DEVELOPMENT AND VALIDATION OF SELF INSTRUCTIONAL COMPUTER BASED PACKAGE FOR TEACHING AND LEARNING OF SOCIAL STUDIES IN SENIOR PRIMARY SCHOOLS

ALABI, T.O
Science Education Department,
Federal University of Technology,
PMB 65, Minna, Niger State.
E-mail: thomasalabi2001@yahoo.com

ABSTRACT

The study is on the development and validation of self-instructional computer based package for teaching social studies in senior Primary Schools. The study investigated the effect intellectual development of study habits in Senior Primary school students where social studies were taught with and without the computer-based self-instructional package. The students perception based on their age, level, performance, gender and achievement was investigated and to achieve this, two hundred students were randomly selected from four schools in Niger State. The data collected was developed by the researcher with the aid of Alabi Social Studies Achievement Test (ASSAT). Questionnaires which were administered and retrieved from the students are subjected to the use of statistical tools as Means, Standard deviation, T-test, and ANOVA. The result showed that general students'perceptions were positive and showed no significant difference on the basis of sex, discipline and performance. Based on these findings, it was concluded that the use of self-instructional computer-based package would serve as a reliable alternative to the conventional chalk and talk method of teaching.

Keyword: Self-instructional computer package, Social Studies

INTRODUCTION

The importance of Social Studies cannot be over emphasized all over the world. The subject deals with man's social, economic and political behavior at any place where people live or have lived now or in the past (Lee, 1979:10). Social Studies have suffered a lot of set backs in the teaching and learning process, for example: Span of time schedule does not give room for adequate understanding of social studies, which in turn does not give room for teacher-student relationship for the teacher to have enough time to pay attention to individual learning/differences in encouraging motivation of the child.

The other problem is teacher-based whereby teachers who are trained in other subjects now teach it. However, in other to solve these problems and to aid teaching and learning today it's of great importance to opt for the recent method of teaching, using programmed instruction, simulation and games both visual and audio visual materials. These computer packages of both audio and visual programmes television have been proved to enhance a high level of learning effectiveness. Lack of adequate materials on the part of the teacher will be a thing of the past because the computer programmes on social studies will facilitate self-paced learning. With child's the education in computer he can learn at home without the teacher. This will make learning and teaching easier when both teacher and students meet in the classroom. This research study endeavored to find the way for development and validation of self instructional computer based package for teaching selected units of social studies in senior primary schools in Niger State Nigeria.

Research Questions

(i)   Is it possible to develop a self-instructional computer package, which can be used to teach some units of social studies in primary schools at a reasonable cheap cost?

(ii)   Is there any difference in the performance of students taught social studies with the self-instructional package and those taught without the package?

(iii)   Is there any difference in the performance of male and female students taught social studies with the -self-instructional package?

(iv)   Is there any difference in the level of achievement of students of different age groups (9-10, 11-12, 13 and above) taught social studies with the self-instructional computer-based package.

Research Hypotheses

1.   There is no significant difference in the mean achievement scores of students taught social studies using the self instructional computer - based package and those taught without the package.

2.   There is no significant difference in the mean achievement scores of male and female students taught social studies with the self instructional computer - based package.

3.   There is no significant difference in the mean achievement scores of students of different age groups taught social studies with the self-instructional computer-based package.

Significance of Study

This research study is going to act as a tool to be used to educate the teacher and the learner on how self-instructional computer-based package will help to aid, facilitate and motivate teaching and learning process, which will be of excellent aid in the following areas.

i.   It will help to study the difference between performances of the senior primary student in the subject taught with the computer based self-instructional package and those taught without it.

ii.   It will also aid the discovery of gender performance in the subject taught by this computer based package.

iii.   The study will bring to light the factors militating against the use of this computer-assisted-instructional package in the senior primary school.

iv.   This research will aid not only the Niger State Educational bodies like the ministry of Education and its state primary Education Board (SPEB) but also the curriculum planners to produce more useful software in social studies to enhance the teaching and learning of the subject social studies.

Basic Assumption

In carrying out this experimentation study it is assumed that the student used in the study do not have any previous knowledge in the uses of computer-based-instructional packages in the teaching and learning process and the pupils chosen for this study have adequate introduction to the social studies source content as stated in their syllabus.

METHODOLOGY

The research looked at the methods used in conducting the research design, samples and sampling techniques as well as the instrumentation and validation of the

instrument reliability and the statistical methods used for data analysis in this research.
The instrument used for data collection was the Alabi Social Studies Achievement Test (ASSAT) made up of fifty multiple-choice questions based on social studies. The questions covered the following areas: marriage and its types; inter-tribal and intra-tribal marriages; the concept of family and its types; religious practices in Nigeria. The instrument was validated by a lecturer of Social Studies in Niger State College of Education and one Senior Officer of Social Studies in National Examination Council (NECO). The test items were corrected and modified on the advice, suggestions and recommendations of the validators. A pilot study was conducted on 40 students of Zarumai Model School to test the efficacy of the research instrument and the procedures for the main study.

The sample population of this research was made up of primary six pupils chosen from schools situated in Minna Local Government Area of Niger State. The Sample for this research work was made up of 80 primary six pupils randomly selected from the four different primary schools. The four primary schools were chosen based on the criteria that the pupils must have ample access to the computer system and the schools syllabus must include computer science as a compulsory subject. Twenty pupils were randomly selected from each school using hat-draw method. The selected pupils are made up of male and female students.

The test instrument was administered by the researcher. The data used for the research work was collected by the researcher by means of the ASSAT. Thirty-five minute lessons were taught to both experimental and control groups to ensure that the last instrument is understood. All scripts were collected from the pupils after the expiration of the testing period (1hr - 15min) by the researcher. The data for this study were analyzed using the following statistical tools: means; standard deviations, t-test and ANOVA statistics. The t-test was used to test hypotheses 1 and 2 while the ANOVA was employed in testing hypothesis 3

FINDINGS

The results obtained agree almost with all the research questions raised in the study.

(i)   that is it possible to develop a self-instructional computer package, which can be used to teach some units of social studies in primary schools at a reasonable cheap cost?

(ii)   that there is no difference in the performance of students taught social studies with the self-instructional package and those taught without the package?

(iii)   that there is no difference in the performance of male and female students taught social studies with the -self-instructional package?

(iv)   that there is no any difference in the level of achievement of students of different age groups (9-10, 11-12, 13 and above) taught social studies with the self-instructional computer-based package.

The exception was in the result of the ANOVA test of experimental group according to their ages with the use of Scheffe statistics. It revealed that while there is difference in the academic achievements of pupils within the ages of 9 - 10 and ages 13-14, there is no significant difference in the academic achievement of ages 11 -- 12 and 13 - 14. This shows that pupils' performance varies according to their ages.

CONCLUSION AND RECOMMENDATIONS

The study has shown that the use of instructional computer-based packages have the capability of improving the performances of pupils in social studies, it is not gender

dependent and it makes teaching and learning process more interesting and effective. Based on the effect of this study the following recommendations are made

i. Computer Assisted Instruction method of learning should be encouraged mostly in the primary school level,

ii. Government should provide computers for all the primary schools in the country,

iii. Government should encourage computer programmers and teachers to develop computer instructional packages on various subjects for use in primary schools in the country and it should be made available to all primary schools in Nigeria,

iv. Where the government and schools are handicapped the pupils should be taken to a nearby computer centres for study,

v. The teachers who intend to use computer in teaching should make sure they plan a good lesson and prepare a good program package for the instruction,

vi. The teacher should be computer-literate

vii. Both pupils and teachers, most especially mathematics and science teachers, should be made to learn and understand how to write simple computer programs.

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