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Title of Thesis: **“A Study of Concept Mapping Strategy on Students’ Anxiety and Achievement Science at Secondary Level”**

## **ABSTRACT**

The findings of the present study have been discussed in relation to the objectives and the hypotheses framed in the beginning of the study. The findings are discussed under three major heads; concept learning in terms of science achievement, students’ anxiety towards science and students’ attitudes toward concept mapping.

### **Achievement in Science**

In the present study the concept learning is measured in terms of performance of students on science (post) achievement test. The measurement has been done with respect to overall learning in of science concepts.

That teaching science through concept mapping is significantly more effective than lecture cum discussion method of teaching in the overall achievement of science of the students of class IX. The difference between means of control group and experimental group is significant. Teaching through concept mapping is more effective in enhancing the science achievement as compared to the lecture cum discussion method of teaching.

### **Anxiety towards Science**

The finding of the present study indicates that teaching through concept mapping is significantly more effective than lecture cum discussion method of teaching to reduce science anxiety of secondary school students. The difference between means of control group and experimental group on anxiety scores is significant. Teaching through concept mapping is more effective than lecture cum discussion method of teaching to reduce students’ anxiety towards learning of science. The findings have come into existence due to the several studies.

This may explain why concept mapping lowers anxiety levels towards the learning of science concepts.

### **Observations**

In this section, present researcher observed students' thoughts and attitudes towards concept mapping teaching strategy. Using an Opinionnaire developed by researcher himself for this purpose. According to observation, the concept maps were found to have positive effects on students.

- The result of analysis of the opinions of the students shows that this method helped students in increasing their knowledge. Student seemed previously stressed working by this method; as the time passed with practice they began to like this method. Initially, they had problems to link the concept (information), but as the time passed almost 72% of the students began to link the concept (information) and they were found curious to work by this method. In other words, students were feeling satisfied and happy by working with this method.
- Concept mapping helped the students know many things with more clarity and also to figure out further examples and concepts. Almost each student was able to quote examples of a particular concept from their own experience and knowledge. They were able to derive new concepts while linking the information or the concepts. It indicated that students are curious and motivated to explore the concepts if subjects taught through this method (concept mapping).
- According to the observation, the most difficult part of concept mapping was writing propositions and arranging the concepts hierarchically.
- The easiest thing that was found in constructing concept maps was defining concepts and linking words.
- Students were active and they were at the centre of the teaching-learning process in this teaching technique.
- This method was loved by students in class activities and assessments, due to puzzle like structure of concept mapping. It was observed as an enjoyable activity by the students.
- Concept maps were very useful in terms of showing relationships between concepts and students who are having speaking difficulties.