Effect of Area on Learning by Traditional Teaching 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 total 138 students in different areas in Guajarati Medium schools in Ahmedabad. The areas are distributed in two 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*

1. Introduction

Programmed learning is an individualized and systematic instructional strategy for classroom learning and self learning. Programmed Learning was developed by B.F. Skinner and is based on his theory of operant conditioning, according to which learning is best accomplished in small, incremental steps with immediate reinforcement or reward for the learner. The programmed learning is based on the principles of small steps, self pacing and immediate feedback.

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 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 method. That's way 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. Researcher thinks that this is one of the best methods for self learning was known as Programmed Learning.

2. Definition of Keywords
2.1 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.

2.1 Computerized Programmed Learning
According to Patrica Calender, "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 "Plant Tissue" for the students of Standard IX as per following the steps given to prepare such material.

3. Objectives of the Study
The objectives of the present study are as follows.

1. To Construct Computerized Programmed Learning Material for the students of Standard 9th on the topic of "Plant Tissue" in Science & Technology Subject.
2. To try out Computerized Programmed Learning Material on the students of standard 9th .
3. To check the effect of Area on Learning by Computerized Programmed Learning and Traditional method of learning.

4. Hypothesis

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.

5. Variables

The variables of present study are as follows.

Table 1:Variable

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 Material
3.	Controlled Variable	Standard Unit Time

6. Research Method

In the present study, researcher wants to investigate the effect of Area on learning through computerized Programmed Learning and Traditional Method. Thus the present study is quantitative research. Researcher had selected experimental method for the present study.

7. Population

In the present study, the population was the students of standard 9th studying in Gujarati medium schools in Ahmedabad.

8. Method of Sampling

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

Table 2: The Sample Selected for Experimental

Sr. No.	Area	No. of Students			Group
		Boys	Girls	Total	
1	Urban	18	18	36	Controlled
		17	17	34	Experimental
2	Rural	17	16	33	Controlled
		17	18	35	Experimental
	Total	69	69	138	

9. Tool of the study

The main objective of the study was to study the effect of area on learning through Computerized Programmed Learning and Traditional Method for the students of standard 9th on "Plant Tissue" unit of Science and Technology subject. For that researcher had decided to prepare Computerized Programmed Learning Material and post test based on same topic to check the effectiveness of area.

After preparation it is given to computer experts, expert teachers of Science and technology Subject and Science and technology method masters changes in Computerized Programmed Learning Material.

10. Design of the study

The researcher had taken the standard 8th Final examination's marks for creation of equivalent group. The researcher prepares pairs of equal marks students in both schools. In this way researcher prepare equal group by calculated mean.

11. Data Analysis

The study was conducted on both schools total 138 students. The researcher applied both method of teaching like Traditional Method and Computerized Programmed Learning Method. After completion of unit post test was given to students and get the data. The data analysis was made by Calculating mean for both areas. The significant difference between the achievements on the post test was investigated through ANOVA which mentioned in table 3.

Table 3: Analysis of Achievement Test

Source of Variance	Sum of Square	df	Mean				F	Interpretation
			Experimental		Traditional			
			Rural	Urban	Rural	Urban		
Area	97.51	1	18.47	19.24	17.30	18.86	4.82*	There is significance at 0.05 level

12. Findings

The findings are as under after checking the objectives and hypotheses.
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 Traditional Method 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 Traditional Method.
3. The Computerized Programmed Learning Material is very useful in Self study.

13. Suggestions

The suggestions are as follows.
1. The teacher has to try more development of students in through both methods in rural area.
2. This Computerized Programmed Learning Material is teacher can use in his or her absence for learning to students as self study. So, teachers have to develop more Programmed Material for students.
3. It may be innovative idea in classroom teaching in India.

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