ICT Incorporation: A Requirement for Upgrading the Teaching and Learning of Social Studies in Rivers State

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Abstract

The thrust of this paper is to identify the needs for ICT integration in Social Studies and stress the requirements or competences needed by teachers for upgrading Social Studies programme using information communication technology (ICT). The use of traditional method of instruction delivery is no longer in vogue in this contemporary time hence educational technologists and other scholars who are interested in innovative instructional techniques advocate or crave the indulgence of modern school teachers to explore emergent/alternative teaching approaches in their effort to facilitate teaching – learning encounters. In carrying out the research the researchers administered questionnaire to 175 Social Studies teachers, out of 230 from 18 LGAs out of 23 LGAs in Rivers State. Statistical analysis of results shows that Social Studies teachers in secondary schools in Rivers State lack ICT facilities; besides they also lack requisite competences for upgrading or integrating ICT into Social Studies. Based on these, conclusion was drawn and recommendations were made.

1. Introduction

Social Studies is regarded as a scientific study that involves how people live and organise themselves in society. More so, and in line with National Council for Social Studies, it is the integration of social sciences and humanities to promote civic competence (NCSS, 1992). Civic competence here refers to the knowledge, skills and attitudes required of students in democratic society. Social Studies programmes integrate knowledge, skills and attitudes within and across disciplines. It is studied in primary school level up to the tertiary institution.

The objectives of Social Studies include the following:
1. to produce complete man, a well rounded citizen that functions effectively in the society;
2. to produce human beings who can adapt and adjust to the rapidly changing world;
3. to aid young people develop the ability to make informed and reasoned decisions for the public good as citizens of culturally diverse democratic system in an independent world and,
4. Promotion of civic competence and cultivation of the spirit of patriotism.

To be able to effectively accomplish the aforesaid objectives in present dispensation, teachers of Social

Studies are required to upgrade the teaching and learning of Social Studies using information communication technology. In other words, the Social Studies teachers need to integrate ICTs during instructional delivery (Dike, 2006). For some scholars, ICT integration was understood and examined in terms of types of teachers' computer use in the classrooms: low-level (e.g. students doing Internet searches) or high-level use (e.g. students doing multimedia presentations, collecting and interpreting data for projects) (Cuban, Kirkpatrick & Peek,2001). For other scholars, ICT integration was understood and examined in terms of how teachers used technology to carry out *familiar* activities more reliably and productively and how such use may be re-shaping these activities (Hennessy, Ruthven, & Brindley, 2005). Still others consider technology integration in terms of teachers using technology to develop students' thinking skills (Lim, Teo, Wong, Khine, Chai, & Divaharan, 2003).

Citing Earle (2002), Wang and Woo (2007) describe integration as having a sense of completeness or wholeness by which all elements of a system are seamlessly combined together to make a whole.

Richards (2006) however, opined that to talk about ICT integration in instruction would require viewi*ng* it from two perspectives: *The first is the technological point of view and the second is the pedagogical point of view.* The convergence of pedagogical and technological points of view supports effective connection between suitable technology for content and pedagogical principles to design learning environments.

A review of relevant literature, on the first perspective, shows that technology integration: (a) focuses on content (e.g. technology knowledge and skills, technology-supported pedagogical knowledge and skills, and technology-related classroom management knowledge and skills), (b) gives teachers' opportunities for "hands-on" work, and (c) is highly consistent with teachers' needs (Khe & Thomas, 2006:238).

The integration of technological infrastructures and systems into the educational environment, in view of the present time, calls for the incorporation of anyone or more than one or two of the following educational technology or information technology resources in instruction: Computer equipment, video compact disc (VCD), television, video disk recording, interactive Video, sound slide system, sound filmstrip, cine or 16mm film, dictionary audio package, power point software, communication satellite, multimedia projector, closed circuit television, digital versatile disk (DVD), multimedia kits, Lynx 4 software/ interactive clever board, teleconferencing equipment, etc.

The technological aspect of ICT integration guarantees ICT programme delivery, opportunities for flexible delivery, provides support for customized educational programs to meet the needs of individual learners and the growing use of the internet and www as tools for information access and communication acts as a powerful agent of change to many of the educational practice to which we have become accustomed. It also explores the impact both current and emerging information and communication technology will have in coming years on what is learned, what learning will take place and how the learning will occur (Adekoya, 2003).

Social Studies education teachers are expected to support or make effective connections between suitable technology for content and pedagogical principles to design learning environments. The pedagogical point of view of ICT integration also talks about the integration of ICT materials and programs in terms of social constructivist learning principles; which has it that: (1) learning and development is a social, collaborative activity (2) the zone of proximal development can serve as a guide for curricular and lesson planning (3) school learning should occur in a meaningful context and not be separated from learning and knowledge children develop in the "real world", and (4) out-of-school experience should be related to the child's school experience (see URL:http://www.massey.ac.nz/-ALock/virtual/wittvyg.htm). Social constructivism places emphasis on everyday interactions between people and how they use language to construct their reality. It regards social practices people engage in as the focus of enquiry (Berger and Luckmann, 1991). Hepp, Hinostroza, Laval and Rehbein (2004) stated the following reasons why schools are insisting on ICT application in education: (i) a new society requires new skills; (ii) productivity enhancement; and (iii) a quest for quality learning.

2. Requirements for Upgrading Social Studies Programme Using Information Communication Technology

For effective and efficient integration of ICT in Social Studies programme, the Social Studies teacher is expected to have the following competencies or skills:

- knowledge of computer, word processing;
- technology-supported pedagogy knowledge and skills in order to integrate technology for instructional purposes;
- ability to share experiences through the Internet;
- ability to recognize the balance between the advantages of giving students responsibility and the potential unproductiveness of random surfing on the Internet;
- knowledge of the principles of educational technology;
- knowledge and skills of utilizing multimedia equipment;
- Knowledge and ability to utilize interactive clever board and lynx software (Mulkeen, 2003; Cuban, Kirkpatrick & Peek, 2001 and Dike, 2006).

3. Statement of the Problem

Despite the advantages of the technology revolution which gave birth to ICT, most Social Studies education teachers in Rivers State do not incorporate the ICT facilities during lesson presentations as expected. They may not have had the requisite competencies or skills required for utilizing ICT tools added to non availability of ICT hardware and software in schools in Rivers State (Afolabi, Adedapo and Adeyanju, 2005:29). The non use of these modern teaching approaches one way or the other have negative effects on students academic achievement and interest in Social Studies programme (Akpore,2011 and Asuquo, 1999), so there is need to determine ways and means of how these negative trends can be stemmed or reversed.

4. Purpose of the Study

The purpose of this paper is to:

1. Determine if ICT facilities are available in secondary schools in Rivers State;
2. Find out if Social Studies teachers possess requisite competencies for upgrading Social Studies using information communication technology (ICT)

5. Research Questions

1. Are there ICT facilities for upgrading Social Studies course?
2. Do Social Studies teachers possess requisite competencies for upgrading the Social Studies programme using ICT?

6. Research Hypothesis

There will be no significant difference in responses of Social Studies teachers concerning competences of Social Studies teachers in upgrading Social Studies programme using ICT.

7. Methodology

This research work was a survey study. The researchers used stratified random sampling to select 18 local government areas out of 23 LGAs in Rivers State. The study population comprised all the Social Studies

teachers (230) in secondary schools in the State, while the sample size consisted of 170 Social Studies teachers out of 230. A questionnaire instrument was developed and validated by two specialists in Social Studies and educational technology. After subjecting it to a process of reliability test using test re-test method of estimate, the instrument was found to have a co-efficient value of 69.0. Being that this was high enough, the researchers went ahead and administered the questionnaire on the respondents. Data obtained from the field were analysed using percentage analysis, as shown in the result below:

8. Result

Research Question 1: Are there ICT facilities for upgrading Social Studies course in secondary schools in Rivers State?

Table 1

S/n	Item	Yes	%	No	%
1	computer accessories	20	11	150	86
2	interactive video disk and tape	0	0	170	97
3	CDTV	10	6	160	91
4	closed circuit television	0	0	170	97
5	closed circuit television	2	1	168	96
6	closed circuit television	15	9	155	89
7	Videoconferencing	5	3	165	94
8	multimedia projector	0	0	170	97
9	multimedia projector	143	82	27	15
10	television	2	1	168	96
11	film	0	0	170	97
12	radio and line transmission equipment	0	0	170	97
13	audiotapes, video tapes,	40	23	130	74
14	VCD and DVD	32	18	138	79
15	cinema van	2	4	166	95
16	interactive white (clever) board	21	14	146	83
17	teaching machine	0	0	170	97

Table 1 above shows that Internet service is the only ICT facility available within the secondary schools where Social Studies is being taught.

Table2: Do Social Studies teachers possess requisite competencies for upgrading the Social Studies programme using ICT?

S/N	Item	Yes	%	No	%
1	Technology-supported pedagogy knowledge and skills in order to integrate technology for Social Studies instructional purposes	20	11	160	91
2	Knowledge of computer, word processing	17	10	15	87
3	Ability to share experiences through the Internet	5	3	165	94
4	Ability to recognize the balance between the advantages of giving students responsibility and the potential unproductiveness of random surfing on the Internet	10	6	160	91
5	Knowledge of the principles of educational Technology	5	3	150	86
6	Knowledge and skills of utilizing multimedia projector	0	0	170	97
7	Knowledge and ability to utilize interactive clever Board	10	6	170	97

Responses in table 2 above indicate that most of the Social Studies teachers in Rivers state do not incorporate ICT to upgrade Social Studies programme in the state

9. Discussion of Result

ICT is a useful tool for lesson presentation. Moreso, it can motivate students' interest in learning as shown in table one. Various scholars have seen motivation as a key variable as far as teaching and learning are concern. It reinforces learning and influence learners academic achievement (Bitter & Pierson, 2005; Dike, 2006; Elliot, Kratochiwill, Cook, and Travers, (2001) and Miller, Martineau and Clark, (2000) also affirmed that when HLR are used during teaching-learning encounter, it not only stimulates several senses but also facilitates cognitive thinking, problem solving and mastery learning, thus making the learner more involved in the learning process. Students feel excited and desire to put in their best in learning effort once they are motivated. Umeh (2006) equally shares the views above but noted that for HLR materials to be able to arouse and sustain students' interest; such materials should be packaged in line with educational technology principles.

Table 2 shows that HLR has positive impact on student's academic performance in biology. This finding is in line with those of Hooper & Rieber, (1995); Brashears, Akers and Smith (2005), Wisdom (2108) and Nkweke (2006). Effective and efficient use of HLR in instruction enhances self-directed learning, critical thinking, and cooperative learning. Students feel a sense of reality in what they learn. This is further supported by Onyegegbu (2006) and Lesley, Satomi and Kristen (2009). A lot of frustrating situations can be saved our children if our teachers use relevant HLR during lesson presentation, among other realist efforts.

10. Conclusion

The importance of ICT to teaching and learning of Social Studies in contemporary time cannot be overemphasized, in view of the fact that Nigeria targets to join the comity of world's twenty (20) most industrialized nations in 2020. The actualization of this lofty dream will, to a large extent, rely on the co-operation of government, private educational institutions, teachers, parents as well as students to facilitate the ICT incorporation.

11. Recommendations

1. Government should procure and distribute ICT facilities to secondary schools in Rivers State.
2. The Social Studies teachers should de-emphasize the use of chalk-talk method of instructional delivery since that method is obsolete and bear in mind that we are now in the era of information technology.
3. Social Studies teachers should frequently integrate ICT to upgrade the teaching and learning of Social Studies.
4. Government should provide secondary schools with electrical power supply or stand-by generators to aid the use of ICT equipment.
5. Government should organize workshop to train Social Studies teachers to acquire necessary competences for incorporating ICT during instructional delivery.
6. Occasionally, the Management of secondary schools in Rivers State should invite specialists (educational technologists, instructional material technicians, computer experts, etc.) to assist the Social Studies teachers in the effective utilization of ICT.
7. Parents should be sensitised to encourage their wards to be ICT compliant

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