

UTILIZATION OF AUDIOVISUAL RESOURCES IN CREATING CHILDREN'S INTEREST IN SCIENCE AND TECHNOLOGY

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ABSTRACT

The declining interest of children in science and technology has reached an alarming rate. This ugly trend has translated into mass failure of candidates in science and related subjects in WAEC and NECO examinations. Consequently, there is the need to urgently cultivate the interest of children in science and technology. Against this backdrop, the paper examines the use of audiovisual resources in creating interest of children in science and technology. The study adopted simple descriptive design aimed at investigating the use of audiovisual resources in creating interest of children in science and technology. Two research questions were stated to guide the study and one hundred and twenty respondents participated in the study. The instrument for data collection was questionnaire while data collected were analyzed using simple percentages. The outcome of the findings revealed that the use of audiovisual resources significantly creates interest of children in the teaching and learning of science and technology.

KEYWORDS: Utilization, Interest, Audiovisual Resources, Technology, Science

INTRODUCTION

The interest of the children is very paramount at all level of educational development. If well catered for and directed, it is the key to success and over-all development of the child. This is apparent because no child can learn and succeed above his or her interest in any given subject. Therefore, the best methods should be used in order to create the interest of the child. Consequently, there is the need to employ the use of audiovisual resources in creating the interest of the children in the teaching and learning of science and technology. Audiovisual resources according to Dike (1989), do not only create interest of the learners but also add clarity to the topic taught and makes learning more interesting. Audiovisual resources have the capability to make learning more interesting because they appeal to more than one sense and therefore, captivate the interest of the learners towards a given subject. Interest according to Njoku (1980) is a goal of education in that it makes the learner to be able to retain what is taught. A study conducted by Ode & Omokaro (2007) also revealed that children retain most of what they hear, see and feel than what they merely hear. This concept bears credence to the old Chinese adage that says "what I hear I forget what I see I remember and what I I know". The use of audiovisual resources offers the learner the opportunity to hear, see and feel because they appeal to more than one sense.

Children usually perceive science courses to be very difficult as such most of them lack interest in the subjects and are unwilling to offer them. The best way to cultivate the interest of the children towards these courses is by the use of audiovisual resources. A visual instruction encourages the use of audiovisual resources in teaching in order to make abstract ideas more concrete and interesting to the learners. Educators have also come to realize that the most effective teaching and learning take place when individuals have direct experience with the topic under study, in other words

children learn best by doing. The use of audiovisual resources offers the children the opportunity to learn by doing and this to a large extent increases the interest of the children in a given topic.

However, there has been no consensus on the capability or otherwise of the use of audiovisual resources in creating the interest of children in science and technology of the numerous works done by researchers and authors of repute. It is against this backdrop that the paper investigates the use of audiovisual resources in creating interest of children in science and technology.

SIGNIFICANCE OF THE STUDY

The outcome of the study will be of great importance to students, teachers, school authorities and educational stakeholders, especially the Federal and State Ministries of Education. Specifically, the findings of this study will help the students to develop interest in science and technology because the recommendations from the study will be applied and audiovisual resources will be used in teaching and learning of science and technology. The study will further help to sensitize and reveal to the teachers, especially the science teachers of their crucial role in promoting the use of audiovisual resources in the teaching and learning of science and technology. The study will also be beneficial to the school authorities as it will create awareness among them of the importance of the use of audiovisual resources in teaching and learning of science and technology because the findings from the study may require them taking decision to infuse audiovisual resources in learning curriculum of schools. The result of the study will also create awareness for the Federal and State Ministries of Education as policy makers of the need to infuse the use of audiovisual resources as core teaching method in the curricula of secondary schools and impress on them to provide explicit strategy for enforcing the use of audiovisual resources in teaching and learning in secondary schools.

PURPOSE OF THE STUDY

The study is designed to investigate the use of audiovisual resources in creating children's interest in science and technology.

Research Questions

- What types of audiovisual resources creates your interest in the teaching and learning of science and technology?
- How does the use of audiovisual resources create interest in of science and technology?

RESEARCH METHODOLOGY

Simple descriptive design was employed in investigating the use of audiovisual resources in creating children's interest in science and technology. The focus of this study is to establish the use of audiovisual resources in creating interest of the children in science and technology. A stratified random sampling was used to select one hundred and twenty JSS I students from the population. The design involved collecting of data through questionnaire administration. The options were presented in three point scale ranging from: strongly agree (SA), Disagree (D) and undecided (U) respectively. Correspondingly, each of the options attracts the following: Agree (3), Disagree (2) and Undecided (1). The criterion for decision making was that 50% and above was acceptable while 49% and below was unacceptable.

DATA ANALYSIS

Simple percentages were used in analyzing the data collected.

RESULTS OF THE FINDINGS

Table 1: Research Question One: What Types of Audiovisual Resources Creates Interest in Learning of science and Technology

S/ N	Item description	Agree	Disagree	Undecided	Total
1	Flash cards	80 66.70%	25 20.80%	15 12.50%	120 100%
2	Transparencies	100 83.30%	15 12.50%	5 4.20%	120 100%
3	Slides	85 70.80%	20 16.70%	15 12.50%	120 100%
4	Microforms	60 50.00%	35 29.20%	25 20.80%	120 100%
5	Filmstrips	100 83.30%	15 12.50%	5 4.20%	120 100%
6	Charts and maps	86 71.67%	24 20.00%	10 8.33%	120 100%
7	Posters and billboard	75 62.50%	25 20.80%	20 16.70%	120 100%
8	Disc, video& tape recorder	105 87.50%	10 8.30%	5 4.20%	120 100%
9	Photographs	90 75.00%	25 20.80%	5 4.20%	120 100%
10	Projected opaque materials	95 79.20%	15 12.50%	10 8.30%	120 100%

From the table above the results shows that eighty respondents representing 66.70% agree that the use of flash cards creates interest in learning, one hundred respondents representing 83.30% agree that the use of transparencies creates interest in learning of science and technology, and eighty –five respondents representing 70.80% of the total population also agree that the agree that the use of slides creates interest in the learning of science and technology. The results further shows that one hundred respondents representing 83.30% agree that filmstrips create interest in learning, eighty-six representing 71.67% agree that charts and maps create interest and seventy-five representing 62.50% agree that posters and billboard are used to create interest in learning of science and technology. Furthermore, it could be observed from the table that one hundred and five respondents representing 87.50% agree that the use of disc, video and tape create interest; ninety respondents representing 75% agree that photographs create interest in learning and ninety-five representing 79.20% agree that the use of projected opaque materials creates interest in learning of science and technology. It could also be noticed from the results that no significant number or percentage of the total population either disagreed or were undecided on the items of descriptions.

Table 2: Research Question 2: How Does the Use of AVS Create Interest in Learning of Science and Technology?

S/N	Options	Agree	Disagree	Undecided	Total
1	The use of Audiovisual resources stimulates interest teaching and learning.	110 91.67%	6 5.00%	4 3.33%	120 100%
2	AVS Provide source of information and removes abstraction in learning	80 66.70%	30 25.00%	10 8.30%	120 100%
3	The use of AVS create emotional balance and better understanding	85 70.80%	20 16.70%	15 12.50%	120 100%
4	The use of AVS help learner develop quick interest in learning	110 91.67%	8 6.66%	2 1.67%	120 100%
5	The use of AVS increase and enhance effective learning	70 58.33%	35 29.17%	15 12.50%	120 100%
6	The use of AVS create concrete basis for conceptual thinking	65 54.17%	35 29.17%	20 16.66%	120 100%
7	The use of AVS captivate interest since they appeal to more than one sense	100 83.33%	12 10.00%	8 6.67%	120 100%
8	AVS add clarity to the topic taught and make learning more interesting	105 87.50%	10 8.33%	5 4.17%	120 100%

The results from the table above shows that one hundred and ten respondents representing 91.67% agree that audiovisual resources stimulate interest while six and 4 respondents representing 5% and 3.33% respectively disagree and were undecided. On item two, eighty respondents representing 66.70% agree that the use of audiovisual resources removes abstraction and creates interest in learning, eighty-five respondents representing 70.80% agree that audiovisual resources creates emotional balance and better understanding and one hundred and ten respondents representing 91.67% agree that audiovisual resources helps learners to develop quick interest in learning. Seventy respondents representing 58.33% agree that audiovisual resources increase and enhance effective learning, sixty-five respondents representing 54.17% agree that audiovisual resources creates basis for conceptual thinking and one hundred respondents representing 83.33% agree that audiovisual resources captivate interest since they appeal to more than one sense. Finally, one hundred and five respondents representing 87.50% opine that audiovisual resources add clarity to the topic taught and make learning more interesting.

DISCUSSION OF THE FINDINGS

The discussions of the findings were made under the following:

- Types of audiovisual resources used for creating children interest in science and technology
- How the use of audiovisual resources creates children interest in science and technology

The data analyzed and presented under research question one revealed that various types of audiovisual resources ranging from flash cards, transparencies, slides, microfilms, filmstrips, video, tape recorders, photographs, projected opaque materials, charts, disc, posters, and bill boards were used to create children's interest in science and technology. The finding of this study is related to the study conducted by Allen (2011) who grouped audiovisual resources used in creating children's interest in learning as flash cards, transparencies, slides, microfilms, filmstrips, video, tape recorders, photographs, projected opaque materials, charts, disc, posters, and billboards. The study further emphasized the need to use audiovisual resources to enhance efficient and effective teaching and learning. This contention is also in line with Okojie (2009) who opined that the use of audiovisual resources makes teaching and learning lively, real and interesting. He further

contended that information accompanied by pictures; illustrations and real life specimens are capable of creating interest in learning. The above assertion provides a framework to which the importance of using the audiovisual resources should be attached.

The outcome of the findings on research question two revealed clearly how the audiovisual resources creates interest of children in teaching and learning of science and technology. The findings further revealed that audiovisual resources inter-alia stimulates interest, removes abstraction in learning, creates emotional balance and better understanding, help learner develop quick interest in learning, enhances effective learning, captivate interest since they appeal to more than one sense and create basis for conceptual thinking. The above findings significantly collaborate with study conducted by Balongu(2012) on the importance of audiovisual resources which revealed that well-chosen audiovisual resources promote better understanding, create emotional balance and make individual learning possible through their programmed instruction; provide concrete basis for conventional thinking hence reducing word response by learners.

CONCLUSIONS

This study has so far investigated the utilization of audiovisual resources in creating children's interest in science and technology. The result of the findings clearly showed that audiovisual resources are indispensable components in creating interest of the children in science and technology. It is therefore imperative that audiovisual resources are used as a core teaching method in the curricula of all secondary schools. This clarion call is made considering the importance of audiovisual resources in the academic achievement of the children and their overall development.

RECOMMENDATIONS

Based on the result of findings it is imperative to make the following recommendations

- Audiovisual resource should be infused as a core teaching method in thee curricula of all secondary schools.
- Ministry of Education and all stakeholders in education policy should provide explicit strategies for enforcing the use of audiovisual resources in all secondary schools
- Training and re-training exercise for the secondary school teachers to get acquainted with the effective use audiovisual resources should be organized by governments in partnership with the school management.
- Secondary schools should make adequate provisions for audiovisual resources and modified the school facilities to accommodate the use of audiovisual resources by building centers where students could be exposed to practical exercise.

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