Impact Of Participatory Learning Technique On The Content Enrichment Of B.Ed. Trainees

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The present study is an effort to study the impact of participatory learning technique on the achievement level and content enrichment in Geography subject among B.Ed. trainees. The objectives were to find out a significant difference in the achievement of the mean score of B.Ed. trainees in the content test of experimental and control group and male and female trainees. The study was experimental in nature and a “two group post test design” was adopted for the study. The sample was selected through purposive sampling technique. Out of 130 B.Ed. trainees admitted in Geography subject course 70 trainees were assigned to experimental treatment. The experimental group was exposed to treatment to understand and enrich the content whereas the control group was taught through the traditional method. According to the result of this study, it was suggested that participatory learning technique proved more effective in improving the content knowledge and achievement level of B.Ed. trainees.

KEYWORDS: Participatory Learning Technique, Traditional Method, Content Enrichment.

INTRODUCTION

The whole teacher education programme i.e. theory and practical activities are designed and implemented for effective training of pupil teachers. The quantitative expansion of teacher education institutions has posed certain challenges, which are to be faced. With this concern the system of teacher education needs to be strengthened and it is the responsibility of teacher education institutions to provide innovative ways to face such challenges.
Development of qualities among the trainees during the training received both in respect of theory and practical is essential. Many studies have been carried out regarding teaching competency and effectiveness. Debnath (1971) studied teaching effectiveness its measurement and determination and found that age, experience, academic achievement and professional training were the significant determinants for teaching effectiveness. Jailkhani and Neerja (1988) studied the effect of an enrichment programme upon the IQ scores of lower class children and findings show workability of enrichment program me on IQ scores. Joyce (1988) conducted an experiment in mastery learning in science. Sohoni (1992) conducted an experimental investigation of problem-solving skills in students of B.Ed. College through a special training program me and findings proved training program me as effective. D'Souza (2010) studied co-operative learning and findings show significant difference in the achievement test scores before and after use of co-operative learning. Rai (2010) investigated effectiveness of participatory learning technique on attitude towards and achievement in educational statistics, the results of the study indicated that participatory learning technique developed more favourable attitude among students and better achievement. It is a fact that to teach any subject effectively teacher must have in-depth knowledge of the content. Quantitative expansion of education affects quality and when graduates enter B.Ed. colleges they possess good academic scores but content knowledge is a matter of concern. B.Ed. Class is a heterogeneous class in terms of academic scores, academic background, age, sex and other factors and the teacher-educators deal with all the trainees using the same method. If little care is taken by teacher educator to enrich the content knowledge of trainees, it will contribute a lot qualitatively to provide competent and effective teachers. Keeping this fact in mind, the investigators undertook this study, which aimed to study the impact of participatory learning technique on the content enrichment of B.Ed. trainees in Geography subject.

**Need And Significance Of The Study**

Teacher education concentrates to acquaint the trainees with theory and practical activities and develop teaching competency among the trainees. After graduation, students who are interested in teaching enter the B.Ed. course through CAP (Central Admission Process). The candidate is expected to take admission in one of the methods course as per the quota and the method will be according to the stream i.e. Arts, Science or Commerce. 2nd methods course is allotted according to the subject they studied at graduation level and the quota for each methodology is fixed as per intake capacity of the institution. Every university in the state has its own structure, which is followed in its
affiliated colleges. Dr. Babasaheb Ambedkar Marathwada University, Aurangabad where the present research study was carried out offers school methodology in two groups as follows: a) Method A: English / Marathi / Hindi / Urdu / Science and b) Method B: Geography / History / Mathematics.

In whichever method the candidate is admitted he/she is expected to choose another methodology subject from the other group. In this way every B.Ed. trainee will have two methodology subjects related to school subjects during the course. The investigators being teacher educators have been teaching Geography methodology since a decade observe that very few students take admission in Geography according to their interest. As choice is given to select one methodology from group B, willingly or unwillingly they select Geography as one of the methods, which they have studied compulsorily till Class X as one of the branch of social sciences. At B.Ed. level, it deals with Geographical concepts and methods to present these concepts while teaching. Wherever trainees had problems, these problems or difficulties were assessed through previous content test results by method-masters and while trainees plan for practicing lessons, suggestions were given by those who were dealing with geography methodology in other classes and colleges. The researchers want to improve the standard of trainees. Hence, the researchers found out an innovative learning technique i.e. participatory learning technique, which would help to enrich the content knowledge of the trainees. In order to enrich the content knowledge of trainees, the syllabus prescribes various activities and out of these one such activity is content test on any geography textbook. Traditionally the method master declares the class and trainees are expected to attempt the content test on the stipulated date. In present study an attempt has been made to see the effect of participatory learning technique on the content enrichment of B.Ed. trainees.

**OBJECTIVES OF THE STUDY**

The objectives of the study are as follows:

1. To study the impact of Participatory Learning Technique on the content enrichment of B.Ed. trainees.

2. To find out the significant difference in the achievement of mean score of B.Ed. trainees in the content test of experimental and control group.

3. To find the difference between male and female B.Ed. students in the achievement level using Participatory Learning Technique.
HYPOTHESES
The following hypotheses were formulated for the study:
1. The Participatory Learning Technique will be effective in enrichment of the content knowledge of B.Ed. trainees.
2. There is significant difference in the achievement of B.Ed. trainees in content test of experimental and control group.
3. There is no significant difference between male and female B.Ed. trainees in the achievement level of experimental group.

DELIMITATIONS OF THE STUDY
The delimitations of the study are:
1. The study is confined to 70 B.Ed. trainees studying in Marathwada College of Education, Aurangabad, during the year 2010-2011.
2. The study is limited to geography methodology only.
3. Since the experimental design has been used the size of the sample was limited.
4. Only impact of participatory learning technique was tested in the study.

OPERATIONAL DEFINITIONS OF THE TERMS
Participatory Learning Technique
It is defined as a form of classroom organization where heterogeneous group of 20 to 30 students actively participate in the task (35 students in this study).

Traditional Method
It is referred to the old teacher centred method in which the participation of the student is bare minimum.

Content Test
According to university syllabus content test is an internal activity to be conducted in each teaching method based on school textbook for content knowledge enrichment demanding in-depth study of the teaching units.

RESEARCH METHODOLOGY
The following methodology was adopted in the study to collect and analyse the data.

EXPERIMENTAL DESIGN
The study was experimental in nature as it aimed to study the impact of Participatory Learning Technique on the content enrichment of B.Ed. trainees
in Geography subject. A two group (experimental and control) post test design was selected. The experimental group was taught through Participatory Learning Technique and the controlled group was taught through traditional method. Researcher selected 70 trainees from a college population of 130 trainees who had opted for Geography methodology. The 70 trainees were randomly assigned to experimental and control treatment with 35 students in experimental (X) and 35 students in control (Y) group. To the group X, Geographical concepts and content of Class IX was discussed and trainees were allowed to give presentations in the class and three unit tests as per schedule were conducted. The content test papers were assessed and scored while group Y was taught traditionally. Geography textbook of Class IX comprises of 09 lessons and the textbook of economics consists of 09 lessons so there are in all 16 lessons, which were divided into 3 groups for practicing test.

In this technique the student is continuously assessed by method master in presentation of concept followed by unit test, which shows the state of knowledge of the learner and helps in identifying the gaps and weaknesses and provides feedback to overcome these. In the present study, activities and learning experience were planned in different phases as shown in Table 1.

Table 1

<table>
<thead>
<tr>
<th>Phase</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase – I</td>
<td>Declaration of standard (IX) &amp; date (23/11/10) for content test in Geography subject.</td>
<td>30th Sept. 2010</td>
</tr>
<tr>
<td>Phase – II</td>
<td>Formation of groups and distribution of topics for Participatory Learning.</td>
<td>1st week of Oct.</td>
</tr>
<tr>
<td>Phase – III</td>
<td>Monday to Friday: Presentation by trainees. Saturday – Unit test [2 – Geography] [1 – Economics] (As per schedule)</td>
<td>2nd week of October onwards.</td>
</tr>
<tr>
<td>Phase – IV</td>
<td>Content test on Class IX. Geography (80 marks) and Economics (20 marks)</td>
<td>Reopening day after Diwali Vacation 23-11-2010</td>
</tr>
<tr>
<td>Phase – V</td>
<td>Assessment, Scoring and Analysis</td>
<td></td>
</tr>
</tbody>
</table>

SAMPLE

The sample for the study was drawn through purposive sampling technique. The B.Ed. trainees who had opted for Geography methodology were selected from Marathwada College of Education, Aurangabad city. The sample of study comprised of 70 trainees (35 – experimental and 35 – control group) of the
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academic year 2010-2011.

**Tool Used In The Study**

The investigators made use of a self-made achievement test as the tool for conducting the study. A subject committee of method masters dealing with geography methodology was constituted and they drafted the content test paper to measure the achievement of objectives i.e. knowledge, understanding, application and skill. The test paper was of three hours duration and was based on Maharashtra State Board pattern. The method masters found that the items drafted were relevant and valid enough to study the content enrichment of B.Ed. trainees as they revised the paper on the basis of expert opinion and used the test as post test to study the effect of participatory learning technique.

**Results Of The Study**

A 't' test was applied to test the hypothesis stated for this study at the 5% level of significance.

**Table 2**

Post Test Means, SD and t-value for Experimental and Control Groups.

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>t</th>
<th>df</th>
<th>0.05 level</th>
<th>Interpretation</th>
<th>Effect Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental (X)</td>
<td>35</td>
<td>64.5</td>
<td>7.24</td>
<td>5.94</td>
<td>68</td>
<td></td>
<td>Significant</td>
<td>0.34</td>
</tr>
<tr>
<td>Control (Y)</td>
<td>35</td>
<td>51.93</td>
<td>10.2</td>
<td></td>
<td>2.00</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The means obtained on the post test of X and Y groups were compared by employing the 't' test and obtained a t-value of 5.94. It is found to be significant at 0.01 and 0.05 level. The effect size for computed t-value is 0.34, which shows quite high magnitude. Hence the hypothesis stating, “The Participatory Learning Technique will be affective in enrichment of the content knowledge of B.Ed. trainees” is accepted. It is concluded that Participatory Learning Technique was effective in enabling the B.Ed. students enrich the Geography content effectively. There is significant difference in the achievement of B.Ed. trainees in content test of X and Y group is also accepted.
Table 3  
Means, SD and t-value of Male and Female B.Ed. Trainees of Experimental Group.

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>t</th>
<th>df</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>14</td>
<td>64.07</td>
<td>8.12</td>
<td>0.82</td>
<td>33</td>
<td>Not significant at 0.05 level.</td>
</tr>
<tr>
<td>Female</td>
<td>21</td>
<td>66.21</td>
<td>6.6</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 3 shows that the ‘t’ value for null hypothesis of the study i.e. “There is no significant difference between male and female B.Ed. trainees in the achievement level of experimental group” is accepted as the obtained value is 0.82 which is not significant at 0.05 level.

Findings of the present study show that participatory learning technique proved to be more effective in enriching the content knowledge of B.Ed. trainees as the difference between means of experimental group and control group is significant (t = 5.94) and the effect size is 0.34, which shows high magnitude, and the difference is significant. There is also no significant difference between male and female B.Ed. trainees on the level of achievement after treatment (t=0.82). This approach gives a joyful experience as the students learn without stress even if they are learning the subject after a long gap. It motivates the students to learn at their own pace and creates a lot of interest among them. They receive feedback frequently after presentations in the class and the unit test. This helps to clear the concepts and enrichment of knowledge and gives opportunity for an in-depth study of the units.

CONCLUSIONS AND IMPLICATIONS
The study illuminated effectiveness of participatory learning technique for enriching the content knowledge enrichment of trainees. Participatory learning technique is a fairly new area and its reliability is yet to be established in the field of education. Any piece of knowledge about participatory learning technique is a contribution to its knowledge base. In this way, the research study of the investigator can be considered as a small but significant contribution to the field of education. The present study has the following educational implications:
1. The participatory Learning Technique is undoubtedly better than the traditional method. It helps in enriching the content knowledge of prospective teachers belonging to geography methods course.
2. It can be used to enrich content knowledge in all subjects.
3. Participatory learning technique is effective for all the trainees from different academic backgrounds.

4. It provides the trainees with an opportunity to read content and discuss with group for effective presentation.

5. It helps the trainees to become confident individuals who are self-reliant.

6. It helps them to prepare innovative teaching aids in-group and for clarifying the concept during presentation.

7. In order to develop broad and thorough knowledge in the subject it is suggested that teacher educators (method masters), who teach methodology of school subject should adopt participatory learning technique to gather many advantages resulting from it.

8. This technique is time consuming but workable and economic if planned systematically. The present research follows a multi-disciplinary approach and is applicable for all other school subjects.

REFERENCES


D'Souza., & Giselle. (2010). Two heads are better than one cooperative learning is so much fun. *EDUTRACKS*, 10(3), 38-41.


