A Comparative Study of Concept Attainment Model and Traditional Method: An Experimental Study

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“Schools, faculties and individual teachers create life in school by models of teaching they choose and create.”

Bruce, Joyse

In behaviour modification and in the task of helping the individual to learn good habits, to imbibe desirable attitudes, interests and so many other personality characteristics, the term model or modelling is used in presenting some ideal figure or behaviour for the purpose of its copying or imitation by the individual concerned. A teacher, a leader or a screen hero may work as a model for a child and he may pick up the behavioural traits of the personality of that model.

In other way models are profoundly used by the artists, architects or engineers in their professional activities, initially the models of dams, projects, installation or construction of machinery and equipment are prepared by the concerned engineers and then the work is carried out exactly as it has been laid down in the model. The architect also provides us with same models when we happened to consult him for the construction of the building of our house.

Teaching is generally considered as an activity which is designed and performed for multiple objectives, in terms of changes in students’ behaviours. Students on the other hand, have multidimensional personalities having different learning styles. The common implication of both these facts is that the teacher should use different strategies of teaching which matches the objectives of teaching on one hand and students’ learning styles and personality dimensions on the other. In order to purpose it, different educationists and pedagogists have transformed prevailing theories and theoretical knowledge into different ‘models of teaching’ which can be readily used by teachers in schools as well as college setting.

Jerome S. Bruner, Jacqueline Gooraw and George Austine developed the concept attainment model of teaching in 1956. The Concept Attainment model belongs to the category of
information processing model. It is used for teaching concepts to the students. It enables them to understand fully the similarities and relationship among various things present in the all around environment.

**Concept Attainment Model in terms of elements**

1. **Focus**- The main focus of this model is to develop inductive reasoning of the students.

2. **Syntax**- A problem is placed before the students. The problem should be related to life situation of the students. The students has to gain experience by solving the real problem. A group of students attempt to solve the problem by performing certain tasks.

3. **Social system**- The teacher has a control of classroom action. He should do so actively and wisely. He should give reasonable freedom to the students for discussion with each other. Proper interaction between the teacher and the learners and also the interaction of the learners with one another makes the system socially efficient.

4. **Support system**- The nature of data should be such that students may understand and identify the concept. The lesson required concept which can be arranged so that concepts may be drawn from the material. The material should be presented in discrete units, positive or negative. The students should know these sources of data or material.

5. **Application**- This model works wonders in teaching. The concept to the young learners through inductive reasoning. The different concept which other wise are difficult for the learners become easy. They are able to develop some interest in learning by this model. Then the problematic areas of some other disciplines which seem to be difficult for the learners can be taught easily to the learners. The concepts formed in the minds of the learners can be retained by them in the mind for a long time.

**Objective of the study**

To compare the effectiveness of traditional teaching and concept attainment model for Class IX and the achievements of the same.

**Hypothesis**

Null hypothesis selected by the researcher.
‘If two groups of 9th grade students are taught the subject of Science with the traditional method and concept attainment model then there will be no significant difference in their achievement’.

Sample

Researcher divided the students of class 9th of Govt.S.S.S. Delwada, Beawar into two groups by random sampling. For this the alphabetical order of the students was prepared and put the students coming on even numbers in one group and the students coming on odd numbers in the other group. when two similar groups are formed by tossing the coin.

One group will be the experimental group and the second group was defined as the control group. The number of of students in each group is 25.

Equipment

The following self-made instruments were used for the research work.

a) Pre test for prior knowledge measurement

b) After providing instruction, the post test for the performed measurements.

Method

The Experimental method was used in this research.

Data Analysis

Pre test

<table>
<thead>
<tr>
<th>Table-1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Group</strong></td>
</tr>
<tr>
<td>Control Group</td>
</tr>
<tr>
<td>Experimental Group</td>
</tr>
</tbody>
</table>

It is clear from the above table that the mean of the test before the controlled group is 11.2 and the standard deviation is 3.54 and the mean of the experimental group is 15.88 and the standard deviation is 5.04 .CR value is 3.79 which is higher than the the 0.1 and 0.5 significance level.
Post test

Table-2

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>C.R. Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control Group</td>
<td>12.56</td>
<td>2.69</td>
<td>12.83</td>
</tr>
<tr>
<td>Experimental Group</td>
<td>24.28</td>
<td>3.69</td>
<td></td>
</tr>
</tbody>
</table>

It is clear from the above table that the answer of the control group, mean and standard deviation of the test are 12.56 and 2.69 respectively and the mean and standard deviation of the experimental group higher test is 24.28 and 3.69 respectively values that exceed .01 and .05 significance level.

**Conclusion and Implication**

The hypothesis created by the researcher is taught to the groups of students of 9th standard from the traditional method of science subject and the concept attainment model then there was no significant difference in their achievement. After research the cr’s value achieved has exceeded the significant level of .01 and .05. Null hypothesis has been rejected. The achievement of students has increased from the teaching with the concept attainment model.

This model guides Teachers to go to the depth of the content and can be used also in teaching of fundamental of mathematics, language, grammer. It is helpful in developing the power of imagination of the students and helps students to analysis things systematically. This model is also an evaluation tool. It can be used with students of all grade and helpful in development of reasoning power of the students.

**References**


8. usablestats.com/calcs/2sample&sample=1.

9. slideshare.net/sahin12/concept-attainment-model-42987280.