EMBELLISHMENT OF STUDENT LEADERSHIP IN LEARNING MULTIPLICATION AT PRIMARY LEVEL

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ABSTRACT

The present study enlightens the efficacy of Student Leadership method in learning Multiplication in Mathematics at primary level. Single group experimental method was adopted for the study. Forty learners studying in Standard III in Panchayat union primary School, Muthupettai in South Tamil Nadu, India have been selected as sample for the study. From the analysis, it is found that the student Leadership method is so robust comparing with the customized approach, in learning concept of Multiplication in Mathematics.

INTRODUCTION

In teaching Mathematics, Chalk and talk method is the most widely practiced one in the primary education in India. Self learning method is adopted nowadays to strengthen the competency of the students at primary level. Even if it is learner centered approach, learners face hurdles and learning impediments in learning multiplication. Autonomous learning is the least approach in achieving the expected competency. It fails to pave way to clarify their doubts and waves co-operative learning. Student Leadership method encourages the co-operative learning which embellishes the learners of primary level in learning multiplication. In the student Leadership method, a class can be divided into five groups, each group selects an efficient learner to act as a leader, who teaches through using newly devised learning materials instead of learning from the teacher. It frees the students from fear and creates the congenial atmosphere in the classroom. Student Leadership method enhances the multiplication competency of the learner in smooth manner. It was observed that student Leadership method strengthened the learning of multiplication and eliminated the learning impediments of the slow learners. It motivates the learners to learn more and they have spot guidance through their leader and creates children friendly atmosphere. It encourages the mutual understanding among the learners and strengthens the democracy of the learners in the classroom.

Statement of the Problem :

The present study aims to identify the problems of the learners in learning multiplication and eliminate their problems by using Student Leadership method in learners of standard III.

Significance of the Study :

Learners of Standard III at Panchayat union Primary school, Muthupettai, Tamilnadu were noticed to attain the competency in multiplication because of the monotonous methodology followed by the pupils as per the guidance of the teacher. Most of the methods in learning multiplication are dependnt upon testing the memorizing ability of the pupils, but failed to evoke interest towards Mathematics. The fundamentals of Multiplication figured as incompetent at Standard III of that school. Even the pupils who have scored higher marks in maths, miserably failed to apply their knowledge of maths in their daily life involving Mathematical problems. These learning impediments were clearly expressing their weakness in the applied aspect. Even if self-learning is introduced, they failed to attend the expected level of competency due to inability to learn through fear free assistance. Keeping the above factors in mind, the investigation team decided upon and developed a new method named student Leadership which facilitates to involve each and every student with

other students under the guidance of a leader for acquiring expected experience and knowledge in Multiplication.

Objectives

The researcher has framed the following objectives of Study:

1. To identify the causes and obstacles of the young learners using the present methods of learning Multiplication at Standard III.
2. To find out the significant difference between the Pre test and Post test in achievement mean scores of the pupils in multiplication.
3. To assess the embellishment of student Leadership method in learning Multiplication.

Hypotheses

The researcher has framed the following hypotheses

1. Learners of Standard III of Panchyat Union Primary School, Muthupettai, Tamil Nadu have learning obstacles in Multiplication.
2. There is no significant difference between Pre-test and Post test in achievement mean scores of the pupils in learning Multiplication.
3. Learning Multiplication by using Student Leadership method is more effective than existing approaches.

Operational Terms

Student Leadership method :

Students of a class are divided into as many groups according to the strength of the class, containing 5 to 10 students as advocated for each group. Each group has a leader selected by the class teacher. Teacher separates the leaders and gives practice using different techniques of learning with the help of learning materials. After giving enough drill to the leaders, they are encouraged to facilitate their groups in learning multiplication. Each leader engages the learners in a friendly manner.

Multiplication

Multiplication is one of the basic arithmetic operations. It is considered as a competency to the acquired at Standard III.

Method of Study

Single group experimental method was adopted for the study.

Sample Design

For the purpose of this study, forty learners of standard III from Panchayat union Primary school at Muthupettai in Tamil Nadu, South India were selected.

Construction of Tools

The investigator's self-made question paper was used for the pre and post test. The same question paper was used for both pre and post test to evaluate the pupil's skills in multiplication through objective type of questions which carried one mark for each question and contained 25 marks. Pupils could answer appropriately by using the student Leadership method in learning multiplication.

Procedures of the Study

Phase 1 : Identification of the problems of the learners of Standard III in achieving mastery in Multiplication, in existing methods through administering pretest.

Phase 2 : The Problems of the learners in learning multiplication was discussed with the class teachers.

Phase 3 : Discussion about Student Leadership in the Class room.

Phase 4 : Preparation of tool with the help of the class teacher.

Phase 5 : Administering pretest among the learners in multiplication and Evaluating the test.

Phase 6: Orientation of teachers to introduce student leadership by using learning materials.

Phase 7 : Preparing of learning materials according to the number of learners.

Phase 8: Taking model class by the researcher.

Phase 9: Practicing the new method in the classroom.

Phase 10: Evaluating the new method. Administering the post test towards the learners.

Data Collection

The researcher administered Pre-test to the pupils with the help of the teachers . The question paper and response sheet were given to the individual learners and collected

Fig. 1Learning by Student Leadership Method

Fig. 2 Learners enjoying with the help of learning material in student leadership method

and evaluated. Learning obstacles of the learners were identified by the Pre-test. The causes of low achievement by unsuitable methods were found out . The treatment method and activities were prepared and executed through student Leader. The post test was administered and the effectiveness of the student Leadership method was found.

Data Analysis

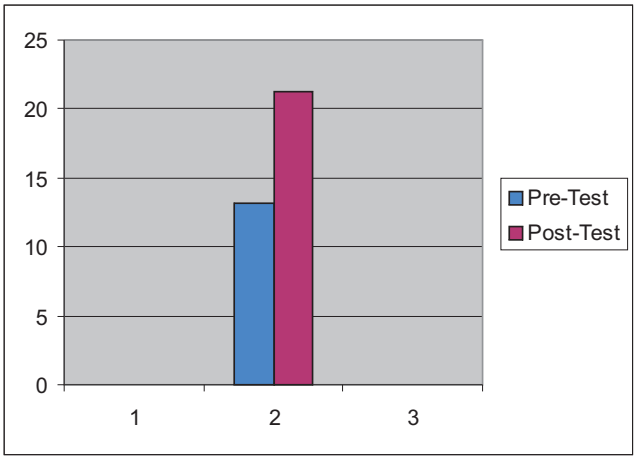
Statistical technique 't' was applied for the study.

Hypothesis Testing

Hypothesis 1 :

Learners of Standard III of Panchayat Union Primary School, Muthupettai, Tamil Nadu, **have learning obstacles in Multiplication.**

Achievement mean score in the pretest was 13.12 and the post test 21.25. Hence it was found that the learners of Standard III had problems in learning multiplication through existing methods.



Histogram Showing Achievement Mean scores Between Pre-Test and Post-Test.

Test			No	t	df	Level of Significance
Pretest	13.12	7.16	40	2.43	7 8	p<0.05
Posttest	21.25	19.9	40			Significant

Table1 showing achievement mean score between Pre and Post test in Multiplication.

Hypothesis 2:

There is no significant difference between pre test and post-test in achievement mean scores of the pupils in learning multiplication.

The calculated 't' value is (2.43) greater than table value(1.66). Hence null hypothesis is rejected at 0.05 level. Hence there is significant difference between Pre-test and Post-test in achievement mean score of the learners in multiplication.

Hypothesis 3 :

Learning Multiplication by using Student Leadership method is more effective than existing approaches.

Achievement mean scores of post-test(21.25) is higher than Pre-test(13.12). Hence it was found that student Leadership method is more effective than traditional approaches in learning Multiplication at Standard III.

The above histogram shows the achievement mean scores of the Pre-test (13.12) in learning multiplication by traditional approach and the effectiveness of using

Student Leadership method with learning materials in learning multiplication as shown in the Post-test achievement score(21.25).

Findings

1. Learners of Standard III of Panchayat Union Primary School, Muthupettai, South India have problems in learning Multiplication.
2. There is significant difference between Pre and Post-test in achievement mean scores in Multiplication.
3. Learning fundamentals of multiplication by using Student Leadership method through learning materials give significant improvement in students.

Educational Implications

1. Student Leadership can be extended to upper primary level, Secondary level and Higher secondary level.
2. This method can be encouraged to implement to use in Adult education.
3. It may be implemented in teacher education
4. It may be implemented in alternative School.
5. Slow learners can improve by using it.
6. It may be more supportive to promote Sarva Siksha Abiyan in grass root level.

Conclusion :

The study reveals that the learners of Standard III at Panchayat Union Primary School of Muthupettai, had problems in learning multiplication by using Traditional approach. It is concluded that learning fundamentals of multiplication by the pupils at Standard III, using Student Leadership method is more effective than traditional approaches. Hence it will be more supportive to promote primary education.

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