

Effectiveness of Video Blog Instructional Package and Senior Secondary School Academic Performance in Geography in Ondo State, Nigeria

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Abstract

The study examined the effect of video blog instructional package (VBIP) on Secondary school students' academic performance in Geography in Akure South local government area of Ondo State. The study adopted a pretest-posttest control group quasi experimental research design. The sample size consisted of 87 Geography students randomly sampled from four secondary schools in the local government area. Intact classes were used in all the selected schools. The participants were assigned into two groups (experimental and control). The experimental groups were taught with Video Blog Instructional Package (VBIP). While the control groups were taught with Conventional Teaching Method (CTM). Two instruments were used in the study, they are; Geography Students' Performance Test (GSPT) and video blog instructional package (VBIP). Two research hypotheses were formulated and tested in the study at 0.05 level of significance. The results revealed that there is significant main effect of treatments (Video Blog Instructional Package) on students' academic performance in Geography (F_(1,82) = 25.250; p<0.05, partial $\eta^2 = .235$). The study also shows that there was no significant difference between the academic performance of male and female students taught with VBIP (F_(1,82) = 1.562; p > 0.05; $\eta^2 = .019$). The study recommends that the use of VBIP should be encouraged in secondary schools, both male and female teachers should be motivated further to use VBIP in secondary schools for instructions.

Keywords: Video blog, instructional package, conventional teaching method, secondary school

Introduction

Geography as one of the subjects taught in senior secondary schools in Nigeria can be seen as a social science subject that fosters holistic knowledge about the world. Its subject matter focuses on the earth's surface and the processes or activities that shape it (Onuoha & Eze, 2013). It seeks to explain the relationships between humans and the environment and promotes sustainable development through resource management and sustainability (Jana & Patra, 2017). The study of Geography aims at developing in learners ability to think critically and to have respect for accuracy as well as orderly and objective method of investigation. Abidoye, (2023) also averts that the study of Geography develops in students a sense of responsibility towards their own society and appreciate problems of other peoples.

Despite all these relevance of Geography in the school curriculum, literatures such as Jana and

Patra (2017) have revealed that students' academic achievements in both internal and external examinations are generally low. The reasons for this low academic performance could be attributed to the use of inappropriate instructional aids and conventional teaching method, where the teacher alone does the talking while the learners remain passive. This has failed to deal effectively with the problem of individual differences and also lead to poor attitude of learners towards the subject. Therefore, there is a need to search for innovative and technology-based strategies that are more effective and are likely to improve students' academic performance in school subjects especially Geography. One of such web-based methods is video blog.

Video blog or weblog according to Ibiieye and Awoniyi 2022) is a web publishing tool that allows authors to quickly and easily self-publish text, artwork, AJSTME, Volume. 9, Issue 6. 452-456, October, 2023. <u>https://www.ajstme.com.ng</u> ISSN: 2251-0141 (Print), 2971-6233 (Online)



videos, pictures, links to other blogs or Web sites, and a whole array of other contents. Mutum and Wang, (2010) also describe weblog as new shape of mainstream private conversation, permitting tens of thousands and thousands of human beings to submit and alternate know-how/records, and to set up networks or construct relationships with inside the weblog world. Blogs can be personal like online diaries or more formal and professional. The advanced features of current blogging platforms can be used by students to keep ePortfolios and design content management systems (Özdemir & Aydin 2015).

Blogs have become one of the most important web 2.0 tools in education which provides enormous benefits to students and teachers both individually and as a community. Awadaci and Ghaith (2014) averts that blogs can be used by teachers to post lists of their daily learning activities and also help students to keep records of their daily works. The author explained further that teachers can give students more opportunities to participate in their learning, either by commenting on post made by teachers or by creating their own blogs to be read and reviewed by their peers. Duffy (2008) also claims that blogs enable students to think deeply on concepts learnt and relate these concepts to real-life issues. Kwache (2013) also states that students develop ideas due to the reflective nature of blogs. Ru-Chu (2010) was of the opinion that blogs can be used as a platform for reflecting deeply on concepts learnt. The author further observed that when blogs are used for collaborative learning, peers prefer to read other peoples entries than write their own.

Gender is one of the important factors that affects the use of technology in teaching and learning of school subjects especially Geography. Aderele and Abidoye (2022), refer to gender as the socially constructed characteristics of women and men - such as norms, roles and relationships of and between groups of men (male) and women (female). Abidove and Abidoye (2022), also refers to gender as the socially and culturally constructed characteristics and roles which are ascribed to males and females in any society. He further explained that the male attributes as bold, aggressive, tactful, and efficient in the use of words while the females are fearful, shy, gentle, dull, submissive and effusive. In the same vein, Abidove & Abidoye (2022) stated that more complex works are usually set aside for male, while the females are considered womanly in a natural setting. Ajewole & Fasola (2012) concluded that there was a significant effect of gender on students' academics self-concept in favour of the female students than their male counterparts. Therefore, gender neutrality, friendliness or otherwise of the school subject such as Geography is worth investigating especially at the secondary school level.

Statement of Problem

Researches had revealed that teacher centered approach has dominated the teaching of Geography particularly secondary schools in Nigeria. This method according to Abidoye (2023) is one of the major factors impeding the teaching of Geography because it does not give room for active participation of the learners in the teaching and learning process. The method is more of teachers centered in nature. Therefore, there is need to employ an innovative teaching approach which may have the capability of spurring the interest of students and enhance the academic performance of students in geography. This study therefore, examines the effect of effect of video blog instructional package (VBIP) on students' academic performance in geography in Akure South local government area of Ondo State.

Hypotheses

Two research hypotheses were formulated and tested in these study at 0.05 level of significance;

- **Ho₁:** There is no significant main effect of treatment (Video Blog Instructional Package, VBIP) on academic performance of secondary school students in Geography.
- **Ho₂:** There is no significant main effect of gender on the secondary school students' performance in Geography.

Methodology

The study adopted pre-test post-test control group quasi experimental research design. The population of the study consisted of all Geography students in secondary schools in Akure South Local Government Area of Ondo State. While the sample population consisted of 87 senior secondary school II (SS II) Geography students. Four secondary schools were purposefully selected (schools with functioning ICT laboratory) in the Local Government area. Intact classes were used in all the selected schools for the study. Participants were further stratified along two groups (experimental and control groups). The experimental group (taught with Video Blog instructional package) while the control group (taught



with conventional teaching method). Two instruments were used in the study, they are; (i) Geography Students' Performance Test (GSPT) and (ii) Video Blog Instructional Package (VBIP). Geography Students' Performance Test (GSPT); This is a response instrument developed by the researcher. It consists of 20 test items. The instrument was developed based on SS II Geography curriculum. It has option of A-D. The instrument was validated by two test experts in the department of Educational foundation and counselling, Adeveni Federal University of Education Ondo. One seasoned and experienced secondary teachers also went through the Based on their comment instruments. and observations, some question items were modified

while some were completely eliminated. The instrument was later administered on 20 SSII Geography students from another secondary school which was not part of the study. The reliability coefficient of 0.84 was obtained using cronbach alpha. This was considered to be relatively high enough for the instrument to be used for the study. Video Blog Instructional Package (VBIP); It contains the video clips of geography contents in SSII. The instrument was validated by two ICT experts and a lecturer in Educational Technology. The comments of experts were used to improve on the instrument. The two research hypotheses for the study were tested with the use of ANCOVA statistical tool at 0.05 level of significance.

Results

Table 1:

	Type III Sum	l				Partial Eta
Source	of Squares	Df	Mean Square	F	Sig.	Squared
Corrected Model	1158.445 ^a	4	289.611	6.741	.000	.247
Intercept	3831.186	1	3831.186	89.169	.000	.521
Pretest	3.926	1	3.926	.091	.763	.001
Treatment	1084.872	1	1084.872	25.250	.000	.235
Gender	67.125	1	67.125	1.562	. 215	. 019
Treatment * Gender	.008	1	.008	.000	.989	.000
Error	3523.164	82	42.965			
Total	204075.000	87				
Corrected Total	4681.609	86				

a. R Squared = .247 (Adjusted R Squared = .211)

Dependent Variable: Performance in Geography

Table 1 shows that there is significant main effect of treatments (Video Blog Instructional Package) on students' academic performance in Geography ($F_{(1,82)} = 25.250$; p<0.05, partial $\eta^2 = .235$). The treatment effect size is 23.5% (partial $\eta^2 x 100$). This result means that there is significant difference in

the post-performance mean scores of the students due to the treatments. Thus, the null hypothesis 1 was rejected. In order to determine the mean difference across the groups, the Estimated Marginal Means of the treatment groups were carried out and the result is presented in Table 2 below.



Table 2

Estimated Marginal Means	of Post-Performance	across the Groups
Estimated marginal means	of I obi I cijoiniunice	across me Groups

87	15.79	-
87	47.87	7.38
41	51.78	1.04
46	44.60	.97
38	49.09	1.07
49	47.30	.94
	87 41 46 38	$\begin{array}{cccc} 87 & 47.87 \\ 41 & 51.78 \\ 46 & 44.60 \\ 38 & 49.09 \\ \end{array}$

Table 2 reveals that the pre-performance mean score (covariates) of the students appeared as 15.79 while it became 47.87 after treatments when the effect of covariates has been statistically controlled. The table shows further that the students in Video Blog Instructional Package (VBIP) had the higher postperformance mean score ($\bar{x} = 51.78$), and then by those exposed to conventional teaching method ($\bar{x} = 44.60$). This result implies that VBIP is more potent for increasing students' performance in Geography. Again, the table shows that the male participants had higher mean post-performance score ($\bar{x} = 49.09$) than the female participants ($\bar{x} = 47.30$).

Also from table 1, it is shown that gender has significant main effect on the students' performance in Geography ($F_{(1,82)} = 1.562$; p > 0.05; $\eta^2 = .019$). This means that the mean score of the male and female students in Geography do not differ significantly. Hence, hypothesis 2 is retained.

Discussion of Findings

The finding of this study revealed that there was significant main effect of treatments (Video Blog Instructional Package) on students' academic performance in Geography. This could be because students find Video Blog Instructional Package more interactive and also participated actively during the lesson. This finding is consistent with the that of Ibileye & Awoniyi (2022) who reported that, in a video blog learning environment, students take more responsibility, learn at their own pace and show higher level of motivation and performance.

It was also revealed from this study that there is no significant main effect of gender on secondary school students' performance in Geography. This implies that students whether males or females are similar in using modern technological methods because of the availability of modern technological devices and the easiness to access such modern technologies. This is in line with the finding of Williams & Augustine (2018) who revealed that there are no differences in male and female academic achievements when taught with mobile phone instructional package.

Conclusion

The study focused on the need to improve the teaching and learning of Geography in secondary schools through the use of video blog instructional package. The findings of the study revealed the superiority of video blog instructional package to conventional teaching method of teaching Geography in the sense that it has led to significant difference in the students' academic achievement in Geography even though it did not lead to a major change in attitude of the learners.

Recommendation

Based on the findings of this study, the following recommendations were made;

- i. Workshops, seminars and training should be organized for Secondary school teachers especially geography teachers on the instructional use and benefits of video blog instructional package.
- ii. Teaching of Geography in secondary schools using video blog instructional package should be embraced by Geography teachers as this is capable of improving students academic



performance in Geography than any other form of blog.

iii. Secondary schools should be equipped with adequate infrastructures that can enhance effective utilization of different types of webbased learning platforms especially video blog instructional package for classroom instructions.

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