

CHAPTER - 7

LIMITATIONS AND SUGGESTIONS

The study entitled “**An experimental study of Computer Assisted Instruction and Conventional Method in attaining and retaining the Mathematical Concepts**” points out some limitations and directions for further work as mentioned below:

7.1 LIMITATIONS OF THE STUDY

- The instructional material both for CAI as well as Conventional Method was developed for some specified Mathematical Concepts at undergraduate level only.
- Microsoft Office Power Point 2007 inserting hyperlinks and actions were used for developing CAI material.
- The experiment was confined to the students of Banasthali Vidyapith Rajasthan at under graduate level. An experimental study of CAI and Conventional Method in attaining and retaining Mathematical Concepts of Algebra, Calculus & Numerical Analysis was conducted in different phases containing different sub studies in alternate sections. But all the groups were homogeneous in respect of their scores in their I.Q and basic education level. It was not possible for the researcher to cover selected units in one sitting according to the curriculum of Mathematics in Banasthali Vidyapith, Rajasthan. Moreover, the researcher being faculty in the Department of Mathematics, University College, Kurukshetra University had to join back after availing Teacher Research Fellowship of two years awarded by UGC under faculty improvement programme in XI plan.

- Total Duration of experiments was eight months. One month for Individual try-out, one month for Small Group try-out, three months for the Field try-out(Validation Testing) of developed tools and three months for the final experiments in three subject area : Algebra. Calculus and Numerical Analysis in Mathematics. All these experiments were administered in the beginning of the semesters in 2011, 2012, & 2013 under the supervision of Prof. Sarla Pareek in the Department of Mathematics and Statistics, Banasthali Vidyapith, Rajasthan. India.

7.2 SUGGESTIONS FOR FURTHER RESEARCHES

One of the outcomes of conducting any research study is to generate avenues for further researches. This study also points to the same directions for further work in the field of Mathematics and Multidiscipline Research:

- Effectiveness of CAI can be further analyzed for more sessions in attaining and retaining Mathematical Concepts.
- Similar research efforts can be put in with a sample drawn from wider geographical area and different types of Institutional environments.
- CAIM for Mathematics may be developed for Elementary, Secondary, Under Graduate and Post Graduate levels. It can also be developed for different concepts for different disciplines and utilized for Distant Learners in Indian class-rooms in an effective way.
- Comparison for Efficiency of CAIM on different Mathematical Concepts in different Universities at undergraduate level can be performed.
- Comparative studies at different levels may also be conducted to find the effect of CAI in attaining and retaining Mathematical Concepts.

- An experimental study may also be taken up for examining the interactive effects among methods, sex, and socio-economic status by controlling confounding variables.
- A study can be made to explore the attitude of the educators toward different types of learning materials.
- User friendly Software packages for different levels of learners in different discipline can be developed and used for effective teaching-learning process.
- The effectiveness of different learning packages for making Mathematics interesting and simple can also be judged in terms of the time taken, self-involvement, self-confidence and their attitude