

**DEVELOPING A COMPUTER ASSISTED LEARNING PROGRAM FOR  
TEACHING GEOGRAPHY & FINDING ITS EFFECTIVENESS - A STUDY****Mr. Suhas Daphal**

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**Abstract**

*It is essential for the teacher to use various teaching methods & techniques in daily teaching. Computer assisted learning program is necessary to make the teaching –learning process effective. Though Geography is the mother of all sciences procedure & experience is important in Geography. At present the concept of E-class is the new trend of education. So it is demanded that students & teachers must use computer in their daily teaching learning process. So technology made it possible to bring world experiences & experiences of the world in the class. A unit taught with the help of lecture method is comprehended by the students less as compared to the same unit taught by computer assisted learning.*

**Keywords:** COMPUTER ASSISTED LEARNING, GEOGRAPHY, EFFECTIVENESS



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**Introduction:-**

All-round development of the students is the main aim of Education. In education process teacher, student & curriculum are the main aspects. The knowledge of teaching learning process is essential for the teacher to construct the content of the text book included in the syllabus effectively.

It is essential for the teacher to use various teaching methods & techniques in daily teaching. Computer assisted learning program is necessary to make the teaching –learning process effective. Though Geography is the mother of all sciences procedure & experience is important in Geography.

With the explosion of knowledge in 21<sup>st</sup> century a big revolution took place. If teacher will select some units from the text book & present it in the class with the help of computer assisted learning program then there will be liveliness & activity based teaching learning in the class. The western philosophers such as Plato, Rousseau, Thomas Edison & the Indian philosophers like M.K. Gandhi, Ravindranath Tagore & Yogi Arvindo had given importance to activity based learning.

**Rationale Of The Research**

At present the concept of E-class is the new trend of education. So it is demanded that students & teachers must use computer in their daily teaching learning process. So technology made it possible to bring world experiences & experiences of the world in the

class. A unit taught with the help of lecture method is comprehended by the students less as compared to the same unit taught by computer assisted learning.

So Researchers has taken this topic to teach B.Ed. students with the help of computer assisted learning program. The present study tries to throw some light on the issue of teaching learning through computer assisted learning program.

**Need Of The Study:-**

1. With the help of computer assisted learning students can understand various geographical concepts.
2. Computer assisted learning is essential to learn Geography with interest & to memorize it for a long time.
3. Present research is necessary to enhance to comprehension power of the student teachers.
4. Present research is necessary to increase the effect of the teaching.
5. It is the need of the time that student can understand difficult & critical units properly. Computer assisted learning is necessary for it.

**Importance Of The Research Study:-**

1. Computer assisted learning is important to get more information in less time.
2. To present particular & new content in front of the students effectively Computer assisted learning is important.
3. Computer assisted learning is important for to present units of the textbook lively in front of the students.
4. Computer assisted learning is important to enhance student teacher's personal critical & team work skills.
5. Computer assisted learning is important to increase student teacher's creativity, thinking power & efficiency.

**Objectives Of The Study:-**

1. To take the content test of B.Ed. students on Geographical units earthquake & volcano.
2. To make control & experimental group according to student's marks after the content test.
3. To teach the experimental group with Computer assisted learning & the control group with traditional method.
4. To find out the effectiveness of the program by the comparative study of the marks got by the student teachers of experimental & control group.

**Hypothesis:-**

**1. Null Hypothesis:-**

There will be no significant difference in the student teachers' scores of the experimental group after teaching them the Geographical units' earthquake & volcano with the help of Computer assisted learning program.

**2. Research Hypothesis:-**

There will be significant difference in the student teachers' scores of the experimental group after teaching them the Geographical units earthquake & volcano with the help of Computer assisted learning program.

**Operational Definitions:-**

**Computer assisted Learning Program :**

A program prepared by the Researcher with the help of Computer (PPT, Pictures, Video clips) for B.Ed. student teachers to learn Geographical units Earthquake & Volcano.

**Geography:-**

Geography is one of the school subject teaching at B.Ed. level as a teaching method for student teachers.

**Effectiveness:-**

The positive change in the scores of the student teachers in the post test is called as effectiveness.

**Scope Of The Study:-**

1. This Research includes one B.Ed. college of Lonavala city.
2. This Research includes B.Ed. student teachers’.
3. This Research includes Boys & Girls.
4. This Research study focuses on the effect of Computer assisted learning on the student teachers.

**Delimitations Of The Study:-**

1. This research study is related to Computer assisted learning program.
2. This research study is delimited for the earthquake & volcano units of Geography subject.
3. This Research includes one non aided Marathi medium B.Ed. college of Lonavala city.
4. This Research includes Marathi medium B.Ed. college of Lonavala city.

**Limitations Of The Study:-**

1. There is no any kind of control on the variables such as family, social, financial of the students, so some problems may create in their Computer assisted learning program.
2. Effect of stress, worry will be there in their Computer assisted learning program..’
3. There may be some negative kind of effect while learning with Computer assisted learning program among the student teachers’ because of illness, diet & less sleep.

**Population:** - All Marathi medium B.Ed. colleges in Pune district.

**Sample:** - Random sample was selected for study.

**For Control & Experimental Group**

30 students of Marathi medium B.Ed. college for control group & 30 students of Marathi medium B.Ed. college for experimental group.

B.Ed. college (30 students) 15 Boys +15 Girls.

**Research Method :-**Experimental Research method

**Research Design :-**

The Pre test Post-test two equivalent Group Design will be selected for research study.

**Tools Of Data Collection:**

**Pre Test:-**

To find out the existing level of the content knowledge of the B.Ed. student teachers’.

**Program :-**

To inculcate to develop a computer assisted learning program for teaching Geography to the B.Ed. student teachers.

**Post Test:-**

To find out the effectiveness of the program.

**Statistical tool t value:**

To analyze the data.

**About The Tool To Check The Effect Of Cal Program.**

The Researcher of this study has made the pre test & post test of 25 marks according to the blue print.

**About The Computer Assisted Learning:-**

Research has made the computer assisted learning programme for the student teachers'. Six periods are assigned for this program. In this program 70 minutes are given.

**Data Collection:-**

Researcher has collected the data by taking pre test & post test of the student teachers. Objective type written test of 25 marks is given to the students. Afterwards papers were checked & marks were given.

**Data Analysis & Interpretation :-**

The data collected during the pre test & post test was analyzed by using the 't' test. Graphical presentation was done with the help of line graph & bar graph.

On the basis of result of analysis of the data, hypothesis was tested & conclusions were drawn.

**Observation:-**

In the pre test only no any student teacher got more than 15 marks. There were 48 students who got (11-15) marks.

In the post test 08 students of experimental group got (16-20) marks. In comparison with the student teachers of control group student teachers' of experimental group got more marks in the post test.

**Interpretation:-**

There is a greater improvement of student teachers' of experimental group in the achievement level of the scores of post test as compare to student teachers' of control group. So we can say that our program was successful.

**Testing Of Hypothesis :-**

**1.Null Hypothesis :-**

There will be no significant difference in the student teachers' scores of the experimental group after teaching them the Geographical units earthquake & volcano with the help of Computer assisted learning program.

Sr.No.	Content	Experimental Group (Post test)	Control Group (Post test)
1	No. of student teachers (N)	30	30
2	Mean of the Scores (M)	$M_1 = 14.26$	$M_2 = 13.3$
3	Standard Deviation (S.D)	$\sigma_1 = 2.20$	$\sigma_2 = 2.35$
4	Difference between Mean	$M_1 - M_2 = D$ $14.26 - 13.3 = 0.96$ $r = 0.90$ <b>t Obtained value = 4.885</b> <b>t table value = 2.35</b>	

From the above table it is seen that the obtained 't' value is 4.885 which was greater than 't' table value 2.35 ,so the effectiveness of the program is significant at 0.01 level. It means that there is a significant difference in the scores of student teachers' of experimental group in

comparison with scores of student teachers of control group after implementation of the computer assisted learning program.

Hence, the stated hypothesis No.1 is rejected & the stated hypothesis No.2 is accepted.

The second hypothesis was stated as-

## **2. Research Hypothesis:-**

There will be significant difference in the student teachers' scores of the experimental group after teaching them the Geographical units earthquake & volcano with the help of Computer assisted learning program.

## **Major Findings Of The Study:-**

1. The Computer assisted learning program for teaching the Geographical units Earthquake & Volcano developed by the researcher was effective.

2. There is significant progress in the post test scores of the student teachers' from experimental group in comparison with student teachers' from experimental group.

## **Results:-**

The Computer assisted learning program developed by the researcher for teaching the Geographical units Earthquake & Volcano was effective.

There is significant progress in the post test scores of the student teachers' from experimental group in comparison with student teachers' from experimental group.

The Computer assisted learning program was helpful for student teachers to learn the Geographical units Earthquake & Volcano effectively.

## **Discourse:-**

This Research proved that if we will make a proper Computer assisted learning program for the student teachers than it will be useful for them to learn various topics This Research is very useful for the student teachers because Computer assisted learning program is the demand of the time.

## **Educational Implications :-**

The finding of the present investigation is important for to teach the student teachers various units of Geography. The following implications can be formulated from the study.

1. The study proved that the program helps the student teachers in learning Geographical units like Earthquake & Volcano effectively.

2. It will be useful for the student teachers to learn effectively with interest.

## **Conclusions :-**

1. The Computer assisted learning program developed by the research effective to teach the Geographical units like Earthquake & Volcano effectively .

2. The effect of the program was positive.

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