

Effect of Area on Learning by Traditional Method and Computerized Programmed Learning Material

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Abstract:

Area is the most effective factor in education. So, Present study has been done to know the effect of Area on learning by Traditional teaching method and Computerized Programmed Learning Material. For this Computerized Programmed Learning Material was prepared and applied on 220 students in different to areas in Gujarati Medium Schools in Ahmedabad. The areas are distributed in 2 parts i.e. Rural and Urban. On the basis of the post data score mean and 'F' was calculated for data analysis.

Keywords: Computerized Programmed Learning Material, Effect, Traditional Teaching Method

Introduction

Education is a tri-polar Process. In which one pole is Teacher, second pole is Student and the third and important pole is Society. Human is a social animal. All the persons live in a society. Every human being wants to progress. So, all the persons want to stay in urban area for their development. So, researcher wants to know the effectiveness of area in education as well as learning through different methods. That's why the researcher had selected the above topic as study. Second thing is 21st century is the time of science and technology. So, researcher thinks to construct some material which is helpful to student in self-learning. In 1954 Prof. B. F. Skinner prepared the self-learning material which was known as "Programmed Learning." Researcher thinks that this is one of the best methods for self-learning.

1. Definition of Key Words

1.1 Traditional Teaching Method

The teaching method in which teacher teaches most of points by giving lecture to students by chalk and talk is known as Traditional Teaching Method. It is teacher oriented method.

1.2 Computerized Programmed Learning

According to Patrica Calendar,

"Programmed Learning is an attempt to systematic education and training, using some of the methods in modern industry. It is also an attempt to make the teacher a more efficient mediator between learning and the learner."

In concern of the present study researcher was constructed Programmed Learning material in computer on "Information Channel" for the students of Std.-11 as per following the steps given to prepare such material.

2. Objectives

The objectives of present study are as follows.

- 1. To construct Computerized Programmed Learning material for the students of standard 11th on the topic of "Information Channel" in O.C.M. subject.
- 2. To try out Computerized Programmed Learning material on the students of standard-11.
- 3. To check the effect of Area on Learning by Computerized Programmed Learning and conventional method of learning.

2. Hypotheses

Ho₁ There is no significant difference between the mean score of rural area and urban area students learning through Computerized Programmed Learning and Traditional Method.

3. Variables

The variables of present study are as follows.

Table 1 Variables

| Sr. No. | Types of Variables | Level of Variables | | | | |
|---------|----------------------|--|--|--|--|--|
| 1 | Dependent Variable | Score of Post Test | | | | |
| 2 | Independent Variable | Urban Area Rural Area Traditional Method Computerized Programmed Learning | | | | |
| 3 | Controlled Variable | Standard of student Topic Time | | | | |

4. Research Method

In the present study, researcher wants to investigate the effect of Area on learning through different two methods i.e. computerized programmed learning and conventional method. Thus the present study is quantitative research. Researcher had selected experimental method for the present study.

5. Population

In the present study, the population was the students of standard 11th (Commerce) studying in Gujarati Medium schools in Ahmedabad.

6. Methods of Sampling

In the present study, the researcher had prepared the list of Gujarati Medium schools for commerce located in Ahmedabad. From prepared list two schools were selected through draw system by Random Sampling Method.

Table 2 Sample Selected for Experiment

| | Boys | | | Girls | | | |
|-------|-------------|--------------|-------|-------------|--------------|-------|-------|
| Area | Exp. Gr. | Cont. Gr. | Total | Exp. Gr. | Cont. Gr. | Total | Total |
| Rural | 28 | 26 | 54 | 24 | 27 | 51 | 105 |
| Urban | 30 | 26 | 56 | 29 | 30 | 59 | 115 |
| Total | 58 | 52 | 110 | 53 | 57 | 110 | 220 |

As shown in above table the lowest sample is 24 in Experimental Group for girls in rural area. So, the calculation and other analysis were done as per 24 students in each group.

7. Research Tool

The main objective of the study was to study the effect of area on learning through computerized programmed learning and conventional method for the students of standard-11th commerce on "Information Channel" unit of O.C.M. subject. For that researcher had decided to prepare Computerized Programmed Learning material and post test based on same topic to check the effectiveness of gender. After preparation it is given to computer expert, expert teacher of commerce schools and Commerce Method masters of B.Ed. colleges for review. After receiving feedback from all experts make necessary changes in Computerized Programmed Learning.

8. Design of Research

The researcher had taken the std.10th Gujarat Secondary Board examination marks for creating equal group. The researcher prepare pairs of students getting equal marks in std.10th board examination in both schools and put one student in experimental group and put another in traditional group. In this way researcher prepare equal group by calculating mean.

9. Research Procedure and Data Analysis

The study was conducted on both schools on total 220 students. The researcher applied both method of teaching i.e. computerized programmed learning and Traditional Method. After Completion of topic post test was given to students and get the data. The data analysis was made by calculating the mean for both areas (schools). The Significant difference between the achievements on the post-test was investigated through ANOVA which is mentioned in table 3.

Table 3 Analysis of Achievement Test

| Sources of Variation | Sum of Square | df | Mean | | | E | | |
|----------------------------|------------------|----|--------------|-------|-------------|-------|------------|---|
| | | | Experimental | | Traditional | | F retio | Interpretation |
| | | | Rural | Urban | Rural | Urban | 1000 | |
| Area | 3.26 | 1 | 15.35 | 15.67 | 15.16 | 15.20 | 0.30 | There is no significance at 0.05 and 0.01 level |

10. Findings

The findings are as under after checking the objectives and hypothesis.

1. The mean of the urban area students learning through Computerized Programmed Learning is higher than the rural area students. It shows the achievement of the urban area students is higher than the rural area students in learning through computerized Programmed Learning.

- 2. The mean of the urban area students learning through conventional method is higher than the rural area students. It shows the achievement of the urban area students is higher than the students of rural area in learning through conventional method.
- 3. The computerized Programmed Learning material is very useful in self-study.

11. Suggestions

The suggestions are as follows.

- 1. The teachers have to try more development of students in learning through both methods in rural area.
- 2. This Computerized Programmed material is teacher can use in his absence for learning to student as self study. So teacher have to develop more Programmed material for students.
- 3. It is helpful aid to teacher's classroom teaching.
- 4. It may be innovative idea in classroom teaching in India.

References

- 1. Brog, R.W., Gall, D.M. (1983). Educational Research as Introduction, New York: Longman Green & Co.
- 2. Desai, H.G. and Desai, K.G. (1997). Research Methods and Techniques, Ahmedabad: University Granth Nirman Board.
- 3. Lokesh, K. (1984). Methodology of Educational Research, Delhi: Vani Education Book
- 4. Patrica Calendar, PL, Its Development and Structure, London: Longman Green & Co.
- 5. Shah, D. B. (1993). Educational Technology, Ahmedabad: University Granth Nirman Board.
- 6. Shah, G.B. (2000). Programmed Learning, Ahmedabad: University Granth Nirman Board.
- 7. Shukhia, S.P. Mehrotra, P.V. and Mehrotra, R.N. (1974). Elements of Educational Research, (3rd Edition), New Delhi: Allied Publishers Pvt. Ltd.
- 8. Trivedi, M.D. and Parekh, B. U. (1996). Statistics in Education, Ahmedabad: University Granth Nirman Board.