

# THE EFFECTIVENESS OF COMPUTER ASSISTED INSTRUCTION IN TEACHING SOCIAL STUDIES TO IX STANDARD STUDENTS

Research  
Paper

## ABSTRACT

*The field of teaching social studies has come a long way in the thirteen years since Social Education published microcomputer courseware evaluation guidelines developed by an ad-hoc committee established by the National Council for Social Studies (NCSS). Since 1984, many advances have been made in the development of software and related technology of peripheral devices. These advances allow students and teachers to develop and access significant content relevant to the social studies curriculum. Many of these programs make strong attempts to engage the learner and help support successful teaching and learning. In this context, the researcher has conducted a study to provide some new and innovative ideas for teaching Social Studies to the school students. The main objective was to find out the effectiveness of a CAI module on the achievement of IX standard students. True experimental design was used for this purpose. 't' test was used to study the effect of the CAI module on the achievement of students in Social Studies. The result of the study revealed that post-test achievement scores of the experimental group was significantly higher than that of the control group. Hence, the CAI module in question is effective in enhancing the achievement of students.*

## INTRODUCTION

Technology has entered the portals of our life in a big way and will continue to stay for a long time to come in modified packages. Since technology is impacting each and every domain of life, education has also been largely influenced by technology. Educational technology, in its wide sense as understood today, includes the development, application and evaluation of system, techniques and aids in the field of learning. Educational technology helps the teacher perform his task in an effective and efficient manner. It helps the teacher find and develop new systems, processes and strategies to achieve educational objectives to the maximum level in an effective and efficient manner. Educational technology provides the scope for using the principles and theories of psychology, and for the application of the technology and knowledge of other disciplines to enrich the teacher in the process of attainment of set goals. It helps the teacher in the development of cognitive, affective and psycho-motor abilities of the learners. Leaders in the field of education agree that all new teachers must graduate from teacher education programs with the knowledge and skills that will allow them to integrate technology easily and effectively into their

daily teaching, whatever the setting. Without a strong foundation in the knowledge and skills for using technology effectively, teacher candidates entering today's schools will fall short of meeting the "highly qualified teacher" expectations set out by the No Child Left Behind (NCLB) Act (2002).

Using CAI as a powerful tool is still in the base root level in our country and hence the investigator felt that there is a true case to develop CAI to teach the student. It will be an utter failure if for a Social Studies teacher tries to make his pupils understand a concept, which is already abstract, mere by a traditional method. Video and audio can play an effective role here. This paves the way for CAI teaching of Social Studies in a narrow sense and all subjects generally.

## OBJECTIVES OF THE STUDY

1. To study the effectiveness of CAI in teaching Social Studies.

**I. Anik Justina**

Asst. Professor

Pope John Paul II College of Education

Pondicherry

## HYPOTHESES

1. There will be no significant difference between the pre-test and post-test achievement scores in Social Studies of the experimental group students.
2. There will be no significant difference between the pre-test and post-test achievement scores in Social Studies of the control group students.
3. There will be no significant difference between the control and the experimental group students in their post-test achievement scores in Social Studies.
4. There will be no significant gain in the achievement of IX standard students in Social Studies by teaching them with the CAI method in comparison with their achievement by using the lecture method.

## RESEARCH METHOD

The present study is undertaken to study the effectiveness of CAI in teaching Social Studies to IX standard students. In order to study the effectiveness of CAI, the researcher uses the experimental method. Experimental design is the blueprint of the procedures that enable the researcher to test the hypotheses by reaching valid conclusions about the relationship between independent and dependent variables. True Experimental Design is adopted for the present study.

## DATA ANALYSIS AND INTERPRETATION

### Hypothesis 1

There will be no significant difference between the pre-test and post-test achievement scores in Social Studies of the experimental group students.

Table 1

### SIGNIFICANT DIFFERENCE BETWEEN THE PRE-TEST AND POST-TEST ACHIEVEMENT SCORES IN SOCIAL STUDIES OF THE EXPERIMENTAL GROUP STUDENTS

Control group	N	Mean	S.D	M.D	Calculated 't' value	Remark at 5% level
Pre-test	20	48.77	16.59	16.04	2.02	S
Post-test	20	64.81	16.11			

(At 5% level of significance the table value is 1.96)

As the calculated 't' value is greater than the tabulated 't' value, the hypothesis is rejected. It is concluded that there is a significant difference between pre-test and post-test achievement scores obtained by the experimental group students.

Research Paper

### Hypothesis 2

There will be no significant difference between the pre-test and post-test achievement scores in Social Studies of the control group students.

Table 2

### SIGNIFICANT DIFFERENCE BETWEEN THE PRE-TEST AND POST-TEST ACHIEVEMENT SCORES OBTAINED BY THE CONTROL GROUP STUDENTS

Control group	N	Mean	S.D	M.D	Calculated 't' value	Remark at 5% level
Pre-test	20	45.17	15.95	3.87	1.07	NS
Post-test	20	48.90	15.45			

(At 5% level of significance the table value is 1.96)

Since the calculated 't' value is smaller than the tabulated 't' value, it is found to be not significant at .05 level. Therefore the null hypothesis is accepted. It is concluded that there is no significant difference between the pre-test and post-test achievement scores in Social Studies by the control group students.

### Hypothesis 3

There will be no significant difference between the control and the experimental group students in their post-test achievement scores in Social Studies.

Table 3

### SIGNIFICANT DIFFERENCE BETWEEN CONTROL AND EXPERIMENTAL GROUP STUDENTS IN THEIR POST-TEST ACHIEVEMENT SCORES IN SOCIAL STUDIES

Post-test score	N	Mean	S.D	M.D	Calculated 't' value	Remark at 5% level
Control	20	48.90	15.45	15.91	2.04	S
Experimental	20	64.81	16.11			

Since the tabulated 't' value is less than the calculated 't' value, it is found to be significant at .05 level. Therefore the hypothesis is rejected. It is concluded that there is a significant mean difference between the control and the experimental group students in their post-test achievement scores in Social Studies.

**Hypothesis 4**

There will be no significant gain in the achievement of IX standard students in Social Studies by teaching them with the CAI method in comparison with their achievement by using the lecture method.

**Table 4**

**COMPARISON OF GAIN SCORE IN THE ACHIEVEMENT SCORES OBTAINED BY THE CONTROL AND THE EXPERIMENTAL GROUP STUDENTS**

Test	Control	Experimental
Post- test mean achievement	48.90	64.81
Pre-test mean achievement	45.17	48.77
Gain achievement	3.73	16.04

The pre-test mean achievement of the control group is 45.17 and for the post-test it is 49.90. The gain achievement is 3.73. In the experimental group, the pre-test achievement is 48.77 and the post-test achievement is 64.81. The gain achievement is 16.04. When the gain achievement scores are compared, experimental group has higher gain score. It is concluded that CAI is more effective than the lecture method.

**MAJOR FINDINGS OF THE STUDY**

The major findings of the study are:

1. Significant difference is found between pre-test and post-test mean achievement scores of the control and the experimental group students. It is inferred that the effect of CAI is more pronounced.
2. On comparing the gain scores of the two groups, it is found that CAI is very effective.

**CONCLUSION**

The present study was conducted to assess the effectiveness of CAI in relation to the conventional method of teaching Social Studies. It was found that in the CAI method students were actively involved in the process of learning which enhanced their achievement. Hence it can be concluded that CAI can enhance achievement, creative learning as well as the students' power of making immediate and effective responses.

**REFERENCE**

1. Sunil Behari Mohanty, (2001) *Computer Assisted Instruction. Journal of All India Association for Educational Research. Vol.13 Nos 1&2 pp 50-58.*
2. Srinivasan, P and Muthumanikam, R (2000) *CAI and the lecture method. A comparative study. Experiments in Education. WWW.Situedurnd.Org/leic. Vol.XXXVII NO. 3 p.15.*
3. Sahaya Mary, R and Paul Raj, I (2005) *Effectiveness of using model DLP by science teachers in teaching the lesson Heat and Temperature to standard IX students. Research and reflections in education. A quarterly journal. Vol.3.no.4 p16.*
4. Venkataiah, S (2004) *Education Via Internet. Anmol Publications Pvt. Ltd. New Delhi-110 002 p.97.*
5. Best, J.W., and Khan, J.V. (1992) *Research In education. New Delhi; Prentice Hall of India Pvt. Ltd.*
6. George, A. (2004) *Learning Strategies. Ajay Verma for Commonwealth Publishers, New Delhi-110 002 pp 47-48.*

Owned & Published by Rev. Dr. S. Sebastian, S.J. from St. Xavier's College of Education, Palayamkottai, Tirunelveli -2. Printed by G. Kanagasabapathi at Muthulethchumi Press, 123-G, Trivandrum Road, Palayamkottai - 627 002.  
Editor : Rev. Dr. S. Sebastian, S.J.