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# COMPARATIVE STUDY OF MODELS OF TEACHING ON ACHIEVEMENT OF 10<sup>TH</sup> STANDARD STUDENTS

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Abstract

Models of Teaching are the effective way of Teaching. In many researches it is proved that it is more effective than regular traditional teaching methods. In present research Inductive Thinking Model and Concept Attainment Model is used to teach one of the Unit of Science subject for 10<sup>th</sup> standard. Post-test only-Equivalent group designed was used. The result of achievement test showed that the Inductive Thinking Model is more effective than Concept Attainment Model.

*Keywords: - Models of Teaching, Inductive Thinking Model, Concept Attainment Model, Metals and Non-metals.* 



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#### Introduction:-

In this dynamic world everything is changing very fast. Many changes are also occurring in teaching field. Now a days there is a need to reconstruct the teaching methodologies. Restructuring of Science teaching is very important for the students to learn Science better in this scientific world.

This reconstructing should help the Science teachers to know many teaching strategies, models and methods so that they can be used effectively in the classroom. The models which can be used to teach Science are Concept attainment Model, Advance Organizer Model and Inductive Thinking Model, Inquiry Training Model etc. All these are from the Information Processing family. These help the students to think and process information.

The higher order thinking skills the very ones our students in this computer society are often left out. Therefore the new millennium teachers need to have exact and sound teaching strategies that will help to brain out learning outcomes in all levels of cognitive, affective and psychomotor domain. Bruce Joyce and Marsha Weil (1996:11) in their book 'Models of Teaching' explained about various models that can help the teacher to bring out

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the best learning outcomes in the students. These needs to be used by every teacher specially Science teachers, since "Science' is ruling the present world and has established its supremacy in every field (Bhatia and Bhatia 2000:390)

Therefore the researcher used the models to teach Science subject to 10<sup>th</sup> standard students in Pune city.

For the present research, the researcher has selected the unit 'Understanding Metals and Nonmetals' from 10<sup>th</sup> standard Scioence book of S.S.C Board. For teaching this unit the researcher used Inductive Thinking Model and Concept Attainment Model.

**Title of Research**: - Comparative Study of Models of Teaching on Achievement of 10<sup>th</sup> standard students.

#### **Operational Definition: -**

- Comparative Study: Comparison between the scores of achievement test between Inductive Thinking Model and Concept Attainment Model.
- Models of Teaching: Models of Teaching is a plan or pattern that we can use to design face to face teaching in classroom or tutorial setting and to shape instructional material including books, tapes,computers mediated programs and curricula.... (Joyce B. & Weil M.)
- Achievement: An Achievement test was developed which was based on the unit 'Understanding Metals and Non –Metals'.
- 10<sup>th</sup> Standard: The students who were studying in 10<sup>th</sup> standard of S.S.C. Board School.

#### **Objectives: -**

- 1. To find out the mean scores of post-test of Inductive Thinking Model and Concept Attainment Model of 10<sup>th</sup> standard students in achievement test for Science subject.
- 2. To compare the effectiveness between Inductive Thinking Model and Concept Attainment Model.

#### Scope: -

- Any content of Science can be taught by using Inductive Thinking Model and Concept Attainment Models at any standard.
- Use of Inductive Thinking Model and Concept Attainment Model is also suitable to teach other subjects of any Board.

#### Limitations: -

There was no control of researcher on interest and attention of students in Science subject.

# **Delimitations: -**

- 1. The present research was limited only for Science subject and only one unit ie. 'Understanding Metals and Non-Metals '
- The teaching programme was done only for 10<sup>th</sup> standard students of Abhinav Education Society's English Medium School, Ambegaon(bk), Pune. The S.S.C. Board, English medium School.

**Population:** - All English medium school students studying in 10<sup>th</sup> standard of S.S.C. board schools.

Sample and Sampling: -Non Probability- Purposive Sampling.

For this research the 10<sup>th</sup> standard 'A&B' division students of Abhinav Education Society's English Medium School, Ambegaon (bk), Pune were selected Total 49 students were there in the class.

#### Assumptions:-

• Models of Teaching are more effective than Traditional Methods of teaching.

### Tools for data collection: -

- An achievement test- An achievement test was framed based on the unit 'Understanding Metals and Non –Metals'. It was used as post-test.
- Statistical tool: Mean and t- test were used.

Research Method- Experimental method- The post-test only, equivalent group design

Type of Research: - Quantitative research-

Applied research.

#### Variables-

Independent variable: - Use of Inductive Thinking Model and Concept Attainment Model.

Dependant variable: - Achievement of Students.

Controlled variable: - Subject and Unit, Time duration of Teaching.

**Data Analysis and Findings**: - The summary of data analysis is given in tabular form as follows.

Post-test mean (Inductive Thinking Model) =
Post- test mean( Concept Attainment Model) =

The value of 't'=

**Conclusion:** - The Inductive Thinking Model was More effective than the Concept Attainment Model.

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