

Effectiveness of Concept Attainment Model in Teaching English Language

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Abstract:

Language plays a key role in every domain of student life. In the Indian context, there is diversity in language in our Indian culture but there is a hidden unity inside. Now a day the process of education has changed drastically in the 21st century. With the advanced development of technology, language learning in all its forms has become very challenging today. There has been a huge gap in teacher teaching and students learning. Amidst such condition it has been found by the researcher that model based teaching overcomes the above problem. As far as concepts in language learning are concerned, CAM can be very effective.

In the present study researcher choose CAM method of instruction to teach concepts of English Language grammar namely nouns and adjectives with the objective to assess the effectiveness of CAM and also assess its effect in relation to Gender. As researcher wants to assess the effectiveness of the CAM, he selects experiment research method in which “Two group only Post Test” research design was selected. After 14 days treatment given to both randomly selected groups researcher collect the data with the help of blue-print based Self constructed achievement test consisting 50 multiple choice questions carrying 1 mark each. As a Sample one school of Ahmedabad city was selected purposively for experiment in which two classes were selected randomly consisting total 85 students. Man Whitney U-test was applied to check the null hypotheses. It was found that teaching through CAM was found to be more effective than Traditional Method of teaching and effect of gender was not found significant. This would be helpful to imply that Teachers can be trained to use CAM teaching strategy for language teaching in schools.

Key Word: CAM (Concept Attainment Model), Effectiveness, English grammar

Introduction:

The process of education has changed drastically in the 21st century. With the advanced development of technology, learning in all its forms has become very challenging today. With the

changing patterns of society, educational goals continue to change its shape. The emerging outcome of educational research underlines the importance of the teacher stimulating learning in the classroom. The findings consistently indicate that the teacher is the single most important factor outside the home environment in affecting student development. Teachers who purposely plan and actively strive for learning using effective methods produce good results. It has been found by the researcher after studying the past research findings that the fundamental problem for a teacher in the classroom lies in practicing appropriate method of teaching.

Language plays a key role in every domain of student life. In the Indian context, there is diversity in language in our Indian culture but there is a hidden unity inside. Now a day the process of education has changed drastically in the 21st century. With the advanced development of technology, language learning in all its forms has become very challenging today. There has been a huge gap in teacher teaching and students learning. Amidst such condition it has been found by the researcher that model based teaching overcomes the above problem. As far as concepts in language learning are concerned, CAM can be very effective.

Literature Review:

Instructional strategy is the backbone for any teacher to reach out to students' learning. There are a variety of instructional strategies in the field of education. They are known as strategies, instructional strategies, instructional approaches and instructional models. Out of this Model based instruction of teaching has been most preferred and effective means of ensuring learning in the classroom. Models of teaching are being used as instructional strategy since the time of Jerome S. Bruner¹ and his associates' who introduced this concept in their first book titled 'A Study of Thinking' in 1956. 'Teaching models are frameworks for instruction that use organized sets of strategies to accomplish specific learning goals.

According to Eggen, P D (1979)² models of teaching have been the most exciting approaches in teaching. According to Joyce B (1972)³ & (1985)⁴ the core outcome of using a model of teaching is that students learn how to learn (reason) in certain fashion. These models of teaching result in more effective teaching of the basic school subjects, both elementary and secondary, than the methods generally employed to teach them. Mohr, L. (2010)⁵ wrote that these teaching models have similarities and differences, however, when used properly, expertly, and with teachers who demonstrate the essential teaching skills, they can open a child's eyes to the world of learning. Mondal, B C (2013)⁶

¹ Bruner, J., et. al (1956), **A Study of Thinking**. Chapman & Hall, Limited, London, Pp 244.

² Eggen, P. D., et al. (1979), **Strategies for Teachers**, 2nd edition, Prentice Hall, Englewood Cliffs, New Jersey, USA.

³ Joyce and Weil, M. (1972), **Models of Teaching**, Prentice Hall of India PVT LTD, New Delhi.

⁴ Joyce, B. (1985), **Models of Teaching Thinking**, article published in Educational Leadership, May 1985.

⁵ Mohr, L. (2010), **Models of Teaching Paper, Education** 106: Human Development and Learning Theory, April 14, 2010.

⁶ Mondal, B. C., (2013), **Teaching Science Through Information Processing Model: A Review**, Journal of Education and Practice, Vol 4 No.9.

concluded that approach of models of teaching has been found to be superior to the traditional methods, whatever the model is. Most of the researches have accepted that models of teaching could prove to have a promising effect on the academic achievement of the students taught through them.

According to past research reviews, Sreelekha and Nayar (2004)⁷ found that The Concept Attainment Model was more effective over the traditional method of teaching with respect to knowledge, objectives, understanding and application objectives. Wanjari (2005)⁸ studied the effectiveness of CAM and ITM and found that both are effective in developing reasoning ability, scientific creativity and favourable attitude towards science in students. Khan and Saeed (2010)⁹ found that The Concept Formation teaching Model appeared to be more favourable to students over the traditional method of teaching in understanding Chemistry subject. Jadhav S (2013)¹⁰ found that CAM is very effective in teaching grammar unit over the traditional method in relation. Ohri, N. (2013)¹¹ found that the students studying concept attainment model have benefitted more than the students studying through conventional learning. The study revealed the superiority of CAM of teaching over the conventional method of teaching to scholastic achievement. Overall, the researcher gathered an impression after studying past researches at the international and national level that CAM is widely used to understand and learn concepts of science subject. The above analysis also reveals that most of the findings indicate, Effectiveness of CAM in teaching concepts of Science subject especially Physics and Mathematics. Besides Mathematics and Science, English has been one of the most desired subjects to be learned in school.

Problem of the Study:

Effectiveness of Concept Attainment Model in Teaching English Language

Objectives:

1. To study the effectiveness of the program based on Concept Attainment Model on the achievement of students of standard VIII.
2. To study the effectiveness of the program based on Concept Attainment Model (CAM) in relation to Gender.

⁷ Sreelekha and Nayar (2004), **The Effectiveness of Concept Attainment Model in learning Chemistry at Secondary level**. NCERT publication, New Delhi.

⁸ Wanjari, S S. (2005), **Effectiveness of Concept Attainment Model and Inductive Thinking Model of Teaching on Students' Achievement in Science, Scientific Creativity and Attitude Towards Science**. Ph.d Thesis, Sant Gadge Baba Amravati, University, Amravati.

⁹ Khan and Saeed (2010), **Effect of teaching Chemistry through Concept Formation Teaching model on students' Achievement**, International Journal of Academic Research, 2 (6), 230-234.

¹⁰ Jadhav, S. (2013), **A Study of Effectiveness of teaching a unit from English grammar of class 7th by Concept Attainment Model**, A Research published in Scholarly Research Journal for Interdisciplinary Studies, access on net on 20 the September 2014, www.srjis.com.

¹¹ Ohri, Neetu, (2014), **Effectiveness of Concept Attainment Model of Teaching on Achievement in Hindi**.

Hypotheses:

Ho₁: There would not be any significant effect of teaching methods (CAM and TM) on the achievement of students.

Ho₂: There would not be any significant effect of teaching methods (CAM & TM) on the achievement of boys.

Ho₃: There would not be any significant effect of teaching methods (CAM & TM) on the achievement of girls.

Ho₄: There would not be any significant effect of gender on the achievement of students of the experimental group on the post test.

Delimitation:

- The study covers only two units of English grammar namely 'Nouns' and 'Adjectives'.
- The study is delimited to Gujarati medium non-aided private schools i.e. Hosanna Mission School, Odhav, Ahmedabad recognized by the government.

Variables:

Independent Variables: 1.Methods of teaching (Teaching program based on Concept Attainment Model and Traditional Method of teaching)

2. Gender (boys and girls)

Dependent Variables: Achievement (Score obtained on post test)

Control Variables: English Grammar Units (Nouns and Adjectives)

Teacher teaching (investigator himself)

School type (Gujarati medium private non-aided)

School Time (schools working in the morning session only)

Teaching parallel in both the classes in the same day

Population and Sample:

All the students of standard VIII of Gujarati medium schools of Ahmedabad city recognized by Gujarat Primary education board constituted the population in the present study. The researcher was selected one school of Ahmedabad by using purposive sampling method. Once selection of the school was done, two divisions of standard VIII were selected randomly constituting nearly above 110 total students. The groups were found equal statistically based on their previous achievement scores of English subject of standard VII. The final sample of this school constituted two groups namely experimental 43 students and control 42 students was total 85 students in the experiment.

Research method:

In the present study the researcher employed a model based teaching program over the traditional method of teaching, so he chose experimental method in order to study the cause and effect relationship between the methods of teaching. As an experimental design the researcher chose non-equivalent groups with only post- test design for the present experimental study.

Research Tool:

The researcher constructed blue-print based **Achievement Test** consisting 50 multiple choice questions and each multiple choice question carrying 1 mark. The duration of the test was 30 minutes. Subjects were to write answer on separate answer sheet provided to them. The test was constructed by the researcher himself along with expert's opinions. The test included questions like match the following, choose the odd, fill in the blanks and reading comprehension. The test covered all the three objectives namely knowledge, understanding and application. The distribution of marks was done on the basis of blue print prepared by the researcher.

Data Collection:

In the present study the researcher used 'posttest only with non equal groups design'. Having matched the groups, the researcher assigned the treatment by flipping coin. This resulted into one class as control group and another as experimental group constituting 42 and 43 students each. After this, the researcher started teaching the groups with two different methods. The experimental group was taught with Concept Attainment Model of teaching program while the control group was taught with the Traditional Method. The teaching continued for two weeks and covered 12 concepts of English Grammar. On the final day an achievement test was administered on both the groups to collect data. The groups were instructed all the required information about the test before the execution of the test. The test was given in both the groups at the same time.

Data Analysis & Discussion:

In the present study because the data were not available in the normal distribution due to lack of randomization, the researcher wished to prefer non-parametric statistical test. The researcher used **Mann- Whitney U-test** to analyze the data because the groups were preexisted.

In the present study, the researcher formulated the four hypotheses to study the effectiveness of CAM teaching program in teaching English Grammar. To test the above hypotheses, the researcher taught the experimental group with CAM program while the control group was taught with the traditional method. The following table displays comparison of performance of students under these methods.

Table 1: Summary of Data Analysis

H ₀	GROUP	N	M	SU M	U	SED	Z	Result
H ₀₁	Experimental group (CAM)	43	38.77	2493	259	113.77	5.66	Rejected **
	Control group (TM)	42	27.88	1162	1547			
H ₀₂	Boys of the experimental group	23	42.43	772.5	32.5	45.52	5.10	Rejected **
	Boys of the control group	22	30.7	308.5	496.5			

Ho ₃	Girls of the experimental group	20	34.55	526	64	32.59	3.54	Rejected **
	Girls of the control group	19	24.47	254	316			
Ho ₄	Experimental group (Boys)	23	39.80	425	311	41.07	0.83	Accepted
	Experimental group (Girls)	20	41.21	474	196			

**significant at 0.01level

According to Ho₁ the calculated Z-value is found to be 5.66. The table value of Z at 0.05 and 0.01 level in front of $df = \alpha$ are 1.96 and 2.58 subsequently. Here the calculated Z value is 5.66 which exceeds the Z table value 2.58 at 0.01 level and so the null hypothesis is rejected at 0.01 level. It may be concluded that CAM produced better results than the traditional method of teaching that describes the effectiveness of CAM.

According to Ho₂ the calculated Z-value is found to be 5.10. The table value of Z at 0.05 and 0.01 level in front of $df = \alpha$ are 1.96 and 2.58 subsequently. Here the calculated Z value is 5.10 which exceeds the Z table value 2.58 at 0.01 level and so the null hypothesis is rejected at 0.01 level. It may be concluded that the effect of CAM produced better results than the effect of traditional method of teaching over the group of boys. It proves the effectiveness of CAM on the group of boys.

According to Ho₃ the calculated Z-value is found to be 3.54. The table value of Z at 0.05 and 0.01 level in front of $df = \alpha$ are 1.96 and 2.58 subsequently. Here the calculated Z value is 3.54 which exceeds the Z table value 2.58 at 0.01 level and so the null hypothesis is rejected at 0.01 level. It may be concluded that the effect of CAM produced better results than the effect of traditional method of teaching over the group of girls. It proves the effectiveness of CAM on the group of girls.

According to Ho₄ the calculated Z-value is found to be 0.83. The table value of Z at 0.05 and 0.01 level in front of $df = \alpha$ are 1.96 and 2.58 subsequently. Here the calculated Z value is 0.83 which does not exceed the Z table value of 1.96 at 0.05 level and so the null hypothesis is accepted. It may be concluded that the effect of CAM based teaching program produced equal results among the boys and girls of the CAM group. It proves the effectiveness of CAM on boys and girls equally.

Findings:

From the above analysis findings the following conclusions have been made.

1. Teaching through CAM was found to be more effective than Traditional Method of teaching.
2. The performance of boys and girls of the experimental group (CAM group) was found to be superior to boys and girls of the Traditional Method of Teaching group.
3. The effect of gender was not so significant on the performance of the experimental group (CAM group). Boys and girls of the experimental group (CAM) produced similar results.

Conclusion:

With the teaching of CAM method the performance of students increased. Teachers can be trained to use this method because it requires meticulous planning. This method of teaching can be used for any student of any standard from any geographical area. The outcome of this study would enhance the policy decision making as far as educational pedagogy is concerned. In conclusion it would proper to say that CAM teaching strategy did produce higher performance and should be used by all teachers in their respective subjects with systematic planning.
