

EFFECT OF CONCEPT ATTAINMENT MODEL ON ACADEMIC ACHIEVEMENT IN HINDI

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ABSTRACT

Concept attainment model as an approach to teaching is concerned with the Concept formation and concept attainment. The study aimed at finding the effectiveness of concept attainment model of teaching on achievement in Hindi of standard VIII pupils. Concept attainment is a process of finding out defining attributes of a given category. Concept attainment model helps to clarify ideas. It engages students in formulating a concept through the use of examples. Concept attainment model is well suited to classroom use. The study was conducted on class VIII students by using experimental method. The sample of the study included 74 class VIII students. Purposive sampling technique was used to collect data. Intelligence test was used for selection of experimental and control groups. The students were divided into two groups on the basis of intelligence test score. The experimental group was taught through concept attainment model and control group was taught by using traditional method. After completion of teaching achievement test (self-developed) was administered. For drawing out the result, t-test was used. The result showed that students exposed to concept attainment model possessed higher score than the students taught through traditional method.

Keywords- Concept Attainment Model, Academic, Achievement

The teaching process is the focal point of entire educational process. Learning appears before us as a result of teaching. These days, all the research efforts of educationists are absorbed in making the teaching and learning process effective. The process of teaching - learning aims at transmission of knowledge, skills; and formation of attitude, values and behavior. The teacher's role is to encourage children to use cognitive process at the maximum by using the best teaching strategy. Every day a new teaching system appears. Also, each and every term in the field of education is being interpreted comprehensively so that the teaching can be defined scientifically. Various educationists have given their own definitions to interpret the term teaching and on the basis of these definitions, the different models of teaching have been prepared. Models are prescriptive teaching strategies designed to accomplish particular teaching goals. Model is a way of thinking; a way to talk and think about instruction,

in which certain facts may be organized, classified and interpreted. The teacher-learning process is the important variable that influences directly on achievement of the students. The effective teaching strategy helps the students to attain the educational objectives in a better way. Teaching is considered as the sharing of experiences between teacher and students in a teaching learning situation. A model of teaching is such a specific pattern of plan, which can be used to shape curriculum, to select instructional material, to guide teacher's action and to help the learner to achieve the specific objectives.

The objective of teaching is the optimum development of the learner. Teaching is to cause the pupil to learn and acquire the desired knowledge, skills and desirable ways of living in the society. In modern age, teaching is considered as science on the basis of which all the activities of teaching can be supervised and analyzed. It is the interaction between the teacher and the learner, under the

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teacher's responsibility, in order to bring about desired change in learner's behavior. Thus, teaching is a process of helping the learner to acquire desired behavior. The most recent concept of teaching is to teach the child how to learn; how to discover; how to think; and how to inquire. The emphasis is upon 'how to know' rather than 'what to know'.

Teaching methods are recurrent instructional process applicable to content of various subjects offered in educational institutions and usable by more than one teacher. The research in the field of teaching learning has brought a revolution in the field of education and it leads to development of certain models in teaching. Each model has a distinct point of view about how people think and how to effect the ways they operate on information. The different models vary on their teaching approaches. Different models of teaching are required to realize different instructional goals. Thus, a teacher, to be effective should be able to recognize different kinds of instructional goals and select appropriate teaching models to realize the specific instructional goals. Models of teaching are designed to impart repertoires while helping students to learn information, ideas academic skills, developing social skills, values and understand themselves and their environments (Joyce and Weil, 1972).

Models of teaching are prescriptive teaching strategies (Eggen et. al. 1979). They differ from general approaches of teaching in that they are designed to realize specific instructional goals. General approaches to teaching are considered to be applicable to all teaching situations. These models of teaching are not a panacea or applicable to all teaching situations. They are rather prescriptive teaching strategies aimed at specific instructional goals. The scope of research in the field is very vast because the concept of models of teaching is multi-dimensional. The use of models requires an ability to specify precise learner outcome so that a specific model can be selected to match a particular goal. The concept attainment model belongs to the category of information processing model firstly suggested by Joyce and Weil (1972). It is based on research of This model was developed by Jerome Bruner, Jacqueline Goodnow and George Austin (1956). Usually it is named as Bruner's Concept Attainment Model. It is an indirect

instructional strategy that uses a structured inquiry process. The concept attainment model is an inductive teaching strategy designed to help students of all ages to learn concepts and practice analytical thinking skills. Model is designed to help students to gain understanding of concepts and to develop critical thinking ability. The main feature in this model is testing hypotheses generated by the students. The teacher role is to create an environment in which students feel free to think.

Concept attainment model is an approach to teaching concepts with the help of examples and non-examples which a teacher provides to the students. Concept attainment model emerged out of the study of thinking process in human beings. It is concerned with the concept formation and concept attainment. Concept formation is the process of sorting of given observation of phenomena into meaningful classes. Concept attainment is a process of finding out defining attributes of a given category. In concept formation the examples of a concept are categorized together and in concept attainment the negative and positive examples are differentiated. In concept attainment model, students figure out the attributes of a group or category that has already been formed by the teacher. To do so, students compare and contrast examples that contain those attributes.

Concept attainment is indirect instructional strategies that use a structured inquiry process. It belongs to the category of information processing model. Concept attainment is largely based on the works of the cognitive psychologist Jerome Bruner, Goodnow and Austin in 1956. They defined concept attainment or concept learning as the search for and listing of attributes that can be used to distinguish examples from non-examples of various categories. Concept attainment model helps to clarify ideas and to introduce aspects of content. It engages students in formulating a concept through the use of examples. All thinking abilities can be challenged throughout the activity with experience. They also provide practice in inductive reasoning and opportunity for altering and improving student's concept-building strategies and nurture an awareness of alternative perspectives sensitivity to logical reasoning in communication and a tolerance of ambiguity. It also helps the teachers to

understand the effectiveness and necessity for the application of model approach in teaching. Concept attainment model is very useful in teaching the concepts through the inductive reasoning. The model works wonders in classroom for language learner as they attain the linguistic structure, grammar or the synthetic structure of every language. The concepts formed in minds of the learners can be retained by them in the mind for a long time. Concept attainment model helps the students to work together in cooperative group to present information. Students may become open minded to other people's thoughts and ideas through their group work. Students easily learn how to examine a concept from a number of perspectives.

Mehra (1986) studied that concept attainment model is superior to traditional method. Eagnrade (1987) in his study compared the achievement on science through concept attainment model and lecture method and reported that combination of concept attainment model and lecture method was significantly superior to the conventional method of teaching science. Zacharia (1989) assessed the effect of concept attainment model on teaching of economics and found that concept attainment model is more effective than the conventional method in teaching of economics. Verma (2000) reported that integrated teaching strategy improves the inductive reasoning ability of the students. Kalani (2008) in a study found that achievement of students who were taught by concept attainment model was better than those who taught by the conventional method. Aruna and Smitha (2009) studied the effectiveness of concept attainment model of teaching with constructivist method of teaching an achievement in biology. The study findings showed a significant difference between the mean scores for achievement between experimental and control groups. Basapur (2012) demonstrates the superiority of concept attainment model over traditional method in raising the achievement of pupils.

Researcher conducted on concept attainment model depicts that student's learn better when taught through this model. However, studies determining the effectiveness of concept

attainment model on academic achievement of students in language are very sketchy. Therefore this study was undertaken to find out the effectiveness of concept attainment model on academic achievement in Hindi.

OBJECTIVES

Objectives of the study were:

- To find out the effectiveness of concept attainment model of teaching on academic achievement in Hindi.
- To find out the effectiveness of traditional method of teaching an academic achievement in Hindi.
- To compare the effectiveness of concept attainment model with traditional method of teaching of Hindi.

METHOD

Sample

Purposive sampling technique was used. The study was conducted on a sample of 74 students of class VIII.

Measures

- Intelligence test, developed by Dr. S.S. Jalota was used for selection of groups.
- Achievement test in Hindi prepared by investigator.

Procedure

In the present study experimental method was used to collect data. Pretest-posttest experimental design was used in the study. Intelligence test, developed by Dr. S.S. Jalota was used for selection of groups. Students of both experimental and control groups were selected on the basis of their intelligence test score. The students were divided into two groups, i.e. experimental group and control group. The experimental group was taught through concept attainment model and the control group was taught through traditional method. The effectiveness of concept attainment model on academic achievement in Hindi was determined by administering the achievement test on both the groups of students. Self-constructed achievement test was used for finding the achievement of the students in Hindi.

Result and Discussion

Table 1: Data and result of the test of significant of the difference between the means of pretest scores of pupils in the experimental and control groups

Variable	Experimental group			Control group			t-value	Level of significance
	N ₁	M ₁	SD ₁	N ₂	M ₂	SD ₂		
Pre-test	36	28.40	1.724	38	27.75	2.446	1.53	NS

NS: Not significant

Table 1 indicates that t-value (1.53) is not significant at 0.05 level of significance. So the null hypothesis that "There exists no significant difference between students achievement on the

pre-test taught through concept attainment model and traditional method is accepted and it is concluded that there is no significant difference between the achievement of both groups.

Table 2: Data and result of the test of significant of the difference between the means of post-test scores of pupils in the experimental and control groups

Variable	Experimental group			Control group			t-value	Level of significance
	N ₁	M ₁	SD ₁	N ₂	M ₂	SD ₂		
Pre-test	36	41.55	1.67	38	29.12	8.73	8.84	0.01

Table 2 indicates that t-value (8.84) is significant at 0.01 level of significance. So the null hypothesis that there exists no significant difference between students achievement on the post-test

taught through concept attainment model and traditional method is rejected and it is concluded that there is significant difference between the achievement of both groups.

3: Difference between the experimental and control groups

Variable	Experimental group			Control group			Mean diff.	t-value	Level of significance
	N ₁	M ₁	SD ₁	N ₂	M ₂	SD ₂			
	36	40.17	3.20	38/	34.52	4.56	5.65	6.41	0.01

Table 3 indicates that data of the experimental and control group in academic achievement in Hindi. The mean score of the experimental group is 40.17 and that of control group 34.52. The SD of the experimental group is 3.20 and that of the control group is 4.56. The mean difference between the two groups is 5.65. The t-value is 6.41 which is significant at both the levels. This shows that null hypothesis that there exists no significant difference between the experimental group and control group in their academic achievement in Hindi is rejected. It can be said that the academic achievement of the experimental

group in Hindi is higher than that of the control group.

Conclusion

In this study an attempt was made to explore the effectiveness of concept attainment model on academic achievement in Hindi. Concept attainment model was found to be effective in influencing the achievement level of class VIII students in Hindi. It helps to clarify ideas and to introduce aspects of content. Achievement level of the students in Hindi taught through concept attainment model was found to be higher than the achievement level of students taught through the

traditional method. The students of experimental group were looking well motivated and ready to learn through the concept attainment model.

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Some references are missing

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