SUMMARY

The concept of education has never been so important and central in the life of individuals, organizations, and societies in the history of our civilization as it is observed in the contemporary times.

So the demand of today education is to shift from verbalism or lecture method to learning by doing, learning by actively involving i.e. collaborative learning, cooperative learning. Concept Mapping “The most important single factor influencing learning is what the learner already knows, ascertain this and teach accordingly” (Ausubel, 1968). It clearly demands a strategy that would transform the position of the teacher from being active speaker to facilitator

Concept Mapping

Concepts are the basic unit of all types of learning. The concepts are the ways by which facts and experiences can be integrated and remain impressed in the mind much longer than facts. So to be successful in learning, students have to take possession of knowledge actively by seeking experts conceptual linkages between new concepts and those, they already possess.

Originally the method was developed by Novak at Cornell University in the 1960s. This concept emerges in the field of learning after new school of constructivism, which accepts active participation of the learner in construction of knowledge.

To conclude, we can say that earlier education was based on traditional methods of teaching, which were teacher centered but with the advancement and modernization these methods were replaced by new innovative methods like concept attainment learning, computer assisted instructions, co-operative learning, collaborative learning and Concept Mapping, which are learner centered methods. Concept map is a list of concepts with relational links and labels for these linking relationships. Concept Mapping is a graphic notation for representing knowledge in a connecting mode.

Achievement

Achievement signifies accomplishment or gain or a performance carried out successfully by an individual on the completion of task. It means all those behavioural changes which take place in an individual as a result of learning experiences of various kinds.
Crow and Crow (1954) defined achievement as the extent to which learner is profiting from instructions in a given area of learning i.e. achievement is reflected by the extent to which knowledge or skill has been acquired by a person from the training imparted to him.

**Achievement in Chemistry**

Chemistry is one of the main branches of Science dealing with chemicals and reactions. Here Achievement in Chemistry is considered as mean gain scores obtained by the students in the achievement test in chemistry.

**Achievement Motivation**

Every person wants to have a unique accomplishment, an accomplishment of excellence. When a person tries to manifest concern for excellence in his work, we call it as behaviour backed by achievement motive. Achievement Motivation is considered to be deep rooted and fixed in human nature. Achievement Motivation is a system of good direction that is closely associated to competence, higher standards of excellence, hope of success, aggressiveness, dominance perseverance and fear of failure. It is a desire to do well. Achievement Motivation sometime refers to as “The motive for mastery”.

So based on the above definition we can conclude, Achievement Motivation is the way through which one desires to obtain a higher standard with the help of goal directional human activity. It plays a significant role in shaping the total behaviour and personality, which in turn shapes the economic and social destiny of a given society.

**Study Habits**

The task of learning is not dependent on teachers’ alone. It is not only teachers’ responsibility but also of the learners’. Efficient learning depends not only on good teaching but also on satisfactory learning procedures. Efficient learning depends on learner's ability to schedule his time, the plan of his study, the habit of concentration, note taking, mental review, over learning, the judicious application of whole and part methods, massed and distributed learning and so on. In other words learning involves the development of Study Habits.

Thus, Study Habits are true indicators of individuality of a person. These are planned programme of subject mastery. They characterize the learner's learning character. In fact, every learner has a peculiar method of style of pursuing his or her academic tasks.
These Study Habits also serve as the vehicle of learning.

**REVIEW OF RELATED LITERATURE**

The present investigation is aimed at exploring the effect of teaching through Concept Mapping on the achievement of students in relation to their Achievement Motivation and Study Habits. Thus the review was divided and presented under these major heads:

- Teaching through Concept Mapping and achievement
- Achievement and achievement motivation.
- Achievement and Study Habits.

**STATEMENT OF THE PROBLEM**

EFFECT OF CONCEPT MAPPING STRATEGY ON ACHIEVEMENT IN CHEMISTRY OF IX GRADERS IN RELATION TO ACHIEVEMENT MOTIVATION AND STUDY HABITS

**STATISTICAL TECHNIQUES EMPLOYED**

SPSS software was applied on the data in order to analyze the descriptive and inferential statistics

**RESULT AND CONCLUSIONS**

The following conclusions were drawn from the present study:

- Achievement in Chemistry of group taught through Concept Mapping is significantly more as compared to group taught through traditional method. Thus Concept Mapping proved to be a better instructional strategy over traditional method in increasing achievement in Chemistry.

- Students with high Achievement Motivation score significantly better in Chemistry than the students with low Achievement Motivation which means that the students having high Achievement Motivation and low Achievement Motivation significantly differ in their Achievement in Chemistry i.e Achievement Motivation is an important factor of achievement.

- Students with good Study Habits score significantly better in Chemistry than the students with poor Study Habits which means that the students having poor Study
Habits and good Study Habits significantly differ in their Achievement in Chemistry i.e. Study Habits is an important factor of achievement.

- Interaction between Achievement Motivation and method of teaching does not affect the Achievement in Chemistry significantly whereas Students with low Achievement Motivation of experimental group are significantly better in Achievement in Chemistry than the students with low Achievement Motivation of controlled group and students with high Achievement Motivation of experimental group are significantly better in Achievement in Chemistry than the students with high Achievement Motivation of controlled group leading to insignificant interaction between Achievement Motivation and method of teaching.

- Interaction between Study Habits and method of teaching does not affect the Achievement in Chemistry significantly whereas students with poor Study Habits of experimental group are significantly better in Achievement in Chemistry than the students with poor Study Habits of controlled group and students with good Study Habits of experimental group are significantly better in Achievement in Chemistry than the students with good Study Habits of controlled group leading to overall insignificant interaction between Study Habits and method of teaching.