CHAPETER V

SUMMARY AND CONCLUSION

Information technology has affected all aspects of human life directly or indirectly. The rapid electronic advancements in the past couple of decades has enabled the production of a variety of computers for various purposes and interlinking them has brought about communication revolution and reaching knowledge to every nook and corner of the world wherever the technology is made available.

Though the use of the computers are widely seen in commerce and business, it has revolutionized the work environment in other fields of human endeavor including education, formal education which boasted until recently on the quality of human resources, the teachers and students and the print material has now of recent acknowledged the tremendous role of computers for imparting quality education to a hetrogenous population in the classroom. Computers can be used for the purpose of teaching and learning both inside and outside the classroom.

Computers also can be used to compliment and supplement the teaching in the classroom. It is a boon to the exceptional students whose learning requirements do not conform to that of the average student and hence the teaching that is imparted to the average majority in the classroom

is of little help to her/him. The thrill of self learning is great motivator to even

an average student. ... The different ... computer software

that are developed are more for commercial use rather than for educational

purposes. Most of the educational software available in the market are for

the school level. In this research the investigator has developed a software

for the purpose of teaching and learning a topic in the subject Educational

Psychology for B. Ed. course.

As computer is a bank of variety of information and converse with

the user, they are being used as resources in teaching and learning of all

levels of education and training. This process is known as Computer

Assisted Learning (CAL). Computer Assisted Instruction (CAI) is most

popular term used to describe the use of computers for instruction task.

Using this mode a learner can learn a lesson at their own pace and time.

Computers are also used to manage the learning process. This is called as

Computer Managed Learning (CML). Computers can store students

response to evaluate their performance and then admit him / her to next

learning.

STATEMENT OF PROBLEM

'DEVELOPMENT OF COMPUTER BASED SOFTWARE FOR
TEACHING AND LEARNING A TOPIC IN EDUCATIONAL
PSYCHOLOGY AT THE B. ED. LEVEL – A STUDY'.

This study intended to investigate the results of the computer based software in teaching and learning a topic 'Personality and Adjustment' of Educational Psychology to students of ,, S.M.T. Government college of Education, Kolhapur.

The suitability of the computer to teach a topic of Educational Psychology at B. Ed. level was tested by comparing students taught by traditional method and by computer method.

DEFINITIONS OF TERMS

DEVELOPMENT

For the purpose of this research 'Development' means preparation of a software.

COMPUTER SOFTWARE

It is a set of program that can be run in a computer.

A program is a set of logically sequenced instructions given to the computer using a computer language.

TEACHING

Teaching means to organize the desired experience together to enable the student to learn the subject matter.

For the purpose of this research teaching means organizing experiences to be given through the computers with the help of a software prepared for the same.

LEARNING

For the purpose of this research Learning means acquiring the subject matter presented through the computer.

SIGNIFICANCE OF THE STUDY

1. At present B. Ed. course content is taught in classroom without the assistance of computer. The computer software that is developed for the purpose of this study will compliment the teaching that will be done in the classroom and this software will enable students to learn the topic at their own pace benefiting the fast learners, slow learners as well as average learners. The students will have the joy of self learning.

2. This software can be repeatedly used by different students at different times at their convenience and then ensure that learning takes place.

3. This study may motivate other researchers to conduct similar studies and develop software for the B. Ed. course.

OBJECTIVES OF THE STUDY

1. To analyze the B. Ed. course content of the paper Educational
   Psychology and choose a topic for the preparation of computer
   software.

2. To develop a computer software to teach selected topic of
   Educational Psychology of the B. Ed. course.

3. To study the effectiveness of the software.

4. To motivate the teachers to use of computer to compliment their
   teaching.

5. To motivate students to use computer for self paced learning.

6. To make suggestions to the authorities to make more use of the
   computer for the purpose of teaching/learning.

HYPOTHESIS

There is no significant difference between the performance of
students learning through traditional method and through computers.

DELIMITATIONS OF THE STUDY

Due to the constraint of time for the M. Phil. Course the following
de-limitations are laid.

1.   Only one topic was selected from the Educational Psychology paper of the B. Ed. course of Shivaji University, Kolhapur the selected topic 'Personality and Adjustment' in Educational Psychology was
     which
     that is common to other Universities in Maharashtra.

2.   Only 60 students, 30 each in control group and experimental group was drawn in this experimental study.

3.   The sample was drawn from one B. Ed. college in Kolhapur affiliated to Shivaji University, Kolhapur.

RESEARCH DESIGN

In this research experimental design was used. The design of the study is as shown in block diagram where step by step development of the research is given in detail.
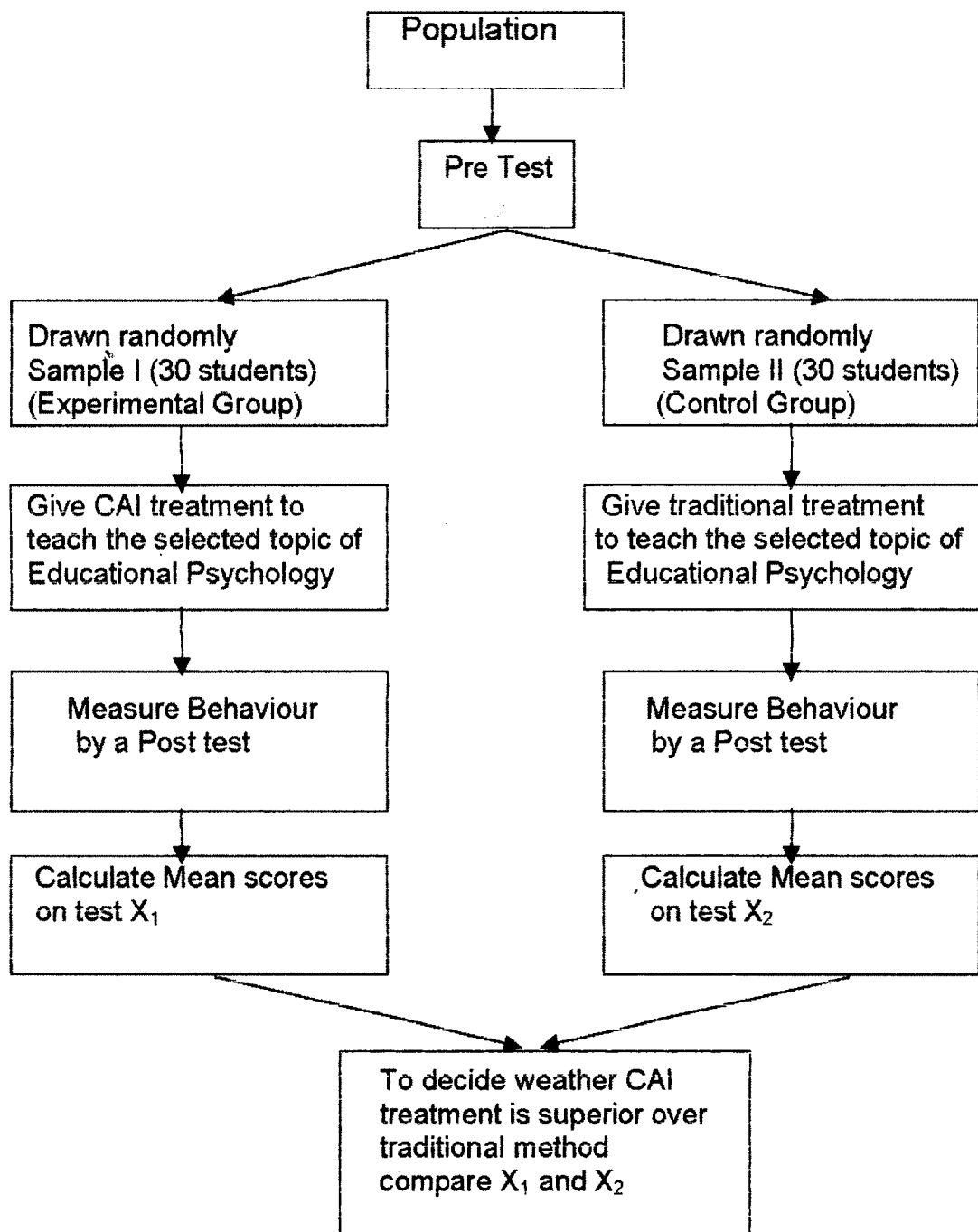
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                    ┌─────────────────┐
                    │   Population    │
                    └─────────────────┘
                             │
                             ▼
                    ┌─────────────────┐
                    │    Pre Test     │
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Drawn randomly Sample I (30 students) (Experimental Group)	Drawn randomly Sample II (30 students) (Control Group)
Give CAI treatment to teach the selected topic of Educational Psychology	Give traditional treatment to teach the selected topic of Educational Psychology
Measure Behaviour by a Post test	Measure Behaviour by a Post test
Calculate Mean scores on test X_1	Calculate Mean scores on test X_2

To decide weather CAI treatment is superior over traditional method compare X_1 and X_2

Fig No. 3 Block Diagram To Show Procedure Of Research Design. And Sample.

SAMPLE

The sample was drawn from one B. Ed. college in Kolhapur affilated to Shivaji University, Kolhapur.

S.M. T. Government College of Education, Kolhapur

NATURE OF SAMPLE

The students admitted to this institution are meritorious students and they have good teaching – learning facilities in the college.

DATA GATHERING TOOLS

PRE TEST AND POST TEST.

PRE TEST

A pre test was administered before teaching the topic and it was paper pencil in nature. It was administered for judging the previous knowledge of the students regarding subject Educational Psychology. Time given for solving the questions was 40 minutes and the test was of 25 marks. Objective type and short answer questions were asked in the test.

The nature of the pre test question paper was as follows :

Q1   Fill in the blanks.

Q2.   Match the groups.

Q3.   Define the terms.

Q4.   Answer the following.

The question paper of the pre test was shown to the Educational
Psychology teachers ᵒᶠ the B. Ed. colleges. Suggestions and opinions were
taken into consideration and then final pre test question paper was
administered. The pre test was conducted by the investigator with the
assistance of the teacher in the college for both the groups.

POST TEST

Control group was taught by the topic in the regular classroom
by traditional method
                                                                    then a
where as the topic was taught to experimental group by CAI method. ˙ post
test was administered to both the groups. Time given for the test was for 40
minutes. It carried 25 marks. The nature of the post test question paper was
as follows :

Q1.   Define the terms.

Q2.   Match the groups.

Q3.   Answer the following.

The test was of paper pencil type. Post test was conducted by the researcher with the assistance of teachers in the college.

TECHNIQUES USED FOR THE ANALYSIS OF DATA

Statistical techniques such as Mean, Standard deviation, t test were used to analyze the data.

CONCLUSIONS

1. The performance in the post test, given by experimental group was better than control group. The better performance could be because of better understanding of topic Educational Psychology learnt by using Computer Assisted Instruction (CAI) method as compared to traditional method.

2. As The Computer Assisted Instruction (CAI) method is found to be more effective method than traditional method for the topic 'Personality and Adjustment' of subject Educational Psychology in the B. Ed. syllabus. So, CAI method should be used for teaching other topics of Educational Psychology at B. Ed. level.

3. If computer software packages, floppies and CD's are available in the B. Ed. colleges, the students can learn the subjects at their own pace and time.

4. Teachers should be trained to use as well as prepare computer software for their own subjects, so that they can compliment their teaching.

5. If good computer software$ are provided all students, slow learners, fast learners and average learners can study the topics of their own speed.

6. If good software$ are provided the students and teachers will be motivated to use them and enrich their knowledge on the topics.

EDUCATIONAL IMPLICATIONS

The developments in the field of Education enable every one to use computer and encourage one to use computer and enhance their efficiency and effectiveness.

In the field of Education computer can be used for

A) 1. Revision of difficult topics.

2. For slow learners.

3. For remedial teaching and narrowing gap between slow and bright learners.

B) Computers are used in a wide variety of modern system which require different levels of training and specializations. Therefore educational qualifications for each level must be specified.

C)   There should be training courses for teachers who are not proficient in computers.

RECOMMENDATIONS

As CAI is found to be more effective than traditional teaching, the B. Ed. colleges should :

1.   Encourage teachers to prepare their own software to use as teaching aids.

2.   Procure computer software related to the subjects and encourage students to use them for learning.

3.   Encourage students to use the CAI packages during the free time, library work period and enhance knowledge and use them as supplementary material or complimentary to traditional teaching.

SUGGESTIONS FOR FURTHER RESEARCH

No research can be said to be complete in itself. The topic can be studied from various aspects with different objectives. This being an M. Phil. dissertation with the time restriction to the course being 2 years, due to the time constraint there was need to restrict the scope of the study.

For this reason, here it was very essential to give the suggestions for the further study as follows :

1. The study may be replicated comparing the performance of students when the software is administered in Marathi and English.

2. The study may be repeated to find out the sex difference while learning through CAI.

3. A study of students and teachers attitude towards computer and CAI.

4. A study of availability of computer resources in a limited geographical area may be undertaken for the study of use of computer in CAI.

5. While considering the student performance, teachers motivation towards computer based education may also be studied.

6. For the development of computer based software for other topics 'VISUAL BASIC' language may be used.