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A Comparative Study of the Impact of Instructional Media in the Teaching and Learning Process in Selected Primary Schools in Kogi State

Tolorunleke, E. Adebayo, Akoji, Augustine, Ibrahim J. Enejo & **Ishaka M. Lawal**
Department of Educational Foundations, Faculty of Education, Kogi State University, Anyigba
Email: tolorunleke.ae@ksu.edu.ng; Tel: 08030726340
Department of Educational Foundations, Faculty of Education, Kogi State University, Anyigba
Tel: 07054692414
Department of Psychology/Guidance and Counseling, Kogi State College of Education, Ankpa
Tel: 08030997600; Email: jibrihima8@gmail.com
Primary Education Department, Kogi State College of Education, Ankpa, Tel: 08036169532
Email: lawalishaka9@gmail.com

Abstract

This paper examines the impact of instructional media in the teaching-learning process in selected primary schools in Kogi State. To achieve these, three hypotheses were formulated and data were collected through personal contact and through selected primary school teachers. The data was tested at 0.05 level of significance to determine the differences in pupils' academic performances and attitudinal changes when taught with selected instructional media. *T-test* and Pearson Product Moment Correlation coefficient statistics were used to determine the differences and relationship respectively. It was concluded that the use of appropriate instructional materials enhances teaching and learning in primary schools. Among the recommendation is that government should provide enough funds for the provision of instructional materials, and also that workshops and seminars should be organized for teachers to enhance the effective utilization of instructional materials in primary schools.

Keywords: Teachers, Teaching, Learning and Instructional media

Introduction

Instructional media in the teaching-learning process is highly justified because the teaching of most subjects to the understanding of learners depends largely on the use of instructional media. Even modern methods of teaching call for the use of instructional materials on the part of practicing teachers who are supposed to be the pedestal of making learners understand certain

concepts. The major goal of the Teacher Education programme is to produce competent professionals who will be capable of making learning easier for pupils. The teacher's ability to evaluate the level of effectiveness of any instructional media for teaching and learning is based on his ability to use them effectively, (Akinpelu, 2005).

Oshodi (2014) viewed instructional media as the vehicle through which instructions are disseminated to the learners for the purpose of appealing to their senses of touching, seeing, hearing and feeling so that desired behavioural changes are achieved. No media, in their own right have absolute influence, but are mere vehicles for more or less well designated instruction. Schools, colleges, universities are over populated thereby creating rooms for the employment of qualified teachers in order to facilitate the use of effective teaching methodology (Adeleke, 2012). School's enrolments are increasing tremendously therefore, there is the need for more qualified teaching staff to cope with the overpopulation problems. Ibikunle (2006) was of the opinion that where instructional materials are properly selected utilized and appropriately matched to a specific learning objective, learner characteristic and the structural properties of the learning task, perception, understanding transfer of training, recall and retention can be enhanced. Properly selected and utilized instructional media "can promote academic achievement can give to learners increased conceptualization and understanding that is more than they usually gain from verbal explanation" (Oluwadare, 2010).

To achieve a maximum selection and utilization of instructional media especially in primary schools-the foundation of learning, it becomes imperative to develop high level educational technologist and qualified teachers to cope with recent trends in scientific and technological advancement. As a corollary to the above, this paper therefore investigated the impact of instructional media in the teaching-learning situation in selected primary school with a view to making suggestions for improved teaching. It will also find out why primary school teachers fail to use media in the process of instruction.

Statement of the Problem

The overpopulation of pupils, lack of instructional media, lack of professional teachers, low academic performance of pupils and low level of attitudinal changes observed in the schools have been a great concern that necessitate. According to Tukur, (2010) is of the opinion that whatever was passed into the learner would go beyond mere acquisition of knowledge from selected topics and themes. These defects, however, may be as a result of non-usage or inadequate teaching material on the part of the teacher. Lack of administrative support, production constraints and inadequate motivation of learners put teachers and the pupils at comprehension disadvantage. Therefore, it is important to supplement the teaching and learning with the use of instructional media like teaching machine, pictures, charts, posters, among others for effective assimilation and internalization of subject matters.

Purpose of the Study

The purpose of this study is to find out the effect of instructional media in the teaching-learning situation. The low academic performance of pupils generally calls for great concern therefore something must be done to salvage the situation hence the need for the study of the effects instructional media would have in the teaching and learning process.

Research Questions

1. To what extent are instructional media used by primary school teachers in the process of teaching.
2. Is there adequate provision of instructional media in primary school?
3. How does teacher's year of experience influence the selection and utilization of instructional media towards effective academic performance of pupils?
4. To what extent is years of experience influence pupils learning outcome?

Research Hypotheses

The following null hypotheses were tested in this study:

Ho_1: There is no significant difference between teacher's mode of instruction and pupils' learning outcome in primary schools.

Ho_2: There is no significance difference between the use of instructional media and student's academic performance in primary schools.

Ho_3: There is no significance relationship between teacher's years of experience and selection of instructional media.

Methodology

The design used was based on quasi experimental. The two randomly selected groups of pupils were assigned to one experimental group and the other to control group. Pre-test and post-test achievement and attitudes scores of the groups were obtain to one experimental group and the other to control group. Pre-test and posttest achievement and attitudes scores of the groups were obtained as data before and at the end of the treatment. This was used for academic and attitudinal performance analysis. Pupils in the experimental group were taught using instructional media materials (posters) while pupils in the control group were taught using the conventional lecture method without any instructional media.

The target population was all primary school pupils and teachers in Ijumu Local Government Area of Kogi State — Nigeria. Two schools were randomly selected from the available schools through the sorting approach. Class six pupils were used for the study. This is because they were in the terminal class and have attained a fair knowledge in the course of their studies. The schools were:

1. Local Government Primary School: Ayeh- Gbedde
2. Community Primary Schools: Iyara-Ijumu

The instrument used in collecting teacher's data was the teaching technology questionnaire (TTQ), which was basically for the teachers to determine how they select and use the instructional materials for teaching and learning. General Pupils Achievement Test (GSAT) was also used to collect data from the pupils. A structured questionnaire was used for collecting data for the achievement test, consisting of twenty (20). Objective questions covered the cognitive, affective and psychomotor domains of the pupils were constructed, 20 items objective test and questionnaire

on the impact of instructional media was validated by two educational technology specialists in the federal college of education Okene. The validators were requested to determine the appropriateness of the content with respect to the objective of the study. A test re-test method was used to determine the reliability of the instruments.

Data analysis was done in two parts. The first one was generated through non-parametric statistics such as arithmetic mean, variance and standard deviation to provide a broad view of the subject performance in pre-test and post-test experiment in the experimental and control groups. The hypotheses were also tested using the *t*-test to compare the difference in variables while Pearson product moment correlation coefficient was used to compare the relationship of the variables. The probability levels or test of significance for analyzing the data collection was 0.05 level of significance.

Table 1: Differences between teacher's method of teaching and student's attitudinal change

Variation	**N**	**X**	**SD**	**T-cal**	**DF**	**T-table**
Teachers method	80	17.6	1.07	12.5	158	1.65
Student attitudinal changes	80	17.6	0.9			

Results

All hypotheses were tested at 0.05 level of significance.

Hypothesis 1: There is no significant difference between teacher's method of teaching and student's attitudinal change.

From the above, there exists main gain for teacher's method over the student's attitudinal changes. A mean of 2.0 is however recorded in favour of teacher's method of teaching. When this mean was subjected to *t*-test statistics they obtained value o f t' (t-cal) was 12.5 at 0.05 level of significant and degree of freedom and t' table was 1.65. Thus, since the 't' Calculated value was greater than the t-table, the null hypothesis stated above was rejected. Hence, there is statistically significant difference in the teacher's method of teaching and student's attitudinal changes.

Hypothesis 2: There is no significant difference between instructional media utilized for teaching and learning and student's academic performance.

Table 2: Difference in instructional media utilized for teaching and learning and student's academic performance.

Variation	**N**	**X**	**SD**	**T-cal**	**DF**	**T-table**
Instructional media utilized	80	12.9	1.4	3.58	158	1.65
Student academic performance	80	2.2	0.91			

From table 2, instructional materials utilized have a mean gain of 0.7 over the student's academic performances. The mean is then subjected to *t*-test statistics and the obtained value of t-calculated was 3.58 at 0.05 level of significant and 158 degree of freedom, 't' table value, the null hypothesis stated above is rejected. Therefore, there are statistically differences in the instructional media utilized for teaching and learning and student's academic performance.

Hypothesis 3: There will be no significance experience and selection of instructional media relationship between teacher's years of experience and selection of instructional media.

Table 3: Relationship between teacher's years of experience and instructional media selected.

Variation	**N**	**X**	**SD**	**T-cal**	**DF**	**T-table**
Teacher's use of experience	80	17.9	1.22	0.007658	158	1.65
Instructional media selected for teaching	80	13.9	13.9			

From the above table, the teacher's years of experience, has a main gain of 3.4 over the instructional media selected for teaching. This main gain, however, was not significant at 0.05 level of significant and 158 degree of freedom. This is because the t-calculated is lesser than the t-table making the hypothesis to be accepted. Thus, there is no statistically significant relationship between teacher's years of experience and selection of instructional media for teaching.

Discussion

Hypothesis one sought to find out the significant difference between teacher's method of teaching and student's attitudinal changes. The result disagreed with the null — hypothesis that there were no statistical differences between teacher's methods of teaching. Teachers play a very prominent role in passing instruction to the learner. Teaching involves a lot of preparation and reflections. It is not enough for the teacher to know the subject. He must also possess the skills and the methods to be used in presenting the particular topic to the student. The ability to combine knowledge and skills result to meaningful learning outcome. Thus, Ajelabi (2000) comment that through preparation of good lesson plan, and impressive personality, a well-rehearsed teaching method and an effective delivery will go a long way in ensuring that teaching is successful and student's attitude changes after the instruction.

In order to demonstrate certain skills, it calls for adequate knowledge in the use of different methods and techniques of teaching. Although teaching is considered as an art, the method used in teaching is scientific. Since teaching is planned to help the individual to learn, it then follows that the method that is choose must be one that will maximize learning Oshodi (2014) comments that instructional materials are not substitute for goods teaching but supplementary materials, which assist the teachers in comprehension process towards realizing the objectives of better learning outcome. Gagne and Briggs (1979) defined instruction as "a set of events which affects learners in such a way that learning is facilitated "they are concerned with the fact that there are internal and external conditions that affect learning conditions.

The internal condition which came into play in learning situation is divided into three (3) they are:

(a) Factual information

(b) Intellectual skills; and

(c) Cognitive strategies

Factual information designated an initial learning of the learners which can be recalled, in order to relate to new information or skills to be learned. This is prominent in lecture method as reflected in this study.

Intellectual skills are correct application of the knowledge learned while the cognitive strategies prepare learners into new learning situations and apply mental skills in order to make the new learning worthwhile. This is prominent in the use of lecture and audio-visual methods as reflected in this study. In conclusion, teachers are to guarantee that such events of instruction are presented to pupils so as to provide the opinion conditions for effective instruction.

The second hypothesis tries to find out the differences instructional media utilized for teaching and learning and pupil's academic performance. The statistical calculation conformed that there exists significant difference in the instructional media utilized for teaching and learning and pupil's academic performance. Oluwadare (2010) finds that instructional materials help pupils to form attitude and clear ideas by showing the relationship between what is seen and heard. The design results to attitude, habits and practice been modified or changed completely. The utilization of instructional media will help in translating all these theories into practical terms for the benefits of the learners.

Little Wonder Abimbade, (1997) points that instructional resources utilization increases rate of learning and simultaneously free the teachers to use more time in gainful activities. Instructional materials utilization makes learning become real, immediate and of course bridge gaps between the two words "inside" and "outside" the classroom. Consequently, the classroom teacher therefore should be able to select and use resources for teaching and learning. This development has a great impact on student's attitudinal change to in learning situation.

The third hypothesis finds out that the significant relationship between teacher's years of experience and selection of instructional media for teaching. The result however showed that there is no statistically significant relationship between teacher's years of experience and selection of instructional media for teaching.

According to Romiszowiki, (1988) who stated that in selecting instructional media, a choice of a particular instructional method will often dictate, our choice of media. For example, if it is necessary to use a method involving group discussion and the sharing of experiences, then obviously a one-direction medium of presentation such as a tape recorder or television could not be

suitable, as it limits the opportunity for feedback and exchange of ideas. He also said that the type of learning task facing the pupils will also eventually influence the media choice, because it indicates or limits the choice of suitable method of instruction. For example, the training of some supervisory and personnel management skills it often achieved by group discussion, where individual managers share experiences with takers. This may be built round a Standard case study, which it filmed. However, the necessary group discussion element in this type of training will influence the methods chose and therefore dictate the appropriate media.

Among other criteria he gave for selecting media are: learner's characteristics, practical constraints and human factors. Therefore, with experience, teachers develop, skills and method either through improvisation at otherwise to enhance learning.

Conclusion

The conclusion, therefore, is that instructional media if used wisely and adequately, not only supplementing teaching but also will make learning interesting, real concertized and motivating. Above all, with the use of instructional media, good teaching method and appropriate selection of instructional materials, teaching and learning situation will improve.

Recommendations

The researcher therefore recommended the following:

1. the Nigerian Education Research and Development Council (NERDC) should go into mass production of instructional materials in every areas of specialization i.e. science, arts and vocational etc for distribution to primary school. This will enhance teacher’s choice of media.
2. electronic teaching-learning aids that are lacking in most of the schools be provided. Since electronic aids cannot be used without electricity, the government should therefore make the necessary provision for electricity in Nigerian schools.

3. as it was identified by Ajelabi (2000) instruction materials should not just be put into use without assessing the criteria for one which include objective, content, accuracy, suitability, size of the class and its functionality.
4. government should provide more funds to schools alongside the provision of adequate instructional media, which can be used across all school subjects. This will facilitate and enhanced academic performance
5. workshops and seminars should be organised for teachers in the primary schools to expose them to the use of instructional materials as well as new ways of improvisation. Years of experience without retraining do not make teachers to keep abreast of new technology
6. more time should be devoted on the time table for any practical teaching subjects like art and science, educational technology and microteaching. These will create a strong base to developing the psychomotor domains of Bloom's taxonomy of education i.e the use of teaching skills in the classroom. This effort will foster behaviour change of learner's i.e effective comprehension of subject matter for use in later life.

References

Abimbade, A. (1997). *Principle and Practice of Educational Technology*, Ibadan International Publishers Ltd.

Adeleke, O. J. (2012). *Learning Resource Management.* J.K Publishers Lagos Oshodi.

Adewoyin, J.A. (1991). *Introduction to Educational Technology,* Lagos John Lad Publishers (2012).

Ajelabi, A. (2000). *Production and Utilization of Educational Media*, Lagos. Raytel Communication Ltd

Akinpelu, B. (2005). *Fundamental of Media Communication*, Lagos Ziklag Educational Publishers.

Donald, P. & Vemous, G. (1971). *Teaching and Media Sycracans* University, Press Ltd. Gagne Briggs (1979): *The basic, concepts of media use.* Ibadan Niger press Ltd.

Ibikunle N. A. (2006). *Fundamentals of Educational Technology "*Y Books Adesoye Crescent, Ibadan

Ogunmilade, C. A. (1984). *Media in Education* I!e-Ife, University of Ife press Ltd.

Oluwadare, O. J. (2010). Effective Utilization of Instructional Media in the Teaching am Learning of Arts, *Unpublished M.Ed Thesis, Lagos*.

Oshodi, M. O. (2014). Instruction of Instructional Media, *Unpublished M.ED. Thesis,* Lagos

Romiszowski, A. J. (1988). *The selection and us of instructional media.* Great Britain Kogan Page Ltd.

Tukur A. K. (2010). *Instructional Media.* New York Willey & Sons.