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Effectiveness of 'Bisag Programme' in Teaching of Science Subject to the students of standard 7th

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Abstract

Bisag Programme was used to teach science subject. To test the effectiveness of Bisag Programme in terms of academic achievement, experiment was conducted utilizing '*two equal groups only post-test design*'. Purposive sampling procedure was followed for sample selection. Two schools from Rajkot city were selected purposively. Students studying in standard 7th were the sample of the study. From the selected school two groups were made equal on the base of the students' marks in science subject obtained in the previous school exam. Out of those two groups one was selected as experimental group and the other as controlled group by randomization. Data were collected on post-test i.e. teacher's made unit test. Data were analysed employing t-test. Bisag Programme was found effective in terms of the students' academic achievement.

Key words: Bisag Programme, GCERT, science.



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**Introduction:**

BISAG (Bhaskaracharya Institute for Space Applications and Geo Informatics) for transmission which is the first educational channel to be used by any local body for mass learning of elementary students across the nation. Main aim of this programme is to reach at remote area and to give quality education. That's why researcher has selected this topic to know the effectiveness of Bisag Programme on the students of standard 7th

Objectives:

To study effectiveness of Bisag Programme.

To compare academic achievement of control group and experimental group.

Hypothesis:

There will be no significant difference between academic achievement of control group and experimental group in science subject of 7th standard.

Variables:

1. Independent Variable: Bisag Programme
2. Dependent Variable: academic achievement
3. Controlled Variable: Gujarati medium school, Area, Gender, Type of School.

Population:

All the students of Standard 7th of Gujarat State will constitute the population of the study.

Sample:

In the present study, the researcher has purposively selected Gujarati Medium School of Rajkot City. Sample was random of 7th standard students. Sixty students were selected randomly among them 30 were in control group and another 30 were in experimental group.

Delimitations of the study:



The result of any research may not be the same in the different situations and time. While interpreting the result of this study, the following delimitations should be kept in mind.

1. The school for experiment was selected purposively.
2. The present research was carried out on the students of Std. 7th of the government primary School of Rajkot, Gujarat.
3. The post test was a teacher made test and was not the standardized one.
7. Novelty of the treatment, interaction among students, individual differences could not be controlled.

Research Method:

The present study is aimed to study the effectiveness of Bisag Programme on the students of standard 7th. Thus, it would become an experimental type research. It was designed as '*Two equal groups only post-test design*'. The experimental group received instruction through virtual classroom, and the control group did not receive any instruction at all. Pre-test was not the part of the study. The data were collected by administering the post-test (T2) on both the groups on one and the same day. After the treatment phase the scores of the students obtained on the post-test were analyzed by employing t-test as statistical technique. Effectiveness of the Bisag Programme was worked out by testing the null hypotheses.

Research Tool:

A self-constructed test was used to evaluate academic achievement.

Methods of analysis:

Independent t-test was selected as statistical technique because two groups' means were to be compared for its significance. Prior to the treatment phase these two groups were equalized on the basis of their past achievement. Allotment of treatment was randomized.

Effectiveness of the Bisag Programme.



To measure the effectiveness of the Bisag Programme the experimentation was done. Experiment was conducted on a sample of 30 students of 7th standard. Achievement scores were obtained on post-test of fifty marks. The t-test was used for analysis. Results of the experiment is given in the table.

Table - 1**Mean Achievement Scores, Standard Deviation and T-Values of Groups during Experiment**

Group	N	Mean Score	S D	t - value
Experimental	30	38.70	3.401	7.093**
Control	30	28.10	3.281	

**** Significant at 0.01 level**

By observing table no.1 mean achievement score during experiment stage of experimental group was 38.73 and the value of S.D. was 8.27. Whereas mean achievement score of control group was 27.91 and S.D. was 6.26. The t-value was 4.73, which was more than 1.65. Thus, the observed t-value was significant. So the null hypothesis is rejected.

Findings:

The findings of the present study were...

1. The Bisag Programme to teach the students of 7th standard was effective with respect to the students' academic achievement.
2. It is true that no technology can replace a good teacher. So far as teaching science is concerned, there is a



shortage of good teachers especially in remote areas. The Bisag Programme can meet the need and the demand of a good teacher.

3. The students responded favourably towards learning through Bisag Programme. They liked to learn other subjects by this method. According to them this method was easy to understand, easy to remember, more interesting, and stress less. Concentration increases, discipline is maintained and self-learning is possible through this method.





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