Impact of Teaching Experience on Teachers Attitude towards the Use of Instructional Television (ITV) in Bayelsa State Nigeria

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Abstract

The main thrust of this study is to find out the teachers' attitude generally toward instruction television (ITV), also to find out the impact of length of work experience on its use. This survey study was carried out in selected secondary in Ekeremor LGA of Bayelsa State. The mann-whitney U test was used in the analysis because it is based on ordinal scale intervals. On the general attitude of teachers towards the use of instructional television, the smaller U (47) is higher than the critical U is (2.3) the null hypothesis was rejected and retained the alternate hypothesis of there is no significant difference in attitude and secondary school teacher towards the use of (ITV). Also, the use of ITV based and the length of teaching experience, the computed U value (32) and the smaller U is (30), the null hypothesis was rejected and retained the alternate hypothesis of there is no significant difference in attitude among secondary teachers with different length of teaching experience towards the use of instruction television in Ekeremor L.G.A of Bayelsa State Nigeria. The study portrayed that they have a favorable disposition towards the use of ITV and it was recommended that some television stations should broadcast well tutored and design suitable lesson to learners.

Keywords: Attitude, Teaching experience, Instructional Television (ITV), Instructional designers, Education, TV Programs.
1. Introduction

Many developing nations are witnessing tremendous increase in the number of school age children in the past ten years according to a United Nations reports, (a phenomenon sometimes regarded as population outburst in these nations) the educational system in most of these nations is stretched beyond the perimeter most schools could accommodate. Many classrooms lack subject/class teachers, yet children go to school and they are taught. These nations including the country Nigeria are looking out for alternative teaching strategies that are as effective as a live teacher. These as given birth to many online and offline distance education programs. Instructional Television set (ITV) is one of the offline strategies adopted. However, it has been observed that it is common knowledge that for any alternative teaching/learning strategy to be productive, that approach, must be acceptable to both teachers and students in the schools, even in different locations.

In the mid 1990’s the use of television set entered into its fifth decade as a mass medium and bloomed from an isolated, expensive, kind of restricted business to what some as referred to as the television set of abundance. Television set is now one of the most easily accessible for use in education not only via over-the-air but by cable TV systems, all of which may be linked by satellite relays (Reddi, 1987).

Most vast libraries of programs are now made available as audio and video tapes. Portable video recorders enables instructors and their students to create their own materials. With this development, the television set now represents many things and is a rich resource for instruction and training.

All this has led to the birth of the term instructional television set or ITV. ITV refers to any planned use of broadcast television or video programs to meet specific instructional goals regardless of the source of the programs or setting in which they are been used. This includes commercial broadcasts, business and industry training programs.

Aluko (2004) noted that ICT application includes video conferencing, Tele-working, distance learning, management information system (MIS), stock taking/counting, technologies which can be said to include a broad array of technologies ranging from the “Old” ones such as radio and television to “New” ones such as cellular and mobile innovations.

ITV is a veritable tool for educational broadcasting. Ajiyeloeye (2017) described it as any instructional materials which emanated from a teacher situated in a remote location (live or recorded) in a studio. The recording is fed to a transmitter which in turn sends the information (through the air wave) to the receiver at another location. Through that, the instruction gets to the learner for whom the broadcast was intended.

Ajiyeloeye (2017) further explained that the radio and the television are referred to as the traditional media which the teacher uses to interact and interface. Abimbade (2016) in Ajiyeloeye (2017) enumerate the objectives of educational broad casting. They are as follows:

- To strengthen the nations education enterprise by minimizing in balances and maximizing educational opportunities in the rural schools handicapped by lack/shortage of qualified staffs and equipment’s.
- To increase the quality of learning (education) through the use of sound teaching methods and supplementary audio – visual materials.
- To assist in teaching subjects where trained school subject teachers are in short supply.
- To improve attendance rates at all levels by motivating pupils by means of interesting programs materials, audio-visual techniques and increased personal attention in large classes.
- To assist in curriculum reforms through swift and effective delivery.
- To promote civic cognizance and national unity via civic programs both at the primary and secondary levels through the phased introduction and use of indigenous or national language.
- To disseminate information’s of interest, to promote and keep teachers up to date on curricular innovations and practices.
- To assist/participate in teacher training programs, at both pre-services and in-services through employment of new media techniques.

Ogunlade (1987) as cited in Nemine (2000) stated that studies and experiments carried out by many schools and researchers particularly in the westernized countries show television as one of the many techniques utilized in the understanding of the instructions given to pupils particularly in the field of science. He went further to say that available evidence from empirical literature shows that pupils learn fast and very effectively when they are taught through television.

- Television pictures short circuit mental process by appealing directly to the senses and they become a substitute to the physical sensation of an actual experience.
- Television teaching is tremendously real and immediate. Its two-fold engagement of the eye and the ear bring students into contact with the events in an exciting and clarifying way. Television is a means by which teachers and students share a common experience.
- It is been discovered that the television is capable not only of breaking through time and space but also bridging the educational gap between the urban and the rural areas, especially in low income countries people see places they have not visited or may not have opportunity to reach through television.

2. Purpose of the Study

- The average family in Ekeremor community in Ekeremor Local Government Area of Bayelsa State has a Television set and a video player with which they watch and a video player with which they watch home videos as there is a giant electric power generating plant installed by the government.
- The irony of this is that the researcher has observed with dismay that though teachers are aware of the importance of the instructional television (ITV), they hardly make use of it for instructional purposes even when and where the resources are made available. What is their attitude towards the use of the instructional television set is what this research work seeks to answer.
2.1. Research Hypothesis

1. There is a significant agreement in attitude among school teachers towards the use of instructional television set (ITV) as an ICT tool in Ekeremor Local Government Area of Bayelsa State.

2. The attitude of school teachers towards the use of instructional television as an ICT tool in Ekeremor Local government Area will be affected as a result of difference in length of teaching experience.

2.2. Methodology

This is a survey type of research and the main thrust of this findings is to find out the attitude of teachers towards the use of offline technologies like the instructional television (ITV).

2.3. Population

The population for the study was made up of teachers drawn from the Eleven (11) schools in Ekeremor Local Government Area of Bayelsa State.

2.4. Sample/Sampling Technique

The subject for the study was taken from eleven (11) schools among the twenty-two (22) communities that make up Ekeremor Local Government Area. These schools were used because they are all in rural setting which is an interest to the researcher. The simple random sampling techniques was used to select the sample size.

2.5. Instrumentation and Questionnaire Design

A questionnaire tagged teacher attitude towards with focus on Instructional Television (TAITV)) was used to gather desired information. It was flexibly designed to elicit required information from the respondent. The questionnaire was divided in Two parts comprising section A (Demographic Data) and Section B contain Fifteen items.

Section A was designed to get some basic demographic information from the respondents. These information include name of school, teaching subject, qualification, years of teaching experience, Gender whether male or female.

The demographic questionnaire was also designed to compare and ascertain whether there are significant differences in attitude of teachers towards the utilization of the television as an Instructional tool, as regards difference in educational qualification either the Nigeria Certificate in Education NCE, Bachelor of Education (B.Ed.) degree, Post Graduate Diploma in Education (PGDE), Masters in Education M.Ed. and Equivalents.

The researcher also want to use the demographic data that will be gathered from the questionnaire to find out if the differences in years of working experiences, gender and areas of teaching subjects (Arts or Science) has anything to do or make any differences in the attitude of teacher towards the use of the instructional television.

Section two of the instrument is made of a five point Likert scale questionnaire. It was made up of fifteen (15) questions with five point alternative opinion on attitude of teachers for the respondents to choose from. It was designed to find out opinions on given statements as per the use of the ITV.

2.6. Data Collection

The questionnaire was administered to one hundred and ten (110) teachers in the eleven schools for the research work.

2.7. Validity and Reliability of the Instruments

The instruments was peer reviewed to ensure that items answered the research questions and measures what it is supposed to measure to ensure validly. A reliability index of 0.68 was obtained which guaranteed the reliability of the instrument for this study.

2.8. Method of Data Analysis

The items in the questionnaire were grouped in relation to the research questions. The data obtained in the process of the investigation were pooled together and analyzed according to the demands of the research questions. For each research question, the responses were collected, marked and reduced to simple percentages and table constructed for the purpose of analysis.

The Mann-Whitney U test was used in the analysis because the data is based on ordinal scale intervals.

3. Data Analysis Technique

In this study the statistical tools used in the analysis of the data collected are the Mann-Whitney U-test and the spearman rank order correlation coefficient. The Mann-Whitney U-test was used for the first hypothesis. This was adopted based on the questionnaire design and the fact that the questions of the testing of hypothesis were based on ordinal scale interval. The spearman rank-order correlation coefficient was used to test hypothesis two.

**Formula:** for Mann-Whitney U – test

\[ U = \frac{n_1n_2 + n_1(n_1 - 1) - R}{2} \]  
\[ U = \frac{n_1n_2 + n_2(n_2 - 1)}{2} \]

Where:

- \( R \) = The sum of ranks assigned to the sample with size \( n_2 \)

The volumes for \( U \) can be obtained by using the above two formula

**Formula:** for spearman Rank – order correlation coefficient

\[ r_s = 1 - \frac{6\sum d^2}{N(N^2 - 1)} \]
Where $\sum d^2$ = sum of squared difference in the ranking of the subject on the two variables 
N = Number of subject being marked

3.1. Testing of Hypothesis One

H0: There is no significant agreement in attitude among secondary school teacher towards the use of instructional television set in Ekeremor Local Government Area of Bayelsa State.

H1: There is a significant agreement in attitude among secondary school teachers towards the use of instructional television set in Ekeremor Local Government Area of Bayelsa State.

Teacher attitude which agree with the use instructional television, the sum of rank, $R_1$ is 113 and the sum of the rank of teachers which disagree with instructional television $R_2$ is 97 Table 1.

Therefore, the $U$ statistical can now be computed thus:

$U = n_1 n_2 + n_1 (n_1 - 1) - R_1$ or $U = n_1 n_2 + n_2 (n_2 + 1)$

Where $R_1$ = the sum of ranks assigned to the sample with Size $n_1$, 
$R_2$ = the sum of ranks assigned to the sampled with size $n_2$

The Volumes for $U$ can be obtained by using the above two formula

1st formula $U = \frac{11 (9) + 11 (11 + 1) - 113}{2}$

$U = 11 (9) + 11 x 6 = 113$
$U = 99 + 66 - 113$
$U = 63$

$2nd \; Formula \; \Rightarrow U = \frac{11(9) + 9 (9 + 1) - 97}{2}$

$U = 11(9) + 9 x 5 = 97$
$U = 99 + 45 - 97$
$U = 4.7$

In testing the null hypothesis we use 4.7 If 4.7 is equal to or less than the tabulated $U$ value accept null hypothesis otherwise reject null hypothesis with a significant level of 0.5, using a critical $U$ value having $n_1 = 11$ and corresponding to $n_2 = 9 \; U \; is \; 2.3.$

Since the smaller $U \; (4.7)$ is higher than the critical $U \; 2.3$, we therefore reject null hypothesis and accept alternate hypothesis that there is no significant difference in attitude among secondary school teachers towards the use of instructional television (ITV) in Ekeremor Local Government Area of Bayelsa State.

Table 1: This table below shows the response to Question 6 and 13 from the respondents.

<table>
<thead>
<tr>
<th>S/N</th>
<th>Teachers</th>
<th>Number of Occasion in Use</th>
<th>Response in Attitude</th>
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<td>$\sum R = 113$</td>
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3.2 Hypothesis Two

H0: There is no significant difference in attitude among secondary school teacher with different length of teaching experience towards the use of instructional television in Ekeremor Local Government Area of Bayelsa State.

H1: There is significant difference in attitude among secondary school teachers with different length of teaching experience towards the use of instructional television in Ekeremor Local Government of Bayelsa State.
Table 2. This table below shows the responses to Question 14 and 15 form the respondents.

<table>
<thead>
<tr>
<th>S/N</th>
<th>Teachers</th>
<th>Length of Teaching Experience</th>
<th>Response in Attitude</th>
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</table>

\[ \sum R_1 = 77 \quad \sum R_2 = 133 \]

Source: Field Work (2019).

Teacher attitude which agree with instructional television, based on length of teaching experience, the sum of the rank, \( R \), is 77 and the sum of the rank of teachers which disagree with instructional television based on teaching experience is \( R_2 \) is 133. Therefore, the U statistical test can now be computed, thus:

\[
U = n_1 n_2 + \frac{n_1 + n_2}{2} R_1 - R_2
\]

Where \( R_1 \) = The sum of Ranks assigned to the sample with size \( n_1 \)

\( R_2 \) = The sum of ranks assigned to the sample with size \( n_2 \)

The value for \( U \) can be obtained by using the above two formulas.

1st Formula

\[
U = 9 \left(11 + 1\right) + 11 \left(11+1\right) - 77
\]

\[ U = 9 \cdot 11 + 9 \cdot 5 - 77 \]

\[ U = 99 + 45 - 77 \]

\[ U = 67 \]

2nd Formula

\[
U = 9 \left(11 + 1\right) + 11 \left(11+1\right) - 33
\]

\[ U = 9 \cdot 11 + 11 \cdot 6 - 133 \]

\[ U = 99 + 66 - 133 \]

\[ U = 32 \]

In testing the null hypothesis we use 32 which is the lesser of the two computed values

4. Findings

The study is based on the assumption that an assessment of teacher attitude towards the use of the Instructional television set would eventually provide great support in high lighting factors impeding its use so as to enable concerned bodies. That is, media technologist to develop a more suitable format for use (Yusuf and Balogun, 2011).

The findings is also designed to examine factors responsible or factors that must have result to a negative or positive attitude in teachers in post primary schools on the use of ITV set. Thus the discussion is based on the findings predicated on the earlier stated hypothesis. It’s worth noting that there is no significant difference in teacher’s attitude, negatively or positively towards the use of instructional television set. It is proven from teachers’ response that there are no neutral or passive towards the use of ITV set. They have a favorable disposition towards its use. This means they have a positive attitude toward the use of instructional television set. From the items in the structured questionnaire, they identified the use of television set as instructional, result driven and motivational, time saving and also stimulate discussion class etc. It also revealed that they preferred to use the video recorder as against other devices of ITV. This finding implies that they want ITV set equipment that will suit formal school time i.e. presented within their school. Their responses also show that educational programs broad casted from television set stations were general, fast in presentation and may not serve meaningful instructional purposes.
They are also aware of the problems involved and what is needed to make the use of the different devices of the ITV more effective. This include production defects such as poor quality of picture and sound, in adequate equipment’s, poor funding, good instructional design within comprehension of learners taking in cognizance the environment i.e. water terrain and educational background of recipients

Thus one can emphatically say that, if the materials are provided and considered by the government or any other agency teachers will not see ITV as a threat to their jobs but welcome and effectively use this timely innovation in the teaching and learning process.

There is no significant difference between the length of teaching experience and teachers’ attitude towards the use of instructional television set. Both teachers’ with long and short experiences in the teaching field from their responses showed favourable disposition to the use of ITV. It is also mentioning that no teacher responded has come in contact with close circuit Television (CCTV) for instructional purposes.

This portray that the frequency of utilization of any given instructional medium depends largely on the availability of that medium and not the length of years in the teaching profession. In other words teachers can only use media found at their disposal or resort to the former teacher centered form of taking lecture or talk –chalk method (Achuonye and Ajoku, 2013).

From the responses one can see that both teachers who graduated long ago when the television was not recognized as an instructional tool for formal education have the same positive attitude towards its use. The modern day teachers and their older counterparts who are sometimes referred to as ‘colonial’ or ‘old’ teachers because they passed through the basic rudiments of teaching in the teachers training colleges all recognize the usefulness or the television for instruction. This may be attributed to the quest for higher level of educational qualification as a result of the Government decision to make The Nigerian Certificate of Education (N.C.E) the lowest qualification for teachers in the country (National Policy on Education, 2010).

5. Conclusion

The following conclusions were made on this findings and discussion of the study.

1. Since findings shows that teachers have a positive attitude towards the use of the instructional television set (ITV), it shows that if adequate facilities are made available and the quality of programming is improved, the instructional method would be utilized more effectively (Yusuf and Balogun, 2011).
2. Good operative educational materials and equipment’s that will achieve the aims and objectives of the use of ITV set be sent to schools.
3. In service courses, seminars and workshops, should be organized in updating the skill and knowledge on the use and many advantage of the ITV and proper funding should be carried out by the government, Philanthropist, oil companies, well-meaning bodies. For example Parents Teachers Association (PTA) stakeholders etc.
4. According to Mohoanty (1992) the television is a new and sophisticated technology. To prove useful, it has to be properly integrated within the educational system, which is old, traditional, closed, well-guarded and very slow to accept innovations.
5. It is worth mentioning that in spite of the above comment, the television set has gained great acceptance and therefore the government and other well-meaning bodies should provide necessary fund and adequate facilities to see its proper utilization in secondary schools especially in Ekeremor Local Government Area of Bayelsa State in Nigeria.

6. Recommendations

1. Television set Stations should be made to broadcast well tutored and designed instructional lesson suitable to the learner’s level of education and their environment.
2. Teachers should be given pre-transmission information, so as to enable them prepare learners before broadcast.
3. Educational programs should be broadcasted in the afternoons so as to be useful during formal school time.
4. Speed of presentation and language use should be designed to suit learners.
5. Video cassettes and compact disc on different topics on different subject areas should be properly designed for school use.
6. Each school should have resource centers with necessary gadgets were every classroom teacher can go and prepare video lesson etc. For individual class use i.e. CCTV (Closed circuit television within a school.
7. Bayelsa State government should make it a primary concern to have television stations were they can air instructions on different subjects on television for students to benefit at home as was obtainable in the Rivers State in the late 80’s.
8. In service courses seminars, workshops etc. be organized on regular basis for all categories of teachers to keep them abreast with, new innovations in education especially pertaining to instructional design.
9. Regular needs analysis and evaluation should be carried out to remove obsolete instructional television programs and new ones introduced by professionals in such areas.

References
