CHAPTER VI

SUMMARY

6.1 Introduction
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The chapter contains a brief account of the present research. It is a concerned form of the investigation conducted by the present researcher with the purpose of providing a quick appraisal of the work contained herein. This chapter has been subdivided into six sections in the following form.

6.1 Introduction

With the advent of independence., India took the path of modernization in order to provide socio-economic justice to its people. The task entailed education of its people so as to help them to move out of their age-long conservation and acquire new ways of life through work, the rapid development of science is revolutionizing the conditions of life and society, its impact is now felt in every walk of our life. Therefore, with the kind of fast changing social set-up, educational objectives shall have to be modified with a view to make science and technology as an essential part in any educational programme.

With the rapid expansion of knowledge in science subjects, now it is a challenge to science teachers of today to evolve new 'teaching strategies' that may help the students to acquire the science concepts effectively.

Models of teaching is a discernible approach that can meet the need of the hour as it helps in designing suitable instructional strategies for
emotional, physical, social and intellectual growth of our students. The use of model determines the shape of particular learning activities because a model of teaching consists of guidelines for designing educational activities and environments, concept teaching provides a change to analyse the students' thinking processes and to help them develop more effective information processing strategies.

In learning or acquiring concepts, strategies play an important role. It is high time to analyse and identify appropriate strategies in the children for the acquisition of science concepts. In schools, emphasis should be made on strategies for learning various science concepts. Thus, the present study has been conducted to find out the strategies adopted by the children in acquiring science concepts and also, which type of strategy is more effective in acquiring different science concepts.

6.2 The Problem:

Reviews of the researches in the area of information-processing strategies and models of teaching by many scholars have confirmed a relative neglect of fundamental work for making the best use of models of teaching. With the changed requirement of mental competencies in context of concept attainment model and the information processing strategies adopted by children in acquiring science concepts was studied through this piece of work with the help of teaching science to class VII. In context of the said need, the present study has precisely been stated as:

"A comparative study of Information Processing strategies Adopted by children of 7th Grade Taught Through Traditional Method and Through Concept Attainment Model in Acquiring Science Concepts."
6.3 Objectives

The study was conducted to achieve the following objectives:

1. To study the types of information-processing strategies adopted by boys and girls of 7th grade in the acquisition of science concepts.
2. To explore the influence of socio-cultural status on information processing strategies adopted by children in acquisition of science concepts.
3. To study the relation between information-processing strategies and concept attainment in science.
4. To suggest ways of making science teaching more effective by inculcating appropriate information-processing strategies among children.

6.4 Hypotheses

1. There is no significant difference between experimental and control group in the acquisition of science concept.
2. There is no significant difference in the information-processing strategies adopted by experimental and control groups in the acquisition of science concept.
3. There is no significant difference between boys and girls of experimental group in the acquisition of science concept.
4. There is no significant relationship between socio cultural status and the levels of acquisition of science concepts.
6.5 Methodology

Quasi-experimental method was employed for the study with pre-test and post-test parallel group design using purposive sample in the form of two intact sections of class VII as control and experimental group in the same school. The students of both the groups were measured on information-processing strategies and achievement, during the pre-test.

The tools used to assess these variables were: Kaufman Assessment Battery for Children (K-ABC) by Alan S. Kaufman and Nadeen L. Kaufman for measuring the information processing strategies adopted by children. Achievement Test in Biology was developed by the researcher to measure the pre- and post-treatment achievement of the pupils.

During treatment, the researcher taught the selected content of Biology to the control group through traditional method of teaching and to the experimental group through concept attainment model of teaching.

Immediately after the treatment was over, the sample subjects were again assessed on the same variables i.e. information processing strategies adopted by pupils and scholastic achievement of pupils through same test as used in the pretest. Socio-cultural status of the pupils was also measured by using the socio-cultural status scale of Dabas. The statistical techniques used for the analysis of data included descriptive and inferential statistics. The descriptive statistics was applied to study the nature of data after computing mean and standard deviation. The inferential statistics include t-test the test of significance of difference and coefficient of correlation.
Individual effectiveness of traditional method and concept attainment model of teaching has been studied through t-test of pre- and post-test measures on the criteria variables as well as through standard error of mean gain in the variable score.

6.6 Major Findings

Following were the major findings of the study as per its objectives:

1. Concept attainment model of teaching is significantly more effective as compared to traditional method of teaching in terms of pupils' scholastic achievement.

2. Concept attainment model of teaching is significantly more effective as compared to traditional method of teaching in developing information processing strategies among students. It was also found that the teaching method does not affect the information processing strategies adopted by children.

3. Scholastic achievement of boys and girls did not differ when taught through concept attainment model of teaching.

4. Socio-cultural status was found effective in terms of pupils' scholastic achievement.