

**A COMPARATIVE STUDY OF THE USE OF COMPUTER ASSISTED
INSTRUCTION AND CONVENTIONAL METHOD OF TEACHING
SOCIALIZATION AMONG NCE II SOCIAL STUDIES STUDENTS' IN COLLEGE
OF EDUCATION WARRI, FOR SUSTAINABLE YOUTHS DEVELOPMENT.**

PATIENCE I. SAWERE

*Department of Curriculum and Instruction
College of Education, Warri.*

Abstract

The study compared computer assisted instruction in term of effectiveness in students academic achievement in social studies. The study participants were drawn through simple random sampling technique and were randomly assigned into experimental and control groups. The sample were pre-test, treated/manipulated and post-tested using the Social Studies Achievement Test (SAT). The study reveals a significant difference in the achievement of students trained using the CAI against lecture method. The study recommends that simulations, animations and software programmes should be developed for social studies courses, in order to apply CAI applications at schools. In-service courses should be organized for teachers to use CAI activities efficiently in our educational programmes. CAI techniques should be used much more at schools among others. Hence, the use of CAI for effective and students' academic achievement cannot be overlooked.

Keywords: compared, Computer assisted instruction, lecture method, academic achievement, social studies.

Introduction

Teaching is an act of imparting knowledge by a teacher in a systematic way. It is a scientific process which involves psychological, sociological and philosophical knowledge. According to Oriafio (2002), "teaching is a process of encouraging students to make connections between their real world experiences and the subject being studied. The essence of teaching basically is to help by prescribed means possible, an individual to acquire skills and knowledge which would affect his/her behavior towards a positive direction. How this is achieved remains relative base on experience, perception, environment or societal influence (Abubakar 2013). Adedoja (2009) cautioned that, without effective social studies and the teaching in our schools there will be no economic, social, political and cultural development of their societies.

On the Nigerian educational scene, many empirically-based studies (Osakwe 2009 & Ogun 2006) have alluded to the highly limited professional competence of many social studies teachers in our schools and colleges. These studies are unanimous in condemning a prevalence of traditional methods in class room dispensation of social studies in Nigeria.

These studies generally reveal that since these methods tend to emphasize rote-learning or a mastery of sets of knowledge and information, then social studies education in this country has failed in achieving the main objectives that prompted its introduction and teaching in schools and colleges.

A major functionality principle' which is expected to influence greatly class room pedagogy in social studies education capitalizes on the view that this subject area represents an interdisciplinary approach to the study of human beings in groups of interrelationships with both their social and physical environments. This functionality principle emphasizes and underscores the vital role of social studies education as an instrument as an instrument for preparing and mobilizing young learners in schools for the purpose of enabling them cultivate an awareness and understanding that would transform them into citizens with skills, competences, moral values and reasoned judgement to effectively live, interrelate and contribute positively to the prosperity of the nation (Mezieobi 2012). In this stance, a main goal of social studies education is designed to generate and develop intelligent, responsible and self-directing citizens who are expected to positively explore opportunities to develop their own potentialities and to contribute their maximum efforts to the improvement of group living within the societal framework of a nation. Thus modern approach to curriculum development in social studies education derives from an understanding that the epistemology of the subject area is meant to incorporate inspirations from a variety of realms of learning, particularly the social sciences. A major' functionality principle' embedded into this epistemology advocates a philosophy which will contribute significantly in bringing about innovations and developments associated with curriculum integration. An implication of this philosophy of integration centers on the view that a single subject is not enough for an individual to adequately understand the interactions and interrelationships between man and his environment. This orientation endorses the idea that the social science disciplines and other related subjects from where the social studies largely derives its *raison d'être* should be utilized interactively and integratively since they are all concerned with issues and problems dealing with the existence of man in his environmental settings (Ogun 2006).

NCCE 2004 stressed the need to sustain the interest of social studies students by adopting teaching methods that will enable them to arouse their interest and understanding of the concept in social studies.

Effective teaching has been aptly described as the teaching in which more than half of the students in a class are able to recall at least up to 50% what were taught. Various methods have been described and suggested by social studies educators (Oriafo 2002, Okoko 2007), as appropriate teaching of social studies.

Such method methods include the discovery, enquiry and hands on approaches among many others. Adaralegbe (2010) has shown that social studies teachers all over the world, have the belief that the learning/reaching of their subjects is a force to reckon with. Using of computers animations in teaching social studies develop literate individuals who understand the use of social studies knowledge in their everyday decision making (Ade 2002). Many students in the publish literature indicate that there is a strong relationship between the use of computers and student's academic achievements in teaching and learning process (Altum, Yigi and Alve, 2007). For instance Yigit (2007) found in his study that computer assisted instruction has had positive impact on students perceptions about computer supported instruction as well as on their academic achievement. It is against this background, that this

present study is being undertaken in an attempt to compare the academic performance of N.C.E. II social studies students in social studies teaching and learning content (socialization) using CAI and conventional, teacher-directed instruction.

Statement of the Problem

The problems of social studies at the implementation level of curriculum process and instructional strategy has been of much concern to Nigerian social studies educators. Hence, social studies education in Nigeria had been criticized for not quite preparing students for effective living in the society and for her low level of academic achievement (Adedoja 2009). Others pointed accusing fingers to the poor teaching method, which involved over emphasis on memory and vastness of social studies syllabus (Osakwe, 2009).

With the new National Policy on Education (FRN, 2004) these and other related problems have adversely affected students academic performance in our colleges today. This prompted the need for the study on comparison of the use of social studies instruction and method of teaching socialization in order to see whether there is a meaningful significant difference in the sense of academic success between the experimental group on which computer assisted instruction was applied and control group, on which conventional teaching method was applied in the teaching of socialization of social studies lesson.

Research Question

1. The study intends to find answer to the following question
What is the effect of Computer Assisted Instruction and Conventional method on the achievement of NCE II social studies students in the learning of Socialization ?

Hypotheses

Based on the research questions stated, the null hypothesis stated below is formulated for testing at 0.05 level of significance:

HO₁ There is no significant difference in the mean scores of students taught socialization using Conventional Method and Computer Assisted Instructions. HO₂ There is no significant difference between the academic achievement of male and female students taught socialization using C.A.I..

Research Design

The researcher employed a pre-test, post-test experimental control groups design in which samples were pre-tested exposed to treatment and then post tested to see if there is significant difference in academic achievement. Both control and experimental groups were located in College of Education, Warri and consisted of both sexes, that is male and female.

Sample and Sampling Technique

The study samples were selected through a simple random sampling technique. The summary of the sample is represented in table 1.

Table 1. Experimental and Control Group

Groups	Experimental	Control
Males	10	10
Females	4	4
Total	14 students	14 students

The groups were randomly assigned into Experimental and Control groups through the draw from the SAT Method.

Instrument for the study

The instrument used for data collection was the social studies achievement test (SAT).

The social studies achievement test (SAT)

The Social Studies Achievement Test (SAT) was used for assessing both approaches, the experimental and control groups. The SAT was based on questions provided for the students to attempt all in three (3) hours. The questions were adopted from creative social studies on the internet project software on the web used for this study.

Data collation procedure

The experimental and control group were pre-tested with SAT, to ensure that the groups were of comparable ability. After the treatment, the groups were post-tested. The results of the testing are used to test the null hypothesis.

Data Analysis Technique

In analyzing the scores obtained from achievement test administered to both experimental and control groups, a t-test was employed to test for significant difference at $p > 0.005$, the H_0 Listed stated below:

H_{01} : There is no significant difference in academic achievement of students who were taught socialization by computer assisted instruction strategy and those exposed to socialization by the conventional strategy among social studies N.C.E. II Students.

H_{02} : There is no significant difference in the academic achievement of male and female student.

Table 2: Significant Difference in Academic Performance: T-test Statistics.

Variable	No	Mean	SD	t-calculate	T-critical
Computer Assisted Approach	14	51.1	10-41		
Conventional approach				0.5	2.06

From the table, the t_2 cal 0.58 is less than the tariff 2.06 at 0.05. This shows that there is no significant different in their academic achievement, the mean score (x) in computer assisted approach is 51.1 and conventional approach is 48.2. The standard deviation for computer assisted approach is 10.41 and conventional approach is 15.59. The calculated test value t_2 was 0.58 and T-critical value was 2.05 (table 4.2).

From the statistical comparison of computer assisted approach and conventional approach scores I table (4.2) using t-test, the following finding were made:

1. There was statistical significant difference between the achievements in both approaches.

Table 3: Comparison between Computer – Assisted Approach and Conventional Approach: T-test Statistics.

Variable	No	Mean	SD	r-calculated	T-critical
Computer Assisted approach	14	51.1	10.41		
Conventional approach	14	48.2	14.72	0.58	2.06

t-test table value = 0.58

Discussion

Similar results were obtained in other studies applied in different subjects and topics carried out (Altum, Yigit and Alev 2007; for instance found in their studies that CAI techniques increase the academic achievements and attitudes of students in the subject of “Eletric Circuit”.

Stangley (2008) investigated the retention effect of computer assisted instruction on students' academic achievement for teaching the force and pressure in the physics topics. At the end of the study, significant differences between the science subject test scores of experiment and control group were found in favour of experiment group. Altum, YIGIT AND Alev (2007) found that computer assisted instruction is more feasible than the conventional approach in terms of cognitive and effective behaviours. Students' perception before and after the applications have significantly changed about physics and computer assisted instruction.

Balanskat, Blamira, Kefala (2006) aimed in their study to compare the effect of computer aided teaching realized from the simulations of the software developed by the researchers for the interactive-English programme and conventional teaching methods on the success of the english prospective teachers and have supported the use of CAI in English Language class room teaching.

Summary

The findings of these research, supports the views of Okoko, (2007) and Ukadike (2008), who strongly argued that positive intervention makes the real difference in students learning when teachers use technology appropriately in the classroom.

Recommendations

1. Simulations, animations and software programmes should be developed for social studies courses, in order to apply CAI applications at schools.
2. In-service courses should be organized for teachers to use CAI activities efficiently in our programmes.
3. Courses that would bring knowledge and skills that are necessary to carry out computer assisted instructions should be organized at faculties that train teachers.
4. CAI techniques should be used much more at schools.

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