ABSTRACT

Learning is an activity that starts at birth and continues throughout lifetime in classrooms and training centres. Facilities and personnel are employed to provide education for classroom learning, which aims at preparing students to contribute meaningfully to the society they live. However, empirical studies in Nigeria involving video-taped instructional strategy have been limited to the teaching and learning of science-based subjects. This study therefore, attempts to determine the effect of video-tape instruction on teaching of social studies in Nigeria Primary Schools.

A total of 102 students in two intact classes were the study participants. Three null hypotheses were formulated and tested. Four instruments namely: video-tape recorder of lesson used for the study, pupils’ attitudinal scale, the social studies achievement test (SSAT); and Teachers’ Guide for conventional teaching were used for the study.

The results revealed there was significant main effect of treatment on students’ achievement. Also, it showed that there was significant main effect of treatment on student’s achievement in social studies. \( F(1,97) = 145.474, P<.05 \). There was a significant main effect of treatment on the attitude of pupils to social studies \( F(1,97) = 127.877, P<.05 \). However, there was no significant main effect of gender on pupil academic achievement in primary social studies \( F(1,97) = 0.839, P>.05 \). There was also no significant main effect of gender on pupils’ attitude to social studies \( F(1,97) = 0.640, P>.05 \). There was no significant 2-way interaction effect of treatment and gender on pupils’ attitude \( F(1,97) = 2.041, P>.05 \).

Based on these findings, government should equip public primary schools with necessary hardware and software facilities, primary school teachers should be encouraged to uptake the challenge of using this strategy and learn how to use it through in-service training. Above all, seasonal educationists should develop video instrumental packages to be used in schools.
INTRODUCTION

Learning is an activity that starts at birth and can be expected to continue for a lifetime in classrooms and training centres, the learning takes place in a well organized way. Facilities and personnel are employed to provide and education designed for classroom learning, which aims to prepare all the students to work and participate in the society which they live.

Video as a media in education comes as the invention of educational technology. They are termed as instructional video. They are created for use in classrooms or in other educational settings. They are usually evaluated for language use, conflict and length and many of them are packaged as multimedia resources that include students' workbooks, teacher's guides, video transcripts and audio tapes. Agommuoh and Nzewi. (2003) reported that video-taped instruction has the qualities of providing a semi-permanent, complete and audio’s visual record of event.

Erickson (1995) Barford and Weston (1997) Chambers (1997) Osokoya 1.0 (2007), highlight both at school and college level through video tape method over the traditional method Empirical studies in Nigeria involving video- taped instructional strategy have been limited to the teaching and learning of sciences, mathematics and English language. (Salawu 1999, Aiyelagbe, 1998, Ajeyi-Dopemu 1985, Aremu 1992, Ibode, 2004). This study attempt to determine the effect of video-tape instruction on teaching of social studies in Nigeria Primary Schools. Literature has also established that video-taped instruction has greatly improved the performance of children with special needs and slow learning abilities (Okwo, 1994, Mitchell, 1994, Aremu, 1992). If this is possible then it should produce better results in students with normal learning abilities which are the target of this study.

Hypotheses of the study

The following null hypotheses were tested for the study

H01: there is no significance main effect of treatment on pupils

1. Academic achievement in primary social studies
2. Attitude to primary social studies
H0₂. There is no significance main effect of gender on pupils
(ii) Academic achievement in primary social studies
(ii) Attitude to primary social studies
H0₃: There is no significance interaction effect of treatment and gender on pupils
(ii) Academic achievement in primary social studies
(ii) Attitude to primary social studies

METHODOLOGY

Design the study adopted the quasi-experimental research design. Specifically, the study was non-randomized pretest, post-test group design. The design was chosen because intact classes were used instead of randomly composed samples.

The diagrammatic representation of the design is as shown.

O₁ X₁ O₂ Experimental group
O₃ X₂ O₄ (control) conventional group
Where O₁ and O₃ represents pre-test
O₂ and O₄ represents post test
X₁ represents treatment (video-taped instruction)
X₂ represents treatment (conventional method)

SAMPLE OF THE STUDY

A total of 102 students studying in primary for drawn by purposive sampling technique from Government aided schools in Owerri (Township Primary School and Manstreet Primary School) were the sample for this study.

TOOLS FOR THE STUDY

(i) Entry behaviour test
(ii) Pre/post-test

The content and the items of the above tools were validated while the subject experts established the face and content validity. item validity was done using discriminative and difficult indices. Reliability of tools was established by rational equivalence method.
PROCEDURES
1. The control group and experimental group were giving a pre-test
2. Academic contents in social studies was identified and sequenced
3. Different programmes for experimenting the control group and experimental group were prepared.
4. A pre-test for each unit was structured and administered to both the groups before instruction.
5. A post test for each module was structured and administered to both the groups after instruction A criterion test for the whole content was administered to both the groups
6. Suitable statistical techniques were employed to analyse the data collected

ANALYSIS AND FINDING
Objective-wise analysis was carried out and the results were interpreted.
(i) Analysis of covariance (ANCOVA) in pre-test and post test in experimental group

Table 1 summary of 2 x 2 x 2 Analysis of covariance (ANCOVA) of students Achievement scores by teaching methods and Gender

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of square</th>
<th>Of</th>
<th>Mean square</th>
<th>F</th>
<th>Sig. P</th>
<th>Etasquare</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrected model</td>
<td>3803.907</td>
<td>4</td>
<td>950.977</td>
<td>38.325</td>
<td>.000</td>
<td>.612</td>
</tr>
<tr>
<td>Intercept</td>
<td>1651.366</td>
<td>1</td>
<td>1651.366</td>
<td>66.551</td>
<td>.000</td>
<td>.407</td>
</tr>
<tr>
<td>Pre Achievement</td>
<td>3.337</td>
<td>1</td>
<td>3.337</td>
<td>.134</td>
<td>.715</td>
<td>.001</td>
</tr>
<tr>
<td>Treatment</td>
<td>3609.729</td>
<td>1</td>
<td>3609.729</td>
<td>.145.474</td>
<td>.000</td>
<td>.600</td>
</tr>
<tr>
<td>Sex</td>
<td>20.813</td>
<td>1</td>
<td>20.813</td>
<td>.839</td>
<td>.362</td>
<td>.009</td>
</tr>
<tr>
<td>Treatment Sex</td>
<td>8.609</td>
<td>1</td>
<td>8.609</td>
<td>.347</td>
<td>.557</td>
<td>.004</td>
</tr>
<tr>
<td>Error</td>
<td>2406.916</td>
<td>97</td>
<td>24.814</td>
<td>Total</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>90952.000</td>
<td>102</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrected Total</td>
<td>6210.824</td>
<td>101</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 1 reveals that there is a significant main effect difference between experimental group and control group in post achievement score \((F(1,97) = 145.474, P<.05)\). This implies that the treatment has significant main effect on pupils academic achievement. The null hypothesis is therefore rejected.
Table 2: Estimated Marginal Means (Emm) on Achievement

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Mean</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>23.67</td>
<td>5.5</td>
</tr>
<tr>
<td>Experimental (video taped instruction)</td>
<td>34.90</td>
<td>4.25</td>
</tr>
</tbody>
</table>

Table 2 reveals that pupils exposed to video taped instructional strategy performed better (X 34.90) than those exposed to conventional strategy (X 23.67).

Table 3
Summary of 2 x 2 x 2 Analysis of covariance (ANCOVA) on Attitude

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of square</th>
<th>DF</th>
<th>Mean squares</th>
<th>S.F</th>
<th>Sig. P</th>
<th>Eta square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrected model</td>
<td>2174.568</td>
<td>4</td>
<td>543.642</td>
<td>32.180</td>
<td>.000</td>
<td>.570</td>
</tr>
<tr>
<td>Intercept</td>
<td>2756.917</td>
<td>1</td>
<td>2756.917</td>
<td>.163</td>
<td>.000</td>
<td>.627</td>
</tr>
<tr>
<td>Pre attitude covariance</td>
<td>.503</td>
<td>1</td>
<td>.503</td>
<td>.030</td>
<td>.863</td>
<td>.000</td>
</tr>
<tr>
<td>Treatment</td>
<td>2160.319</td>
<td>1</td>
<td>2160.319</td>
<td>127.877</td>
<td>.000</td>
<td>.569</td>
</tr>
<tr>
<td>Sex</td>
<td>10.805</td>
<td>1</td>
<td>10.805</td>
<td>.640</td>
<td>.426</td>
<td>.007</td>
</tr>
<tr>
<td>Treatment</td>
<td>34.475</td>
<td>1</td>
<td>34.475</td>
<td>2.041</td>
<td>.156</td>
<td>.021</td>
</tr>
<tr>
<td>Error</td>
<td>1638.687</td>
<td>97</td>
<td>16.894</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>307324.000</td>
<td>102</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrected Total</td>
<td>3813.255</td>
<td>101</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

$R^2 = .570$ (Adjusted $R$ squared = .553)

Table 3 reveals that there is a significant difference between experimental and control group in the post attitude score ($F_{1,97} = 127.877$, P<.05). This implies that the treatment has a significant main effect hence $H_{01b}$ is rejected.

Table 4: Estimated Marginal means (Emm) on Attitude

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Mean</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>49.98</td>
<td>5.37</td>
</tr>
<tr>
<td>Experimental</td>
<td>59.12</td>
<td>2.20</td>
</tr>
</tbody>
</table>
Table 4 shows that pupils who were exposed to treatment video-taped instruction have a better attitude ($X = 59.12$) than those exposed to conventional strategy. ($X = 49.98$).

$H_{O2a}$: There is no significant main effect of gender on pupils academic achievement in primary social studies.

Table 1 reveals that the main effect of gender on pupils achievement in social studies is not significant ($F(1,97) = 0.839, P > .05$) here $H_{O2a}$ is not rejected.

$H_{O2b}$: There is no significant main effect of gender on pupils attitude to social studies.

Table 3 reveals that the main effect of gender on pupils attitude to social studies is not significant ($F(1,97) = .640, P > .05$) here $H_{O2b}$ is not rejected.

$H_{O3a}$: There is no significant interaction effect of treatment and gender on pupils achievement in primary social studies.

Table 1 shows that the 2 way interaction effect of treatment and gender on pupils achievement is not significant ($F(1,97) = .347, P > .05$), here $H_{O3a}$ is not rejected.

$H_{O3b}$: There is no significant interaction effect of treatment and gender on pupils’ attitude to social studies.

Table 3 reveals that the 2-way interaction effect of treatment and gender on pupils attitude is not significant ($F(1,97) = 2.041, P > .05$), hence $H_{O3b}$ is not rejected.

**DISCUSSION AND FINDINGS**

The findings of the study suggest that:

1. Attainment of the concept and mastery of competencies can be possible through video cassette techniques at primary level.
2. This method creates interest, attention and learning attitude among students.

**LIMITATION**

1. This study is limited to pupils studying in primary five.
2. The investigation is limited to only two schools, which is located in Owerri Urban.
3. The experiment is limited to only social studies subjects
4. Pupils in experimental group were curious to see video lessons unlike people in control group.

SUGGESTION FOR FURTHER RESEARCH.
i. The experiment may be extended to many schools and districts
ii. The experiment may be conducted in other branches of academic subject also
iii. Comparative study may be undertaken with reference to rural and urban, slow learners and quick learners and government schools, aided and self-financed schools
iv. The experiment may be conducted to study the level of pupils retention towards this method.

IMPLICATIONS
1. The outcome of the study proved that the teaching through video cassette is more effective than the traditional method in teaching social studies.
2. The services of the best teachers in each subject may be obtained for taking classes to prepare video cassette
3. This video taped instruction method can be modern approach as this is a tool which has great implication in all fields of instruction demonstrations and documentary projections.
REFERENCES


