

STATUS OF EDUCATIONAL TECHNOLOGY IN EKITI STATE PRIMARY SCHOOLS

Adeosun, Olufemi, Victor (Ph.D)

Ajulo, Bukola Oluwatoyin

Department of Curriculum Studies,

Faculty of Education, University of Ado-Ekiti, Nigeria

Abstract

This study investigated the status of educational technology in Ekiti State Primary Schools. The purpose was meant to orientate primary school teachers on the relevance of educational technology in the success of UBE Programme and to emphasis the right concept of the system. Also to examine the factors that stand as obstacles to its proper application and the effect on teaching learning process. The subject for the research consists of 500 teachers who had been trained in educational technology. They were purposively and randomly selected across the 16 Local Government areas of Ekiti State. A questionnaire titled "status of Educational Technology in Ekiti State Primary Schools" was designed, validated and used to gather information on the knowledge of teachers on Educational Technology, Application of Educational Technology by teachers, Availability of instructional materials in schools and the attitude of Teachers Towards Educational Technology. The researcher formulated four general questions and four research hypothesis to guide the study. The t-test statistics was used to analyse the data. The hypothesis was tested at 0.05 level of significance. The results show that many teachers including the government need the knowledge of the right concept of educational technology to improve learning. Based on the findings, it was recommended, among others, that awareness be created for teachers, pupils, parents and government to change their attitude from what it is presently towards educational technology.

Introduction

The standard of education at all levels of educational system in Nigeria has been the main concern of everybody, most especially the educationists. It was observed that education as switch turns on light that brightens the darkness of poverty and enlightens the lives of the people (Fajonyomi, 2007). One of the major solutions to the multi-faceted problems we have in education is the proper application of educational technology. It is no doubt that it is one of the latest innovations that has been adopted in Nigeria in a bid to improve the quality of learning. But educational technology as a concept has been highly misunderstood, even by teachers, teacher educators and the government in Nigeria. Some of them refer to it as the use of charts, cardboards or the use of teaching aids in instruction.

No wonder therefore that Ogunmilade (1984) claims that educational technology means different things to different people depending on who is talking to whom and in what context. That is why some teachers make use of instructional materials bothering less on their relevance and appropriateness to the topic being taught in the process of teaching that topic. It is observed that people have different views of terms in the field, there are controversy on what the right concept is. Observing the controversy, Nwerri (1991) referred to educational technology as curriculum design, instructional design, instructional materials and method of presentation. Hence instructional materials continue to reflect in teachers understanding of the term educational technology.

The concept of educational technology had been accorded different meanings, which were later synthesized into its current generally accepted definition which sees the concept as the application of the systems approach to finding out educational problems and resolving these problems.

According to Adeosun (1998), Educational Technology is the integration (or weaving together) of variables (or factors) in order to find out the problems involved in the process of acquiring knowledge, skills and habits and solve these problems. In other words, it is the integration of variables in order to find out and solve all problems involved in all aspects of human learning.

In the primary schools, importance of educational technology cannot be underrated, but it has suffered a lot of set back due to the fact that a lot of teachers hold a wrong concept of educational technology. They believe that all it deals with is the use of instructional materials in the classroom, hence they believe that once they make use of instructional materials in the class, learning is being facilitated. The researcher realized that many teachers in Ekiti State are not well equipped for efficiency in the job. Teaching is a professional job and engages in the dissemination of knowledge, but the exposure to technology for the majority of them consists only of the single course they are usually exposed to during their teacher training programmes. They lack technological know-how on the operation of electronic instructional package.

In some Teacher Training Institutions, the recipients are not adequately trained in educational technology, the teacher educators in Nigeria accord wrong meanings to the concept creating a fundamental negative effect on teacher education in Nigeria.

Poverty and lack of knowledge on the part of the parents have also hindered this system in the primary schools. The parents would not buy or replenish books and necessary materials for their children/wards. They prefer to engage the children in their trading and business during school hours which often leads to low daily attendance, poor retention and unsatisfactory learning outcomes on the children.

It is discovered that teacher's morale is low in the primary schools. Teachers are poorly motivated which has culminated them in search for greener pastures and having less interest in striving for more knowledge that could help their efficiency in the job. Also young and energetic teachers are not recruited into the primary schools, majority of them are not even interested to be recruited since those presently on ground are not motivated.

Having a sight into our primary schools, some of the classroom buildings are dilapidated especially in the rural areas. No window panes or shutters, no ceilings, plaster peel off, broken floor and leaking roof etc. Ajayi and Ayodele (2002) As poor as these structures are they are not even adequate, two or more streams have to share the same dilapidated classes in many occasions resulting to over crowded classroom. The government doesn't pay enough attention to primary education especially in the area of making it a quality one Ajayi and Ayodele (2002). Majority of teachers employed even in the private settings are not experienced, they are school certificate drop-outs, yet they are expected to build these young children.

Workshops and in-service training of teachers are not well organized for every teacher to benefit from. Cutbacks in educational funding have also made it difficult to purchase and install necessary equipment and materials (tape recorders, video camera, monitors, video projectors,

other projectors) etc. Irregular supply of electricity makes up another problem hindering the proper application of educational technology in our schools.

Purpose

This study was to find out the influence of variables like school type, school location (i.e. urban and rural) teachers' experience on the use of educational technology and the availability of instructional materials in schools.

Research Hypotheses

The following research questions were raised for the purpose of this study:

- (1) There is no significant relationship between teachers' knowledge of Educational Technology and their application of Educational Technology in teaching and learning situation.
- (2) There is no significant difference in the application of Educational Technology between rural and urban teachers.
- (3) There is no significant difference in the application of Educational Technology between private and public schools.
- (4) There is no significant difference in the application of Educational Technology between experienced and inexperienced teachers.

Methodology

Research Design

The design of this study is a descriptive survey type, which involves the use of questionnaire for the collection of data for the main purpose of investigating the status of educational technology in Ekiti State Primary Schools.

Sample and Sampling Techniques

Five hundred (500) teachers in 27 primary schools across nine Local Government Areas constituted the sample for this study. The multistage sampling technique was used for the study. There are three senatorial district in the state, from each district, three Local Government that are not contiguous were purposively chosen. From each Local Government three schools were chosen and stratified into private and public schools. One private school and two public schools were stratified from each Local Government Area. This gives nine private, 18 public schools in all.

Research Instrument

Questionnaire on the "Status of Educational Technology in Ekiti State Primary Schools" (QSETESPS) designed by the researcher was used for this study. The instrument was designed to find the knowledge of teachers on Educational Technology, application of Educational Technology by teachers, availability of instructional materials in schools and the attitude of teachers towards Educational Technology. The instrument consists of five sections. Section A requests the respondents' bio-data like sex, age, religion, marital status, years of experience, status of school etc. section B is a test, objective test questions with options A – C. this tests the knowledge of teachers on Educational Technology. Respondents were to tick as applicable. Section D has the format of Yes or No, it tests the availability of instructional materials in schools. Section C tests the application of Educational Technology by teachers and section E was used to elicit the attitude of teachers towards Educational Technology. All Sections have a

format which the respondents were to choose from viz: Strongly Agree, Agree, Disagree and Strongly Disagree. The instrument was validated by the researchers using experts in educational technology and tests and measurement. Adopting the test-retest method and using Pearson Product Moment Correlation analysis, a reliability coefficient of 0.76 was obtained for the instrument.

Research Procedure

Permissions were sought from the school headmasters before the distribution of the copies of the questionnaire to the teachers in their various schools. The copies of the questionnaire were administered personally, with the help of research assistants. The questionnaire were administered to the respondents during their long break periods.

Data Analysis

Data collected were analysed using descriptive and inferential statistics. Hypothesis I was tested with Pearson Product Moment Correlation analysis, while Hypotheses 2, 3 and 4 were analyzed using t-test analyses.

Results

Hypothesis One

There is no significant relationship between teachers' knowledge of Educational Technology and their application of Educational Technology in Teaching-learning situation.

Table 1: Summary of Pearson Product Moment Correlation analysis showing relationship between the knowledge of Educational Technology and the application of Educational Technology

| VARIABLE | N | Mean | SD | r.cal | r.tab |
|---------------------------------------|-----|------|------|-------|-------|
| Knowledge of Educational Technology | 500 | 0.84 | 0.36 | | 0.195 |
| Application of Educational Technology | 500 | 3.10 | 0.95 | 0.36 | |

Significant at 0.05 alpha level

From the above table, it is clear that there is a relationship between teachers knowledge of Educational Technology and the application of Educational Technology in their learning situation. Therefore hypothesis one is rejected.

Hypothesis Two

There is no significant difference in the application of Educational Technology between rural and urban teachers.

Table 2: Summary of paired sample t-test showing proper application of Educational Technology between rural & urban teachers

| VARIABLE | N | Mean | SD | df | Cal. t | Tab. Cal |
|----------|-----|------|-----|-----|--------|----------|
| Urban | 365 | 1.67 | .55 | | | |
| Rural | 135 | 1.78 | .43 | 498 | 2.32 | 1.96 |

This table indicates there is a significance difference in the proper application of Educational Technology between rural and urban. Therefore hypothesis two is rejected.

Hypothesis Three

There is no significant difference in the application of Educational Technology between private and public schools.

Table 3: Summary of dependent t – test showing the difference between the application of Educational technology in private and public schools

| VARIABLE | N | Mean | SD | df | Cal. t | Tab. Cal |
|-----------------|-----|------|-----|-----|--------|----------|
| Private schools | 148 | 1.75 | .43 | | | |
| Public Schools | 352 | 1.68 | .46 | 498 | 1.46 | 1.96 |

The table revealed that there is no significant difference in the proper application of Educational Technology between private and public schools in Ekiti State. Therefore Hypothesis three is accepted.

Hypothesis Four: There is no significant difference in the application of Educational Technology between experienced and inexperienced teachers.

Table 4: Summary of t-test showing the difference between proper application of Educational Technology between experienced and inexperienced teachers

| VARIABLE | N | Mean | SD | df | Cal. t | Tab. Cal |
|------------------------|-----|------|------|-----|--------|----------|
| Experienced Teachers | 389 | 2.66 | 1.26 | | | |
| Inexperienced Teachers | 111 | 3.44 | .89 | 498 | 6.08 | 1.96 |

Significant at 0.05 alpha level

This table shows that there is a significant difference in the proper application of Educational Technology between experienced and inexperienced teachers. Therefore hypothesis four is rejected.

Discussion

On the issue of the right knowledge of Educational Technology, only few respondents have the answers rights, majority of them hold to the wrong concept of educational technology. Adeosun (2002) claims that this wrong concept has got a fundamental negative effect on teacher education in Nigeria. On the application of educational technology by teachers, the researchers discovered that only few teachers use instructional materials, some even believe that once they make use of a cardboard to teach that is okay. In supporting the view of Adeosun (1998) that many teachers keep using instructional materials, caring less whether those materials have effect on students' achievement or not.

Also the research finding claims that availability of instructional materials is inadequate in schools. This is in agreement with McDivitt (2006) and Kolawole and Arikpo (2001) who found the same in primary schools in South-West, Nigeria. Resources expected to be supplied by the government are not available for teachers use. The attitude of some teachers towards educational technology is encouraging, only it appears that some of the teachers see it as a threat to their profession and would not want to change from their old system of approach.

Conclusion

Based on the findings of this study, the following conclusions are drawn:

Many teachers don't have the right knowledge of educational technology. They accord wrong meanings to the concept of educational technology. Also it was discovered that instructional materials are not adequate in schools. Teachers seldom receive instructional materials from the Government. In addition, the attitude of teachers towards educational technology is of the opinion that teaching load does not allow enough time to plan the use of instructional materials also since there is no audio visual centre in the primary schools, audio visual should not be expected in teaching. Some also believe that educational technology is not important in effective teaching/ learning process therefore it is not compulsory to use in delivery of instruction.

Recommendations

Based on the finding of this study, a number of recommendations were made to improve Educational Technology in Ekiti State Primary Schools:

1. Government should ensure that adequate and relevant instructional materials and equipment are supplied to the primary schools, especially in the rural areas where instructional materials are scarce.
2. Government should ensure the installation of electricity power and provision of generators to operate electrical equipment in primary schools.
3. Workshops and in-service training should be given to all teachers, especially inexperienced teachers to enable all of them grasp the real meaning of Educational Technology, to know when they should use instructional materials and why they should use them appropriately.
4. The Federal Government should establish Educational Technology Centre in Ekiti State so that experienced and inexperienced teachers from rural and urban areas would have the opportunity to access instructional materials and brainstorm with their colleagues regarding how to effectively apply them.

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