Effectiveness of Teaching through Smart Learning on Educational Achievement of the 8th Class Students

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Abstract:

Present study had been undertaken to assess the effectiveness on the achievement of Science & Technology of the teaching method through Smart learning and traditional class room teaching method. For, this, the researcher prepared Smart learning programme and the effectiveness of the programme was assessed by the Experimental research method on the achievement of Science & Technology of the students. In the present study, the sample was selected by purposive sampling method, in which a rural and an urban school are included. For experimenting on these selected sample, equal groups only Post Test Design was implemented. For this, the test based on the subject of Gujarati of Std. 8 was administered to the students of Std. 8 to form the equal groups in both the areas. By arranging the scores of this test in the ascending order, the student getting the first rank in the first group of students and the student getting the second rank in the second group, the student getting the third rank in the second group and the student getting the fourth rank in the first group was kept. Thus the students were distributed in two groups in both the areas. Then those groups were classified randomly as a controlled group and an experimental group. In both the areas, Smart learning programme on experimental group and traditional classroom teaching programme on controlled group were implemented. After the implementation, the post test was administered to them to assess the effectiveness of the achievement of Science & Technology. And at the end of one month in order to know the retention, the test was administered again. For assessing the hypothesis with the help of the scores obtained on the test. -test was used as suitable Statistical Technique.

Keywords: *Smart learning, Educational Achievement*

1. Objectives of Research

1. To construct the Smart learning programme on the selected two units of the content of Gujarati of Std. 8th.
2. To assess the effectiveness of Traditional class-room teaching and Teaching through Smart learning on the educational achievement of the students of Std. 8.
3. To assess the effect of area on the relation of the educational achievement and the teaching method through smart-learning.

2. Hypotheses of Research

Ho_1: There will not be the significant difference between the mean scores of Gujarati of the students of the Experimental group and the Controlled group of the rural area.

Ho_2: There will not be the significant difference between the mean scores of Gujarati of the students of the Experimental group and the controlled group of the urban area.

Ho_3: There will not be the significant difference between the mean scores of post test of Gujarati and Retention test of the students of the Experimental group of Rural area.

Ho_4: There will not be the significant difference between the mean scores of post test of Gujarati and Retention test of the students of the Experimental group of Urban area.

Ho_5: There will not be the significant difference between the mean scores of post test of Gujarati and Retention Test of the controlled group of the rural area.

3. Population and Sample

In the present study the students studying during the year 2017-18 of Std. 8 in the Secondary Schools of Gujarati medium of Mehsana and Panchmahal District are the population. Sample was selected by using the purposive sampling method in the present study, in which one school of rural and urban area is included. Number of students of both the groups of the schools of both the areas.

Experiment No.	Area	Controlled Gr. No. of students	Exp. Gr. No. of students	Total No. of students.
1	Rural	40	40	70
2	Urban	40	40	70
Total		80	80	140

4. Research method - Design

For experimentation on the selected sample, Equal group only Post Test Design had been implemented. For this, in both the areas, in order to make the equal groups, the test based on the subject of Gujarati of Std. 8th was administered to the students of Std. 10. In both the areas, out of the sample Smart learning programme was implemented on the Experimental group and the method of traditional class-room teaching was implemented on the controlled group. After the implementation post test was administered to assess the effectiveness of the subject Gujarati. And at the end of one month in order to know the Retention of it the same test was administered again. t-test was used as the suitable statistical technique for Hypothesis Testing with the help of the scores obtained in the test.

5. Preparation of teaching through Smart programme

The main objective of the present study was to prepare Smart learning programme by using the Smart learning material. It was prepared based on the two units of Gujarati of Std. 8th namely “Reflection and Refraction of light” and Dispersion of light and Optical Instruments.

6. Construction of the tools

In the present research in both the experiments, a test was constructed to make the equal groups and post test was constructed of the subject Science & Technology of Std. 8.

7. Data Collection and Analysis

In the present study at the end of both the experiments the post test was administered to the students. In order to assess the retention at the end of one month the same test (post test) was administered. On the basis of scoring design after checking the answer sheets the scores were gained.

In the present research, Mean, S.D. and standard error were calculated by area wise and GroupWise of the scores of the post test and the retention test. And t-test was used to compare the means of the obtained scores.

8. Hypothesis Testing

Hypothesis testing of the present study is mentioned in Table 2.

Table -2 Hypotheses Testing

No.	Hypothesis	t-value	Level of Significance	Acceptance or Non-Acceptance
1	Ho1:- There will not be the significant difference between the mean scores of Gujarati of the students of the Experimental group and the Controlled group of the rural area.	3.84	0.01	Not Accepted
2	Ho2:- There will not be the significant difference between the mean scores of Gujarati of the students of the Experimental group and the controlled group of the urban area.	2.78	0.01	Not Accepted
3	Ho3:- There will not be the significant difference between the mean scores of post test of Gujarati and Retention test of the students of the Experimental group of Rural area.	1.79	0.01	Accepted
4	Ho4:- There will not be the significant difference between the mean scores of post test of Gujarati and Retention test of the students of the Experimental group of Urban area.	1.66	0.01	Accepted
5	Ho5:- There will not be the significant difference between the mean scores of post test of Gujarati and Retention Test of the controlled group of the rural area.	3.1	0.01	Not Accepted

9. Finding of Research

Following are the findings or conclusions of the study based on the interpretations obtained from the hypotheses testing constructed suited to the present study:-

1. With reference to two units of Gujarati of Std. 8th of the School of Urban and Rural area namely ' Reflection and Refraction of Light and Dispersion of Light and optical instruments there was the significant effect of Teaching through Smart learning on the educational achievement of the students of the Experimental groups.
2. With reference to two units of Gujarati of Std. 8th of the School of Urban and Rural area namely ' Reflection and Refraction of Light and Dispersion of Light and optical instruments, the retention of the students of the experimental group remained effective.
3. With reference to two units of Gujarati of Std. 8 of the School of Urban and Rural area namely ' Reflection and Refraction of Light and Dispersion of Light and optical instruments, the decrease had been observed in the retention of the students of the controlled group.

10. Conclusion

The researcher made effort to know the effect on the educational achievement by teaching through Smart learning in the subject of Science & Technology. It has been proved here that the level of educational achievement can be taken at height in the subject of Gujarati, through the Smart learning teaching programme prepared by adequate treatment. Moreover the researcher had experienced that by the use of the technology schools can give qualitative education to the students and can improve the quality also. Simultaneously they can save the time also. Thus, in the present study, the researcher has attempted to prepare the Smart learning programme with the aim of giving the new teaching-learning process and secondly with the aim of making the Educational achievement effective.

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