percent
Regan Memorial Baptist School	50	25%
Methodist Girls High School	50	25%
Our Lady Of Apostle Private Secondary School	50	25%
Birrel Secondary School	50	25%
Total	200	100%

Table 1 indicated that 25% (n = 50) respondents were from Regan memorial School, 25% (n = 50) respondents were from Methodist girls School, 25% (n = 50) respondents were from our lady of Apostle Sec. School and 25% (n = 50) respondents were from Birrel secondary School. It also showed that all four schools were represented equally.

Table 2: Distribution of Respondents by Age

Age	Frequency	Percent
10-12yrs	90	45%
13-15yrs	99	49.5%
16-18yrs	11	5.5%
Total	200	100%

Table 2 indicated that n= 90 students, representing 45% falls within the age bracket of the 10-12 years of age, n=99 students representing 49.5% falls within the age bracket of the 13-15 years of age while only n=11 representing 5.5% of them falls between 16-18 years of age.

Table 3: Distribution of Respondents by Class

Class	Frequency	Percent
JSS1	40	20%
JSS2	80	40%
JSS3	80	40%
Total	200	100%

Table 3 indicated that 20% (n=40) of the respondents were in JSS 1, 40% (N= 80) of the respondents were in JSS 2 while 40% representing (n=80) respondents were in JSS 3.

Hypotheses Testing

Hypothesis one states that teacher's competency in utilization of audio-visual materials will have no significant effect on the teaching and learning of physical and health education among secondary schools in Yaba Local Council Development Area. The inferential statistics of Chi-square (X^2) was used to test the hypothesis at 0.05 level of significance. The result is presented in below.

Table 4: Chi-square (X^2) Analysis on Effect of Teachers' Competency in Utilization of Audio-Visual Materials on Teaching and Learning of Physical and Health Education

Variable	N	df	L.S.	X^2_{cal}	$X^2_{critical}$	Remarks
Teachers' Competency	200	27	0.05	733.18	40.11	Significant

From Table 4, the calculated Chi-square value of 733.18 was higher than the critical chi-square value of 40.11 at degree of freedom 27 and 0.05 level of significance. This means that the null hypothesis which state that teacher's competency in utilization of audio-visual materials will have no significant effect on the teaching and learning of physical and health education among secondary schools in Yaba Local Council Development Areas hereby rejected. This implies that teacher's competency in utilization of audio-visual materials had significant effect on the teaching and learning of physical and health education among secondary schools in Yaba Local Council Development Area.

Hypothesis two states that time management will have no significant effect on the utilization of audio-visuals materials in teaching and learning of Physical and Health Education in Junior Secondary Schools in Yaba Local Council Development Area. The inferential statistics of Chi-square (X^2) was used to test the hypothesis at 0.05 level of significance. The result is presented in below.

Table 5: Chi-square (X^2) Analysis on Effect of Time Management in Utilization of Audio-Visual Materials on Teaching and Learning of Physical and Health Education

Variable	N	Df	L.S.	X^2_{cal}	$X^2_{critical}$	Remarks
Time Management	200	27	0.05	402.70	40.11	Significant

From Table 5, the calculated Chi-square value of 402.70 was higher than the critical chi-square value of 40.11 at degree of freedom 27 and 0.05 level of significance. This means that the null hypothesis which state that time management will have no significant effect on the utilization of audio-visuals materials in teaching and learning of Physical and Health Education in Junior Secondary Schools in Yaba Local Council Development Areas hereby rejected. This implies that time management had significant effect on the utilization of audio-visuals materials in teaching and learning of Physical and Health Education in Junior Secondary Schools in Yaba Local Council Development Area.

Hypothesis three states that student's readiness will have no significant effect on the utilization of audio-visual instructional materials in the teaching and learning of Physical and Health Education in Junior Secondary Schools in Yaba Local Council Development Area. The inferential statistics of Chi-square (X^2) was used to test this hypothesis at 0.05 level of significance. The result is presented in below.

Table 6: Chi-square (X^2) Analysis on Effect of Students Readiness on Utilization of Audio-Visual Materials in Teaching and Learning of Physical and Health Education

Variable	N	df	L.S.	X^2_{cal}	$X^2_{critical}$	Remarks
Students Readiness	200	27	0.05	504.42	40.11	Significant

From Table 6, the calculated Chi-square value of 504.42 was higher than the critical chi-square value of 40.11 at degree of freedom 27 and 0.05 level of significance. This means that the null hypothesis which state that student's readiness will have no significant effect on the utilization of audio-visual instructional materials in the teaching and learning of Physical and Health Education in Junior Secondary Schools in Yaba Local Council Development Area is hereby rejected. The implication of this is that student's readiness will have significant effect on the utilization of audio-visual instructional materials in the teaching and learning of Physical and Health Education in Junior Secondary Schools in Yaba Local Council Development Area.

Discussion of Findings

The first finding of this study is that teacher's competency in utilization of audio-visual materials will have significant effect on the teaching and learning of physical and health education among secondary schools in Yaba Local Council Development Area. This finding supported the study of Webb and Kembo (2010) who asserted that it is therefore necessary for teacher training institutions to incorporate the modern educational technologies in teacher training programme as this will ensure teacher competence in the use and acquisition of modern educational technologies in the learning process. Agreeing with this result also is Veen (2011), who noted that teacher factors appear to be more significant. When teachers are less equipped during the teacher training, they will be less competent in creative acquisition and the use of modern educational technologies at school level.

The second finding of this study is that time management will have significant effect on the utilization of audio-visuals materials in teaching and learning of Physical and Health Education in Junior Secondary Schools in Yaba Local Council Development Area. Supporting this finding was the result submitted by Coppola (2010) whose study found that without strong teacher knowledge of ways to use technology; a lot of precious time can be wasted (Coppola, 2010). Teachers must know when to use a film to clarify important concepts rather than explaining it in a textbook. When to use discussion alone of a related film strip, when to assign outside viewing of television programme of self-study or when to have the class produce flannel boards illustrations as part of summarizing oral report on one aspect of classwork.

The third finding of this study is that student's readiness will have significant effect on the utilization of

audio-visual instructional materials in the teaching and learning of Physical and Health Education in Junior Secondary Schools in Yaba Local Council Development Area. This finding correlate with Reeves (2011) who stated that learning achievement is directly dependent on four factors; aptitudes, motivation, instruction, and the psychological environment of the classroom setting for student convenience. Many factors are responsible towards how prepared students are ready to learn. Students should not be overloaded with information. Instruction should be made to fit the learners' capacity. Most of the world current curriculum of education promotes student-centred kind of learning and the innovation and use of educational technologies.

Conclusion and Recommendations

1. Teacher's competency in utilization of audio-visual materials significantly affects the teaching and learning of physical and health education among secondary schools in Yaba Local Council Development Area.
2. Time management significantly affects the utilization of audio-visuals materials in teaching and learning of Physical and Health Education in Junior Secondary Schools in Yaba Local Council Development Area.
3. Student's readiness significantly affects the utilization of audio-visual instructional materials in the teaching and learning of Physical and Health Education in Junior Secondary Schools in Yaba Local Council Development Area.

The following recommendations are made:

1. Training and re- training exercise for secondary school teachers to get acquainted with the effective use of audio-visual materials should be organized by government in partnership with the school management.
2. Emphasis should be made on the use of audio-visual materials in order to inculcate the spirit of learning of physical and health education to students.
3. Government and non-governmental agencies should assist in the provision of audio-visual materials for effective teaching and learning of physical and health education in secondary schools.
4. Infusion of the use of audio-visual resources as a core teaching method in the curricula of secondary schools and impressing upon the ministry of Education to provide explicit strategy for enforcing the use of audio-visual materials in teaching and learning is imperative.
5. The school facilities should be modified to accommodate the use of audio-visual by building

audio-visual centers where students could be exposed to practical exercise.

6. Curriculum planners should encourage the use of audio-visual materials by inculcating them in the educational syllabus of all levels of education.
7. Students and teachers alike should get involved in their various roles in the improvisation and utilization of audio-visual resources when necessary

References

- Coppola (2010). An interview with Francis Ford Coppola. Retrieved from <http://achievement.org>. Archived from the original on December 13, 2010. Retrieved October 18, 2010.
- Dike F.R (2006). The use of communicative language teaching materials for junior secondary school. *American Journal of Educational Research*, 3(3), 292-300.
- Feng, X. & Humphreys, B. R. (2008). Assessing the Economic Impact of Sports Facilities on Residential Property Values: A Spatial Hedonic Approach. North American Association of Sports Economists.
- Gopal P. V. (2010). Importance of audio – visual aids in teaching and learning methodology. <http://www.articlesbase.com/tutoring-articles/importance-of-audio-methodology-3667855.html> Nov 15, 2010.
- Natoli, C. (2011). The importance of audio-visual materials in teaching and learning. Retrieved from <http://www.helium.com/s/224-early-childhood-ed>.
- Ogunmola, A. L. (2002). Sports in nation development. *Journal of Sports Management and Educational Research* 1(1) 1-5.
- Swank, W. D. (2011). Effect of the availability and use of instructional materials on academic performance of student. Retrieved from <http://kubanni.abu.edu.ng/jspui/bitstream/>
- Veen, W. (2011). Factors affecting the use of computers in the classroom. Retrieved from <https://files.eric.ed.gov/fulltext/EJ1071358.pdf>
- Webb, K. N., & Kembo, D. O. (2010). *An introduction to the language and linguistics of Africa*. USA: Oxford University Press.