



Research Paper-Education

A Study of Effectiveness of Teaching Through E-Learning on The Educational Achievement Of The Students in Social Science Subject

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Abstract:

The aim of the Present Study Was to assess the effectiveness of teaching through E-learning as Compared classroom teaching. Achievement in social science and retention were the dependent variables. In experimental one, two equal groups were formed by administering the self constructed test of social science based on STD-viii and ix in two classes of std x of the selected secondary school of urban area and on the basis of the obtained scores by one to one pair out of this groups, one was considered as controlled group and the other as the experimental group. And teaching work was undertaken by two different methods as mentioned above. For teaching through E-learning the teaching-learning material was prepared. For this the teaching programme through E-learning was prepared for two selected units of social science of std.10. In experimental group, teaching was carried out by E-learning and in control group by traditional classroom teaching, For experiment-2, in selected rural school, two groups of std 10 were formed by the method as mentioned above and teaching was carried on both groups-Experimental and controlled group. In both the experiments the researcher implemented the experimental design namely 'Two groups pre test- post test Equal Group'. Achievements in Social Science test with the help of these scores for testing hypotheses suitable statistical techniques were used.

Keywords : *E-learning and Achievement*

1. Introduction

In the process of education, the fundamental changes are occurring continuously and along with that the roles of the teacher and taught also change. Till yesterday, the teachers were imparting education directly, but due to the emergence of computer and other audio-video media the student has started to get education at his own time. Thus, in order to satisfy the needs of the students in some matters the improvements have become necessary in these media. The researches related to computer such as CAL, CAI, web based learning, e-learning have been undertaken in foreign countries, India and Gujarat. The investigator has undertaken the present research study with the purpose to know the effect on the achievement of the students in the subject of social science while teaching through e-learning as it is his subject.

2. Statement of the problem

A study of effectiveness of teaching through e-learning on the Educational Achievement of the students in social science subject

2. Objectives of the study

Following are the objectives of the study :

1. To construct the e-learning learning material on three units of the selected content of social science subject of std. X.
2. To prepare the e-learning programme by collecting the e-learning material.
3. To construct the self-made pre test and post test to assess the effect of e-learning programme.
4. To assess the effect on Educational Achievement of the students of std. X of teaching through e-learning as compared to traditional class room teaching.
5. To assess the effect on Educational Achievement of the students of std. X of Teaching through e-learning as compared to traditional class room teaching in context to gender.

3. Hypotheses of the Study

Hypotheses of the present study are as follows.

Ho₁ There will not be the significant difference between the mean scores of Achievement test of social science subject of the students getting traditional teaching and of those getting Teaching through e-learning .

Ho₂ There will not be the significant difference between the mean scores of Achievement test of social science subject of the students getting traditional teaching and of those getting teaching through e-learning in schools of gender.

4. Scope of the study

This study was concerned with the field of educational Technology.

5. Type of the study

Present study was the research of practical type. It was also of a quantitative type of research in context to data collection and data analysis during the study.

6. Method of the study

As the relation of the present study was with the future situation, the experimental method was used for the research work.

7. Experimental Design

In the present study, two equal groups controlled group and experimental group were formed on the basis of the obtained scores on a test of social science subject of std. VIII and IX. In the present research 'Two groups pre test- post test Equal Group' design was used.

8. Population and Sample Selection

In the present study, the students of std X of the secondary schools of Gujarati medium of middle Gujarat of year 2010-11 were included as population.

Group selection : In the present study the test of social science subject of std. 8 and 9 was administered to the students of std. 10 and on the basis of Mean, S.D. the equal groups were formed for the experiment. Two equal groups were formed in two experiments as shown in Table 2.

Table 1. Number of students of both the groups of the schools

Experiment No.	Area	Controlled Group. No. of students	Exp. Group. No. of students	Total No. of students.
1	Boys	18	17	35
2	girls	11	12	23
Total		29	29	58

9. Preparation of e-learning based Teaching Programme

e-learning based teaching programme was based on three units of Indian cultural Heritage of social science subject of std. X. It was designed as follows :

Step 1 Formation of objectives for the construction of e-learning based Teaching (Tool).

Step 2 Formation of learning literature (material) objective based.

Step 3 Construction of web-site having the learning material for e learning based teaching.

Step 4 Assessment by the experts in web-site and pre test of e learning based teaching on students.

Step 5 Final form of web-site. Keeping in view these steps, the final form of e-learning based teaching programme was decided.

10. Construction of Tools

In the present study, social science subject of std. VIII and IX self-made pre test The investigator constructed the (post test.1) compiled test based on three units of social science subject of std. X.

11. Data Collection

In the present study, at the end of the experiment, the students were given the compiled test of the social science and the scores were obtained. The difference of scores of these two tests was also obtained.

12. Classification and Analysis of Data

In the present study statistical techniques like Mean (M), standard deviation (SD) and standard error were calculated; gender wise and Group-wise scores of pre test and post test. Moreover F test was used to compare the mean scores of pre test and post test administered gender wise and group wise.

13. Testing of Hypotheses

Hypotheses were tested in the present study as follows :

Table 2 :Testing of Hypotheses

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 Achievement test of social science subject of the students getting traditional teaching and of those getting Teaching through e-learning.	6.11	0.01 Significant	Not Accepted
2	Ho2 There will not be the significant difference between the mean scores of Achievement test of social science subject of the students getting traditional teaching and of those getting teaching through e-learning in schools of gender.	0.17	0.01 Not Significant	Accepted

14. Testing of Hypotheses

Hypotheses were tested in the present study as follows :

15. Findings or Conclusions

The findings of the present study are as follows:

1. There is significant difference between the mean scores obtained in post test by the students of experimental group and controlled group of urban area and this difference is in favour of the experimental group. It means that teaching method through e-learning is superior to traditional classroom teaching.
2. There is significant difference between the mean scores obtained in post test by the students of experimental group and controlled groups of rural area. And this difference is in favour of the experimental group. It means that teaching method through e-learning is superior to traditional classroom teaching.
3. There is no significant difference between the mean scores of retention of the students of teaching through e-learning group and traditional classroom Teaching group of urban and rural area.

16. Conclusion

In the present study the effect of teaching through e-learning on the educational achievement of social science subject of the students. Though from the point of view of the content, looking at the few units and less no. of students, the results of the experiment cannot be applied generally. Even though, this study of teaching through e-learning will motivate the subject teachers, students and Interested people in various subjects. The investigator has undertaken the study with a hope that this small effort will be useful.

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