A STUDY OF THE EFFECTIVENESS OF CONCEPT ATTAINMENT MODEL OVER CONVENTIONAL TEACHING METHOD FOR TEACHING SCIENCE IN RELATION TO ACHIEVEMENT AND RETENTION

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Teaching models are just instructional designs. They describe the process of specifying and producing particular environmental situations which cause the student to interact in such a way that specific changes occur in behaviour. The teaching model are very useful for teachers for planning and organising teaching activities. The teacher can make its use in planning curriculum, student teacher interaction and to develop specific teaching aids. J.S.Bruner, the author of the Process of Education (1960) and Toward a theory. The information process teaching model provides knowledge and understanding to the students about new information and facts.

Prof. of Instruction (1966) has advocated certain types of learning and determining what one is attempting to teach the learner. He has stressed the active and conceptual aspects of learning such as classifying, concept learning and discovery learning.

Prof. Jerome Bruner’s ideas are similar to piaget’s in that he views intelligence as developing through series of stages.

Bruner give more emphasis than piaget to the process of thinking and stresses the role of language. He has given three modes of learning Enactive, Ionic and Symbolic. These three modes of learning form a developmental order.

A very young child will learn principally by the enactive mode and as he grows older, the ionic and then the symbolic became more important. Prof. Bruner have studied the growth of children from the point of intellectual development. He recommended the use of discovery approach, intrinsic motivation and providing instructional material for learning.

Systematic interactions between a teacher and a learner are necessary for cognitive development. The child maintain a balanced relationship with environment. The investigator keep in mind these ideas about the development of thinking and should select concept attainment model of teaching.

Objectives- 1. To study the effect of teaching model on attainment of concept at high school level. 2. To study the relative effectiveness of concept attainment model and conventional method of teaching at high school level. 3. To study the effect of teaching model on achievement at high school. 4. To study the effect of teaching model on retention of high school level.

Hypothesis- 1. Teaching through teaching model (concept attainment model) and conventional method affect academic achievement of high school level. 2. Teaching through concept attainment model and conventional model affect attainment of concept in high school level. 3. Teaching through concept attainment model affect retention in high school level.

Sample of study- In the present study a sample of one hundred and twenty students of VII standard of public school will be taken from Jaipur city. In the present study pre-post experimental design is used this design consists of experimental and control groups both. The experimental group is taught through concept attainment model and the control group by conventional method by the teacher of the school (whatever the method they used).

Tools for the study- For the present study self made achievement test in science (pre and post) Preparation of unit plan and lesson plan on concept attainment model for the experimental group is used.. Concept attain test (CAT) by Anuradha Joshi and Ratanmala Arya is also administered.

Method of study- In this study pre-post experimental method has been used. The gathered data is treated with mean SD and ‘t’ test.

Findings- 1. The achievement of students who were taught by concept attainment model were found to be better than conventional method. 2. Concept
attainment model was more effective than conventional method with respect to the scores on attainment on the concept in science. 3. Concept attainment model was more effective than conventional method in the retention of concept.

**Conclusion**-Student learn best by being actively involved in learning, by conducting an experiment, participate in group work. Pupils need concrete first hand experiences as basis of concept formation. Most of the science learning is teacher centered or science text book oriented or examination oriented. There is a need to rewrite the science text book which provide sufficient scope for learner to investigate and experiment. The book should be learner centered. The science concept should be matched with school level.

**REFERENCES**

Teaching models help students develop such approaches in themselves. Such models assist students’ development and consider them as individuals with ability to enhance logical thinking and behavior and create social skills and commitment (Behrang & Aghayari, 2004). So the purpose of this study was investigate the effectiveness of constructivist teaching method on students’ mathematic academic achievement (learning the knowledge, learning the concepts, learning the application, learning the analysis, learning the synthesis, learning the evaluation). Attainment model over conventional teaching method for teaching science in relation to achievement and retention. 

Dr. Aarti Kalani. Teaching models are just instructional designs. They describe the process of specifying and producing particular environmental situations which cause the student to interact in such a way that specific changes occur in behavior. 2. To study the relative effectiveness of concept attainment model and conventional method of teaching at high school level. 3. To study the effect of teaching model on achievement at high school. 4. To study the effect of teaching model on retention of high school level. Hypothesis-1. 2. Concept Attainment Model (CAM). 3. Objectives of the study. 4. Hypotheses. Therefore there is a need to study the effectiveness of the teaching methods in physics. This study is based on facts collected from two schools in Mohindergarh (Haryana). The main aim of this study is to bring out the relative effectiveness of concept attainment model of teaching and conventional method of teaching on the achievement of students for acquisition of physics concepts in class IX. The term Concept Attainment Model is historically linked with the work of Jerome S. Bruner and his associates. This Model is intended to teach specific concepts by comparing and contrasting examples that contain the concept and that do not contain the concept. It is built up from Bruner’s work.