A Comparative Study of Traditional Teaching Method and Computerized Self Learning Material

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Abstract:
Present study has been done to know the effect of Computerized Self Learning Material. For this Programmed Learning Material was prepared and experimented on 220 students in 2 different Gujarati Medium schools of Ahmedabad. On the basis of the post data score mean and ‘F’ was calculated for data analysis.

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

1. Introduction
In 21st century we show changes in each factor everyday. Due to changes in education a vast changes in method of teaching also. Today classroom teaching is limited source of education, although we use old tradition of teaching, old methods and text book oriented education instead of student oriented education. So, we have to think for self learning methods for student. We have to teach them in that way so students will try out to solve the problems themselves. As per Albert Einstein-

“I never teach my pupils, I only attempt to provide the conditions in which they learn”

So, the teaching method will be that with which student will read, think, learn, find out the solution and go ahead with self attempt. So, researcher thinks that Programmed Learning is one of the best method for self learning. In 21st century computer is very useful in each factor. So, here researcher constructed computerized Programmed for Standard11th (commerce) in O.C.M. subject for unit “Information Channel.”

2. Definition of Key Words
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. It is teacher oriented method.

2.2 Computerized Self Learning Material
The material helpful to a student for learning himself without the help of teacher is known as Self Learning Material. It is created with the help of Computer is known as Computerized Self Learning Material.

2.2 Programmed Learning (PL)
According to Encarta dictionary:
“Learning method based on self-instructional materials that are designed to allow students to progress at their own space, step by step, through structured sequences.”
In concern of the present study researcher will prepare Programmed Learning material in computer on “Information Channel” for the students of Std.-11 as per following the steps given to prepare such material.

3. Objectives of the Study
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 11th.
3. To compare the Learning by Computerized Programmed Learning and Traditional method.

4. Hypotheses
1. There is no significant difference between the mean score of students learning through Computerized Programmed Learning and Traditional Method in School 1.
2. There is no significant difference between the mean score of students learning through Computerized Programmed Learning and Traditional Method in School 2.

5. Variables
The variables of present study are as follows.

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Types of Variables</th>
<th>Level of Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Dependent Variable</td>
<td>1. Score of Post Test</td>
</tr>
</tbody>
</table>
| 2       | Independent Variable | 1. Traditional Method  
|         |                    | 2. Computerized Programmed Learning Material |
| 3       | Controlled Variable | 1. Standard of student                        
|         |                    | 2. Topic                                       
|         |                    | 3. Time                                        |

6. Research Method
In the present study, researcher wants to investigate the student’s achievement in self-learning through computerized self-study material. 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 11th (Commerce) studying in Gujarati Medium schools in Ahmedabad.

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

<table>
<thead>
<tr>
<th>School</th>
<th>Experimental Group</th>
<th>Controlled Group</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Boys</td>
<td>Girls</td>
<td>Total</td>
</tr>
<tr>
<td>Smt. H.B.M.V. High School, Odhav</td>
<td>28</td>
<td>24</td>
<td>52</td>
</tr>
<tr>
<td>Pooja Vidyalaya, CTM</td>
<td>30</td>
<td>29</td>
<td>59</td>
</tr>
<tr>
<td>Total</td>
<td>58</td>
<td>53</td>
<td>111</td>
</tr>
</tbody>
</table>
As shown in above table the lowest sample is 24 in Experimental Group for girls. So, the calculation and other analysis were done as per 24 students in each group.

9. Tool of the Study
The main objective of the study was to study the effectiveness of computerized programmed learning for the students of standard11 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. After preparation it is given to computer experts, expert teachers of O.C.M. subject and Commerce Method masters of B.Ed. colleges for review. After receiving feedback from all experts make necessary changes in Computerized Programmed Learning.

10. Design of the Study
The researcher had taken the std.10th Gujarat board examination marks for creation of equivalent group. The researcher prepare pairs of equal marks students in both schools and put one student in experimental group and put another in traditional group. In this way researcher prepare equal group with mean.

11. Research Procedure and Data Analysis
The study was conducted on both schools total 220 students. The researcher applied both method of teaching i.e. computerized programmed Learning and Traditional Method. After Completion of unit post test was given to students and get the data. The data analysis was made by find out the mean. The Significant difference between the achievements on the post-test was investigated through ANOVA which is mentioned in table 3.

<table>
<thead>
<tr>
<th>Sources of Variation</th>
<th>Sum of Square</th>
<th>df</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>School-1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Exp.</td>
</tr>
<tr>
<td>Learning Method</td>
<td>9.63</td>
<td>1</td>
<td>15.35</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interpretaion</td>
<td></td>
<td></td>
<td>F</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0.89</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>There is no significance at 0.05 and 0.01 level</td>
</tr>
</tbody>
</table>

12. Findings
The findings are as under after checking the objectives and hypotheses.
1. The mean of the students learning through Computerized Programmed Learning is higher than the students learning through Traditional Method in School 1. It shows the achievement of the students learning through Computerized Programmed Learning is higher than the Traditional teaching method.
2. The mean of the students learning through Computerized Programmed Learning is higher than the students learning through Traditional Method in School 2 also. It shows the achievement of the students learning through Computerized Programmed Learning is higher than the Traditional teaching method.
3. The computerized Programmed Learning material is very useful in self-study.
13. Suggestions
The suggestions are as follows.
1. This 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.
2. It is helpful aid to teacher’s classroom teaching.
3. Teacher can utilize this type of self-learning modules for exercise, for drill work.

References
8. www.encarta.com