Utilization of Information Communication and Technology (ICT) Facilities in the Teaching of Social Studies in Nigerian Secondary Schools

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Abstract: *This study was a correlational type. It was carried out to examine the relationship between the availability of ICT facilities in Social Studies and students' achievement in Social Studies; the relationship between the utilization of ICT facilities in Social Studies and students' achievement in Social Studies. Also, it examined the relationship between the availability of ICT facilities in Social Studies and utilization of ICT facilities in the teaching of Social Studies. A sample of 400 JSS 2 students was drawn from two zones (Osun State and Ondo State) in Southwestern Nigeria through multi-stage sampling technique. Two research instruments titled "Availability and Utilization of ICT facilities in Social Studies Inventory" (AUFSSI) and "Social Studies Achievement Test" (SSAT) were constructed by the investigator. These instruments were validated before used with reliability coefficients of 0.84 and 0.86 respectively. Three research hypotheses emanated from the study. The findings revealed that there was no significant relationship between the availability of ICT facilities in Social Studies and students' achievement in Social Studies ($r = -0.18$); there was no significant relationship between the utilization of ICT facilities in teaching Social Studies and students' achievement in Social Studies ($r = .083$). Also, there was no significant relationship between the availability of ICT facilities in Social Studies and utilization of ICT facilities in teaching Social Studies. Recommendations were made among others: the need for secondary schools in Nigeria to be equipped with ICT facilities and that government should see it as a matter of urgency to ensure that teachers are trained and re-trained from time to time in the use of ICT so that they can impart the same to their students.*

Keywords*: Utilization, ICT, Teaching Facilities, Social Studies and Achievement*

1. Introduction

Social Studies is one of the newly introduced subjects that has found its way into the school curriculum. It is a subject that studies man in his social, historical, geographical and cultural context. In Nigeria, Social Studies is a key subject indispensable for the attainment of national unity through the education of the various ethnic groups and interdependence of one group with another groups. According to Udeinya (1999), Social Studies can help in eradicating the social ills that bedevil the nation and also assist in the development of democracy. The fundamental concern of Social Studies is with men and its complete relationship with the world around and beyond. It is this content that the Social Studies curriculum attempts to instill in the students the basic knowledge, desirable value and skills for investigating, analysing and explaining this relationship.

For the attainment of the above lofty expectation on which Social Studies as a subject evolved, the use of ICT in its teaching cannot be overemphasized. No wonder Adeyemi (2008) was of the view that Social Studies as a field of study is a pragmatic discipline which must evolve diverse forms of strategies that apply heuristic mode which will pave way for integration of reflective enquiry, problem solving, critical thinking, inductive and deductive teaching with the prime purpose of developing learners' cognition in order to inculcate acceptable values and attitude. He was also of the view that the process of Social Studies education is basically related to information communication and technology (ICT). There is no doubt that ICT is changing every aspect of human life-trade, manufacturing, communication, services, culture, entertainment, education, research defence and global security (Grushen, 2001; Akindolu, 2002; Ekoko, 2002; Abada & Nwanse, 2002).

It is therefore no exaggeration to say that ICT has become the chief determinant in the educational attainment of any discipline. There is therefore the need to examine the availability and utilization of ICT facilities in the teaching of Social Studies in Nigerian Secondary Schools.

2. Statement of the problem

In Adeyemi (2009), efforts were made at examining the extent or level of digital literacy in Nigerian Secondary Schools; a factor which is critical to ICT integration in Social Studies classroom. The study obtained that no significant differences existed among the variables of interest. However, another factor which is critical to ICT immersed Social Studies teaching is availability of ICT facilities. Consequent upon digital literacy of Social Studies teachers, relevant ICT facilities are needed in Social Studies instructional lessons. Studies and information are lacking on the extent to which ICT infrastructures are available in the teaching of Social Studies at secondary school level in Nigeria. Hence this study

3. Hypotheses

Three hypotheses were generated in the course of this study and they were stated in null form to be tested at 0.05 level of significance.

(1)   There is no significant relationship between the availability of ICT facilities in Social Studies and students' achievement in Social Studies.
(2)   There is no significant relationship between the utilization of ICT facilities in Social Studies and students' achievement in Social Studies.
(3)   There is no significant relationship between the availability of ICT facilities in Social Studies and the utilization of ICT facilities in Social Studies.

4. Method

4.1 Design

The study was a correlational type. This was so because the researcher was interested in investigating possible relationships among the variables without manipulating the variables.

4.2 Study Population

The population for the study was made of Junior Secondary School students in Social Studies in two zones (Osun State and Ondo State) of Southwestern Nigeria.

4.3 Sample and Sampling Techniques

Four hundred JSS 2 students were finally sampled. Two trained research assistants were made use of. Multi-stage sampling technique was employed in selecting ten schools from five local government in each of the states, in each state we have 200 students that constituted the sample for the study.

4.4 Instrumentation

Two research instruments were used to collect data for this study. These include:
(1)   "Availability and utilization of ICT Facilities in Social Studies Inventory" (AUFSSI)

This instrument was developed by the investigator. It has two sections. Section A is on personal information on students, while section B consists of fifteen different ICT facilities in which students indicated the level of availability and frequency of utilization. The items were scored in the following order.

Level of Availability
Available = 2
Less Available = 1
Not Available = 0

Frequency of utilization
Great Extent = 2
Some Extent = 1
Not in use = 0

(2) "Social Studies Achievement Test" (SSAT)
This instrument consists of 30 objective questions on Social Studies based on JSS 2 syllabus. The items were already standardized because they were picked from NECO, JSS 3 past questions on Social Studies. Each item consists of 4 options which students chose only one correct option.

4.5 Validity and Reliability

The two research instruments were given to experts in Educational Evaluation for face and content validity. Some modifications were made after which the two instruments were later administered to few students in Oyo state Nigeria for trial testing. The reliability coefficients of the two instruments were obtained with reliability coefficient of 0.84 and 0.86 respectively.

4.6 Procedure of Data Collection

The researcher and two trained assistants administered the instruments to the respondents. They were also collected immediately on completion.

4.7 Data Analysis

The data collected were analysed with the use of Pearson Product Moment Correlation (r) to test the relationship between the variables of interest.

5. Findings and Discussion

The findings about the hypotheses were presented as follows:

Hypothesis 1

There is no significant relationship between the availability of ICT facilities in Social Studies and students' achievement in Social Studies.

Table 1 Pearson Correlation of the relationship between the availability of ICT facilities in Social Studies and achievement in Social Studies

Variables	N	Mean	sd	r	df	P$_{value}$	Remark
Availability of ICT facilities in Social Studies	400	0.4250	0.51966	– 0.18	399	.719	Not significant
Students' Achievement in Social Studies	400	7.6100	3.38845				

Table 1 shows the Pearson correlation of the relationship between the availability of ICT facilities in Social Studies and achievement in Social Studies. The result indicated r = −.018, P = .719 which implies that P >0.05. P$_{value}$ is greater than 0.05 alpha level. This implies that there is no significant relationship between the availability of ICT facilities in Social Studies and achievement in Social Studies.

Based on the above hypothesis and the result obtained as shown in the table, the hypothesis was not rejected which implies that there is no significant relationship between the availability of ICT facilities in Social Studies and students' achievement in Social Studies. This may be traced to the fact that the availability of ICT facilities in Social Studies may not probably improve the students' academic achievement in Social Studies. This finding was supported by Binkley (2008) who stated that using computer to allow students and teachers to do at a distance what they can do face-to-face is not likely to improve learning.

Hypothesis 2

There is no significant relationship between the utilization of ICT facilities in Social Studies and students' achievement in Social Studies.

Table 2 Pearson Correlation of the relationship between the utilization of ICT facilities in Social Studies and achievement in Social Studies.

Variables	N	Mean	sd	r	df	P$_{value}$	Remark
Utilization of ICT facilities in Social Studies	400	0.2000	0.40050	0.83	399	.095	Not significant
Students' Achievement in Social Studies	400	7.6100	3.38845				

Table 2 shows the Pearson correlation of the relationship between the utilization of ICT facilities in Social Studies and achievement in Social Studies. The result indicated r = .083, P = .095 which implies that P > 0.05, P$_{value}$ is greater than 0.05 alpha level. This implies that there is no significant relationship between the utilization of ICT facilities in Social Studies and achievement in Social Studies. Based on the above hypothesis and the result obtained as shown in the table, the hypothesis was not rejected which implies that there is no significant relationship between the utilization of ICT facilities in Social Studies and achievement in Social Studies. This implies that non utilization of ICT facilities has no bearing with students' achievement in Social Studies. This finding contradicted the view of Moorgawa (2007) whose argument was in favour of improving quality of education through improvement in quality of teaching and learning processes with the use of ICT facilities.

Hypothesis 3

There is no significant relationship between the availability of ICT facilities in Social Studies and the utilization of ICT facilities in Social Studies.

Variables	N	Mean	sd	r	df	P$_{value}$	Remark
Availability of ICT facilities in Social Studies	400	0.4250	0.51966				
Utilization of ICT facilities in Social Studies	400	0.2000	0.40050	0.60	399	.230	Not significant

Table 3 shows that the Pearson Correlation of the relationship between the availability of ICT facilities in Social Studies and utilization of ICT facilities in Social Studies. The Pearson correlation analysis yields the value of .060 at 0.05 confidence level. This shows that there is no significant relationship between the availability of ICT facilities in Social Studies and utilization of ICT facilities in Social Studies.

From the stated hypothesis above which says "there is no significant relationship between the availability of ICT facilities in Social Studies and the utilization of ICT facilities in Social Studies" was accepted. This implies that the availability of ICT facilities in Social Studies may not definitely enhance its utilization in the teaching and learning of Social Studies. This may arise because most of the ICT facilities were not available let alone their utilization. This shows that it is when they are available that teachers could utilize them in teaching and learning. This finding was supported by various past investigators: Mac-Ikemenjima, (2005), Olagunju (2003), Samuel & Bakar (2006), Oloyede (2004). They were all of the views that measurement of students' learning outcomes had significant impact on the use of ICTs in the curriculum and thereby capable of improving teaching and learning.

6. Conclusion and Recommendation

The results of this finding indicated that no significant relationship existed between the availability of ICT facilities in Social Studies and achievement in Social Studies. Also, no significant relationship existed between the utilization of ICT facilities in Social Studies and achievement in Social Studies, and lastly no significant relationship existed between the availability of ICT facilities in Social Studies and utilization of ICT facilities in Social Studies. It is sad to note that based on the findings of this study, most of the ICT facilities were not available in Nigeria secondary schools and since they were not available, they cannot be utilized. It can therefore be concluded that the availability of ICT facilities in the teaching and learning of Social Studies will increase students' motivation, engagement, facilitation and acquisition of basic skills that will enable them to achieve worthwhile learning goals as well as appropriate academic standards.

Based on the results of this study, the following recommendations are proffered.
- Conducive environment should be provided where effective learning can take place.
- There is need for secondary schools in Nigeria to be equipped with ICT facilities.
- Government should see it as a matter of urgency to ensure that teachers are trained and re-trained from time to time to use ICT facilities so that they can as well impact the same to their students.

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