

Availability and Utilization of Audio-Visual Aids in Teaching Animal Husbandry for Global Relevance in Delta State Technical Colleges

Eze MaryAnn Ogochukwu (Ph.D)

Department of Agricultural Education
Federal College of Education (Technical), Asaba
Ezeogochukwu2015@gmail.com
07037288771

Eze Joan N. (Ph.D)

Department of Agricultural Education
Federal College of Education (Technical), Asaba

Oyana Victor N. (Ph.D)

Department of Agricultural Education
Federal College of Education (Technical), Asaba

Ogochukwu Frances Obianuju

Department of Agricultural Education
Federal College of Education (Technical), Asaba

Abstract

The study adopted a descriptive survey research designed to determine the availability and utilization of audio visual aids in teaching animal husbandry for global relevance in Delta State Technical Colleges. Two research Questions guided the study. The reliability of Instrument was determined using Cronbach Alpha, which yielded an overall reliability coefficient value of 0.84. The total population was 30 agricultural teachers from six technical colleges of Delta State. The researchers therefore sampled the whole 30 teachers since the number is small and convenient for the research. The researchers developed 26 structured item questionnaire tagged Availability and Use of Audio Visual in Teaching Animal Husbandry (AUAVATAHQ) based on the reviewed literature to collect the data. The questionnaire was validated by three lecturers from Animal science department, Delta State University, Abraka, Anwai Campus. The data was then analyzed using Mean and standard deviation. The findings of this study reveals among others that audio visual aids are not adequately available and utilized by teachers in teaching trade subjects such as animal husbandry in technical colleges. Based on the findings, it was recommended that government and relevant professional bodies should make audio visual aids adequately available in teaching animal husbandry as well as training the teachers through conferences, workshops and seminars on the appropriate way of using the teaching aids.

Introduction

Education is the foundation of every development, forming the foundation for literacy, skill acquisition, technological development as well as ability to export natural resources of the state (Uwameiye, 2019). It is essential to the achievement of personal goals and individual aspirations. In recognition of the importance of education Nigeria has continued to make serious efforts towards providing her citizens with quality and functional education for socio-economic development (ALU, 2000). Hence, the national policy of education (2004) Stated that education should help the child acquire appropriate skills, abilities and competencies, both mental and physical, for the individual to live and contribute to the development of the society. Such skills, abilities and concepts could be acquired through training provided in technical colleges with relevant skills and knowledge in Technical Education (TE) courses.

Technical Education (TE) means education and training which provides skills for self-reliance using formal, non-formal or informal learning platform (Bandung, 2008). In the view of Eze and Eze, (2019) TE covers a wide range of occupational options which are embedded on variety of subjects such as agricultural science. Agricultural Science according to NEEDS,(2019) is the science of cultivation of crops, rearing of animals , forestry and marketing of agricultural produce. The teaching of agricultural science is carried out at primary, technical, colleges and tertiary institutions of learning. Recently, there has been an inclusion of trade subjects in technical colleges to meet up with the skill demand of this 21st century. Animal husbandry however emerges to be one of the trade subjects. (Nigeria and Educational Research and Development Council, (NERDC) 2012).

Animal husbandry is a broad range of all the activities that are needed to ensure the wellbeing, growth, development and reproduction of farm animals. According to Barnnergee (2012) animal husbandry is seen as the process of domesticating animals for economic and recreational purposes. The author said further that it includes proper feeding, health care, housing and many other activities given to farm animals. There are various branches in animal husbandry which include; animal production, animal health and marketing. The aim of teaching animal husbandry to students in technical school is to provide practical training to students so they can be employers of labour rather than job seekers. In order to impart the skills effectively in animal husbandry to students, Offorma in Bessong, Emmanuel, and Attah, (2019) asserted that teachers of all subjects particularly trade subjects like animal husbandry should use different resources such as audio visual

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188

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aids to teach students of different abilities so as to make the class interesting. Audio visual aids are devices or technological media that enables the teacher to clarify, establishes, coordinate accurate concepts and interprets a topic to the learners (Berry, Rich and Allington, 2010).

Berry et al,(2010) further asserted that audio visual aids are instructional aids use to improve the concreteness, clarity and effectiveness of ideas and skills being transferred. Audio visual aids enable the learner to see, listen and learn by doing. Nzerner, (2005) supported that audio visual aids are instructional aids, audio' literally means hearing' and visual means seeing. Similarly, Berry, eta'l (2010) posited that audio visual aids are sensory objects and images that stimulate and emphasizes on learning process. In this study, audio visual aids are instructional material (electronic and non-electronic) that agricultural teacher employs in teaching of animal husbandry to students' in order to enhance learning. Audio visual such as; television set, design models, radio-cassette, smart phones, chalkboard among others.

The utilization of audio visual aids and other technologies for teaching in this scientific era is not only beneficial to the teacher but to learner and society at large as it provides better value to students than the overseas rivals (Riley, 2012). According to Wanjiku, (2013) the utilization of audio visual aids in teaching entails the art of efficiently putting into use teaching resources. It also means the magnitude to which provided audio visual aids are consistently utilized for teaching purposes. In order to impart the skills effectively in animal husbandry to students, Offorma in Bessong, Emmanuel, and Attah, (2019) asserted teachers of all subjects particularly trade subjects like animal husbandry should utilize audio visual aids to teach students of different abilities so as to make the class interesting. Prasad, (2005) opined that use of audio visual aids in teaching brings diversification in methods of teaching brings better understanding of the topic. It helps students to experience some task performed in animal husbandry virtually or vicariously. The author further narrated that task in animal husbandry such as castration, debeaking, feeding, housing, breeding, health management among others need better understanding when teaching with audio visual aids. Furthermore, Adebowale and Adekanye, (2012) pointed out that audio visual aids develop critical thinking and reasoning among learners. Audio visual aid has of course made teaching easier for the teachers. Rasul (2011) stated that audio-visual aids are very useful in education when they are adequate for learners to gain understanding of practical skills. Similarly, Ogunbote and Adesoye (2016) stated that

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189

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audio-visual aids enhance learning because the words are complemented with images and animations.

Despite the above importance, there are numerous factors that affect the use of audio visual aids in teaching; such as school environment, Socio economic background of the students among others (Nwachukwu, 2011). Eze, (2014) argued that teachers in Nigeria are still following traditional methods of teaching by using lecture method, and demonstration method because audio visual aids are not adequately provided. Reacting to the above, Kathrine, (2009) stated that inability of the teachers to operate and handle the audio visual aids properly has emerged a problem in the utilization. Supporting this view, Prasad, (2005) further stated that teachers lack patience and dedication to learn and use audio visual aids. Besides, insufficient fund to buy the aids is also a problem. Wanjiku (2013) contended that for Nigerian educational system to produce graduates of trades subjects that would be globally relevant, the above mentioned challenges must be tackled.

Global Relevance is the required feature of an organization or a country to be of an international standard (Udoka, 2010). Students gain global relevance by practicing skill development in the classroom and applying their learning to real world topics. According to Reiley, (2012) Global relevance is the ability of an individual or a nation to produce goods and services which provide better value than the ones obtainable in overseas.

In this study, global relevance is the ability of Nigerian educational system to produce graduates of trade subjects that are professionally skilled that would gain them international recognition.

The inability of Nigerian teachers to produce graduates of international standard especially in animal husbandry among technical colleges has become a serious concern in Nigerian educational system. However, the main objectives of animal husbandry are to prepare students in skills, knowledge, attitudes, abilities and competencies for self-reliance in a specific area. Unfortunately, the objectives have not been achieved. There is still persistent poor performance among students, this persistence brought about unskilled, unproductive and disillusioned youths who parade the streets in search of white collar jobs (Ekong, Ikutal and Ibe, 2009). Some researchers such as Ekong et al, (2009) Phipps, Oshome, Dyer and Ball (2008) attributed the scenario to the poor use of teaching aids by the teachers of trade subjects. Furthermore, the authors stated that though the audio visual aids are available but they are not adequate in teaching of trade subject like animal husbandry. The implication is that the students do not acquire many skills, as such the

graduates are not relevant both nationally and globally. Though the teachers most times cover the scheme of work but they are not imparting the needed skills that would enable students to carry out practical task in animal husbandry such as castration, construction of houses, artificial insemination among all, due to lack of availability and utilization of appropriate teaching aids. Hence, the topic; Availability and Utilization of Audio Visual Aids in teaching animal husbandry for global relevance in technical colleges of Delta State.

Several studies have been carried out on the use of audio visual aids in teaching, studies such as Narasimhan (2007), Ranasinghe and Leisher 2009), Roc, (2005) and Kishore(2003) among others conducted a research on the assessment of the provision of audio visual aids in teaching and learning of trade subjects in South West Secondary Schools. They reported that audio visual aids such as smart phones, slide projectors, DVD and DVC recorders, smart boards etc. are not provided to schools to promote teaching and learning. Other researchers like Besong et al (2019) and Downes, (2010) also carried out a study on the problems of utilization of audio visual aids in teaching science education students in Edo State Senior Secondary Schools, It was observed therefore that inadequate funds, poor perception of parents, attitude of school management, inadequate training of the teachers on how to use the audio visual aids especially the electronic ones constitute a big challenge to utilizing the aids.

Though, there are many research studies on audio visual aids in teaching yet there are few empirical research studies that considered using audio visual aids in teaching animal husbandry in technical colleges. It is in the bid to close this gap in literature that this study sought to determine the availability and utilization of audio visual aids in teaching animal husbandry for global relevance in technical colleges of Delta State.

Purpose of Study

The main purpose of this study was to determine the extent audio visual aids are made available and utilized by teachers in teaching animal husbandry for global relevance in Delta State Technical Colleges. Specifically the study determined;

1. the extent to which audio visual aids are made available in teaching animal husbandry in Delta State Technical Colleges.
2. the extent to which the audio visual aids are utilized by teachers in teaching animal husbandry in Delta State Technical Colleges

Research Questions

1. To what extent are audio visual aids made available in teaching animal husbandry in Delta State Technical Colleges?
2. To what extent do audio visual aids used by teachers in teaching animal husbandry in Delta State technical Colleges?

Methodology

The study adopted descriptive survey design. It was in line with Osuala (2005) because it is suitable for the public opinion on existing phenomenon with the intent to determine the current conditions or practices and better plan for improvement. The study was carried out in six technical colleges of Delta State of Nigeria. The population consisted of 30 agricultural science teachers in all the technical colleges; Agbo technical college; 6 teachers, Iselle-ukwu technical college; 6 teachers, Ogor technical college; 6 teachers, Sapele technical college; 6 teachers and Utagbe-Ogbe technical college; 6 teachers. The researcher therefore used the whole 30 agricultural science teachers because the population is small and convenient for the study. A checklist was used as a preliminary study to ascertain the availability of the materials while observation schedule was used to ascertain the utilization of those materials by the teachers. A questionnaire tagged 'Availability and Use of Audio Visual Aids in Teaching Animal Husbandry Questionnaire (AUAVATAHQ) was made up of four point scale (Very High Extent, High Extent, Low Extent and Very Low Extent, very highly utilized, highly utilized, low utilized and very low utilized) with 26 items which was based on relevant literature reviewed. The instrument was face validated by two experts from agricultural education Department, Delta State University, Abraka, Anwai Campus, Delta State.

The researchers therefore engaged three research assistants in administering the instrument. The reliability of the instrument was determined using Cronbach Alpha, which yielded an overall reliability coefficient of 0.84. Mean(x) and standard deviation were used to analyse the data. The results were interpreted based on the real limit of numbers as follows 1-1.49(very low extent), 1.50- 2.49 (low extent), 2.50 – 3.49(high extent) 3.50- 4.49 (very high extent). Statistical package for Social Science (SPSS) version 22 was used for probability level, less or equal to 0.5. Since the items were based on four point scale, the accepted mean score was 2.50. Thus, mean rating of 2.5 and above were accepted while items with mean rating below 2.5 were rejected.

Result 1: To what extent are audio visual aids made adequately available in teaching animal husbandry in Delta State Technical Colleges?

Table 1: Mean response of teachers on the extent of audio-visual aids are made available in Teaching Animal Husbandry in Delta State Technical Colleges (N-30)

SN	STATEMENTS	MEAN	SD	DECISION
1	Closed circuit television	1.73	0.94	Low Extent
2.	Radio-cassette player	1.70	0.84	Low Extent
3.	Computer based assisted programmes such as prepared manuals in animal husbandry	2.13	1.07	Low Extent
4.	VCD and DVD connected to television	1.97	1.03	Low Extent
5.	Computers	2.77	1.10	High Extent
6.	Projectors	1.73	0.94	Low Extent
7.	Motion Picture	1.90	1.03	Low Extent
8.	Video Recorder	1.70	0.84	Low Extent
9.	Smart Phones	2.0	1.02	Low Extent
10.	Graphic pictures such as bar graphs, pie graph, Posters, charts, diagrams and cartoons	2.83	1.05	High Extent
11.	Tape Recorder	2.17	1.05	Low Extent
12.	Chalkboard	3.73	0.58	Very High Extent
13.	Textbooks	3.47	0.78	High Extent

VHE- Very High Extent, HE- High Extent, LE- Low Extent, VLE- Very Low Extent and SD- Standard Deviation

Table 1 revealed the mean response of teachers on the extent Audio-visual Aids are adequately provided in teaching animal husbandry in Delta State Technical Colleges. Items 5, 10, 12, and 13 showed high extent with the mean range of 2.77 to 3.73 while items 1, 2, 3, 4, 6, 7, 8, 9 and 11 showed to a low extent with the mean of 1.7 to 2.13. This means that computer, graphic pictures, chalkboard and textbooks are adequately available in teaching animal husbandry to a high extent while closed circuit television, radio recorder and radio cassettes player, computer based assisted programmes, DVD recorder, DVD, projector of all kind, motion pictures video recorder, smart phones and tape recorder are not adequately available to a low extent.

Result 2: To what extent do audio visual aids used by teachers in teaching animal husbandry in Delta State technical Colleges?

Table 2: mean Response of Teachers on the utilization of Audio-visual Aids in Teaching Animal Husbandry in Delta State Technical Colleges (N-30)

SN	STATEMENTS	VHU	HU	LU	VLU	MEAN	SD	DECISION
1	Closed circuit television use in magnifying objects, role play and laboratory experiments	1	1	10	18	1.57	0.73	Lowly Utilized
2.	Radio-cassette player for transmitting knowledge, ideas and information to students					1.57	0.77	Lowly Utilized
3.	Computer					2.63	1.03	Highly Utilized
4.	VCD and DVD connected to television for displaying various tasks carried out in animal husbandry					1.73	0.91	Lowly Utilized
5.	Computers assisted programme in animal husbandry such as prepared manuals in animal husbandry					1.80	0.92	Lowly Utilized
6.	Use of projectors					2.07	1.05	Lowly Utilized
7.	Use of motion Pictures					2.07	1.05	Lowly Utilized
8.	Video Recorder for recording sounds, visions and install information until desired time					1.57	0.77	Lowly Utilized
9.	Use of smart Phones in recording, displaying images and graphics in teaching animal husbandry					1.80	0.92	Lowly Utilized
10.	Use of graphic pictures such as bar graphs, pie graph, Posters, charts, diagrams and cartoons					2.07	1.08	Lowly Utilized
11.	Use of tape Recorder to recall information, reverse and evaluate students performance					1.90	0.99	Lowly Utilized
12.	Use of chalkboard for writing, illustrations and drawing of diagrams related to the topic					3.67	0.76	Very Highly Utilized
13.	Textbooks showing relevant pictures on the topic taught to students					3.50	0.82	Very Highly Utilized

VHU- Very High Utilized, HU- High Utilized, LU- Low Utilized, VLU- Very Low Utilized and SD- Standard Deviation

Table 2 shows the mean response of teachers on the utilization of audio-visual aids in teaching animal husbandry in Delta State Technical Colleges. Table 2 shows that the response of the teachers in items 3 shows that teachers utilized computer in teaching animal husbandry to a high extent, the response of the respondents in items 12 and 13 shows that teachers use chalkboard for writing, illustrations and drawing of diagrams relating to the topic and Textbooks showing relevant content and pictures on the topic taught to students to a very high extent while the response of respondents in items 1, 2, 4,

5, 6, 7, 8, 9, 10 and 11 shows that teachers use the statements in these items to a low extent.

Discussion of Findings

The result of the study in table 1 showed that the closed circuit television, radio-cassette players, computer assisted programmes, VCD and DVD, projectors of all kinds, motion pictures video recorder, smart phones, and tape recorders are available in teaching animal husbandry to a low extent. Computers and graphic pictures are highly utilized while chalkboards and textbooks are very high utilized. The findings are in line with the study carried out by Bessong et al, (2019) and Downes (2010) which stated that Audio Visual Aids are not adequately available in Nigerian South South technical colleges. In addition, the findings are in agreement with Narasimban (2007), Ranasingge and Leisher (2009), Roc, (2005) and Kishore(2003) who conducted a study on the assessment of Provision of Audio Visual Aids in Teaching and Learning of Trade Subjects in South West Secondary Schools. It was observed among others that there was gross lack of audio visual aids in teaching the practical involved in trade subjects like animal husbandry. In view of above, Barnnergee (2012) lamented that governments do not provide enough funds in buying of the audio visual aids.

In table 2, the findings of the study showed that chalkboard and textbooks are very highly utilized by the teachers in teaching animal husbandry in technical colleges of Delta State while computer is highly utilized. However, closed circuit television, radio cassette player, DVD and VCD, computer assisted programmes, projectors, motion pictures, video recorder, smart phones, graphic pictures and tape recorder are utilized on a low extent. The findings are in consonance with the result of the findings of Ekong etal (2009) and Phipps et.al (2008) which agreed that the above mentioned items are utilized by teachers to a low extent. Each of the researchers agreed that very few audio visual aids are highly utilized by teachers in classroom delivery. Attah (2019) asserted that though some audio visual aids are provided that the teachers cannot effectively use them due to inadequate training. Wanjiku (2013) maintained that the relevance of a student academic performance is measured based on the skills acquired when audio visual aids are utilized in teaching and learning.

On the other hand, this work was anchored on the research carried out by Kathrine (2009) on the problems of utilization of teaching science students in Edo State Senior Secondary Schools, it was reported that poor parents perception, insufficient funds, inadequate

training of the teachers on the use of teaching aids among others constitute a problem in the utilization of audio visual by teachers.

Conclusion

From the findings of the study, it was discovered that audio visual aids such as closed circuit television, radio-cassette players, computer assisted programmes, VCD and DVD, projectors, motion pictures, video recorder, smart phones and tape recorders are not adequately available to a low extent, whereas computers and graphic pictures are made available to a high extent. However, chalkboard and textbooks are adequately available and utilized by teachers in teaching animal husbandry in technical schools for global relevance.

Recommendations

1. Based on the findings, the following recommendations were made;
Delta State Government and non-governmental organizations (NGOs) should make sure that audio-visual aids are adequately available in technical schools in the State.
2. Government and relevant professional bodies such as Nigerian association of Teachers of technology (NATT) and Nigeria Vocational Technical Association should organize conferences, workshops and seminars for teachers on the use of audio-visual aids in teaching.
3. The Delta State Education Commission should map out strategies such as adequate supervision to make sure that teachers in technical colleges are using Audio-visual Aids such as smart phones, computer, projectors of all kinds, and video recorder among others in teaching.

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