Student Name: Anamika Chauhan

Supervisor: Prof Mehnaz Ansari

Deptt; IASE

Neme of Topic: A study of Effect of Concept Mapping on Understanding Social Science Concepts at Elementary Level

Key words – Effect, Concept Mapping, Understanding, Social Science, Concepts, Elementary Level

Introduction - In this study, the researcher tried to establish the effectiveness of concept mapping as a teaching learning strategy over the lecture cum discussion cum reading method of teaching, to the students of elementary level (class VI to VIII) in government schools. Analysis of the data shows an improvement in the conceptual understanding of the students taught through concept mapping over the students taught through lecture cum discussion cum reading method. Though improvement recorded in both the control and experimental group but the effect of concept mapping which was used in for intervention shows significant results as compared to the conventional method.

Need for the Study- Researcher found that students are not able to apply the relativity of concepts of social science in their day to day life due to lack of understanding of the subject. The researcher focused on this area so as to improve the understanding of the subject by developing a suitable teaching method for social science. It was observed by the researcher that concept mapping is being used as a teaching method for meaningful learning in the areas such as science, mathematics, accountancy, marketing, medicine, etc but is rarely used in the realm of social science. This gap in the research of social science motivated the researcher to study the use of concept mapping in social science.

Objectives of the Study

- 1. To study the effects of the conventional method in understanding different concepts of social science.
- 2. To study the effects of concept mapping method in understanding different concepts of social science.
- 3. To compare the student's conceptual clarity of various concepts of social science taught to them through the conventional method and through the concept mapping method.
- 4. To compare the student's ability to differentiate between various concepts of social science taught to them through the conventional method and through the concept mapping method.
- 5. To compare the student's ability to relate the theoretical concepts of social science with everyday life taught to them through the conventional method and through the concept mapping method.
- 6. To compare the ability of the student's application of social science concepts in daily life taught to them through the conventional method and through the concept mapping method.

The researcher adopted pre-test-post-test quasi experimental design.

In this study population comprises of students of government schools in Delhi. The sample consists of 106 students of class IX of Government Boys Senior Secondary School no 3, Tuglaquabad Extaintion, South Delhi which was selected by using random selection technique.

The study was confined to the students of class IX of Government Boys Senior Secondary in Delhi.

In the present study independent variable is **Concept Mapping as** teaching method and **Conceptual Understanding** is the dependent variable.

In order to collect required data for the present study, Achievement test (self-developed) and Intervention tool (self-developed) were used.

Data collection procedure of the study- Data collection procedure for the study was completed in three stages, **Pre- Test, Intervention Programme and Post- Test** on both experimental and control group.

Analysis of the Data- The analysis of data was done by using inferential statistical techniques.

Major Findings of the Study- The major findings of the present research are as follows:

- Conventional method of teaching when applied with student centric approach showed improvement in the students, as their pre- test and post -test scores were compared. The mean of pre-test was found to be 19.13 (21.02%) with a standard deviation of 5.98 and for the post-test control group it stands at 30.36(33.36%) with a standard deviation of 13.31. The difference between the two set of scores was 11.23 (12.34%).
- The effectiveness of concept mapping method in understanding various concepts of social science was found to be significant by comparing the pre- test and post- test score of the experimental group. The mean of pre-test score was found to be 19.13 (21.02%) with a standard deviation of 5.98 and for the post-test experimental group was found to be 49.91 (54.85%) with a standard deviation of 10.36. The difference between the pre-and post-test experimental group score was found to be 30.78 (33.83%) higher than the pre-test scores.
- A comparison of pre-test and post-test scores on student's conceptual clarity of various concepts of social science of both control group and experimental group using ANCOVA shows that the Fx value corresponds to .324 which shows that there is no significant difference between the pre-test scores of the two groups and proves that both the groups were equivalent. Fy is found to be 71.42 and t (\sqrt{Fy}) is found to be 8.45 which is significant at .01 level. This shows that the

treatment given to the experimental group is highly significant.

- When the data of the control group and the experimental group were compared for student's ability to differentiate between various concepts of social science value of t found to be 4.05 which is significant at .05 level.
- Students who were taught using concept mapping were able to relate the theoretical concepts of social science with everyday life in a better way. Value of t was found to be 5.26 which is significant at .05 level.
- Students who were taught using concept mapping had improved clarity of concepts which helped them improve their applicability of acquired knowledge as compared to the conventionally taught students. Value of t was found to be 5.2 which shows that treatment is significant at .05 level.

The conclusions drawn from the **present research have many implications** for the subject teachers and students. Few implications are: -

- Concept mapping helps the Teachers to have better understanding of the subject and also plays important role in developing the child's (students/ learners) interest in the concept.
- Concept mapping helps in creating democratic and student friendly classroom environment.
- Concept mapping is an effective method to understand the concept of social sciences because it reduces the vaugeness of the subject and makes it objective, presentable and very easy to understand for the learners.

Conclusion - The present study on the elementary class student of the government school for the effectiveness of concept mapping method provided an insight about the need for adopting concept mapping as an indispensable method for the improvement in the conceptual understanding of students.