

Improvement in Mathematical Word Problems Solving Method Through Practice**Khanpate Sonaji Gunaji**

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Abstract :-

The focus of the study is to create the Mathematical word problems solving method through practices and two find out the best practices for it. Experimental research methodology has been used for this study and single group design has been used for the research study. For the students are selected from entire population by incidental sampling method. The problem solving method pretest and post test and questionnaire are used for collection of data. To find out the effectiveness of problems solving method the hypothesis are formulated Ho. There 18 no significant difference between means score of experimental group and control group taught by problem solving method Ho: 1 no difference existing between observed frequencies and expected frequencies. The finding of the study are developed problem solving method enhance the understanding of word problem solving in student and opinions of students are positive to words the developed problem solving method.

Introduction :-

Secondary school education is important in students life. Teacher taught him all the subject language, social science, science, mathematics. All subject having importance for his future. At the level of understanding mathematics is tough than other subject.

Therefore the role of teacher as the dispenser of knowledge does not seem to be very relevant now it is more important for him to initiate his student into the art of learning by way of helping them acquire the right mental attitude and learning habits. Thus the teachers role is changing his authoritative delivery of knowledge is being supplemented by his spending more time diagnosing the learner's needs motivating and encouraging study and checking the knowledge required.

The teacher is now expected not only to inculcate knowledge but also to encourage thinking. He has to become more an adviser, a partner to talk to he has to help seek out conflicting arguments rather than hand out ready-made truths. For this he will have to devote more and more time and energy to productive and creative activities.

In the context of prevention all these crisis related to student. Secondary education play an important role. There is necessity to train the student to understand and solve the mathematical word

problem. In connection of this secondary level is most important for learning such a things. It is also important to understand and solve the problems with in time and skillfully statement of the problem.

Improvement in mathematical word problems solving through practice.

Objectives of the study

- 1) To find out the problems in mathematical word problem solving.
- 2) To prepare the practice session for the student.
- 3) To find out the effectiveness of session teaching.
- 4) To find out the opinion of secondary school student about mathematical word problem solving.

Assumptions of the study

- 1) Secondary school students have knowledge about problem solving.
- 2) Secondary students are know the importance of word problem.
- 3) Secondary students apply new method of problem solving in everyday life.

Research hypothesis of the study

- 1) There is significant difference between means score of control group and experimental group taught by word problem solving method.

- 2) A significant difference existing between observed frequencies and observed frequencies of experimental group student.

Null hypothesis of the study

Ho = There is no significant difference between means score of control group and experimental group taught by problem solving method.

Ho 1 = No significant difference existing between observed frequencies and observed frequencies of experimental group student.

Imitators of the study

- 1) The psychological aspects like attention, motivation, merest are beyond the control of investigator.
- 2) The attendance aspect of the student's is beyond the control of investigator.

Research methodology

For this research study experimental research methodology is used to find out the problems in solving of mathematical word problems.

Research Design of the study

Research design is blue print of the study which enable researcher to achieve the goal. For this research study signal group design is used.

Population of the study

Population of the present research study consists of all the student of 10th class in the school.

Sample and sampling method of the study

Table No. : 1.

Sr. No.	Design	Experimental control group	Total
1	Single group	40	40

Table : 1 Show the sample of the present research study which consists of 40 students from the mahatma phule vidhyalaya parbhani. Incidental sampling method is used.

Variables of the research study : Independent variable :

Problem solving method developed by researcher comes under independent variable.

Dependent Variable :

Achievement score of student comes under dependent variable.

Research Tool

Tools for the data for this research study consists of

- A. Problem solving method teaching (pre test and post test)
- B. Opinionnaire for student
- C. Problem solving method programme.

Statistical Tools :

- a) Mean b) S.D. c) T. Test d) chi-square test.

Preparation of Tools :

- a) **Problem solving method programme** (pre test and post test) : This test is prepared by the investigation which is prepared by researcher.
- b) **Problem solving programme.** : Programme is based on mathematical word problem, which contain many types of problems, how to understand and how to solve.
- c) **Administration of test** : Administration of problem solving test pre test. Before administration of special teaching programme investigator has implemented. The special teaching of mathematical word problem solving pre test is used for evaluation related to understanding of student.
- d) **Administration of special teaching programme.** : A special teaching programme based on the mathematical word problem. this teaching programme is administered for experimental group.
- e) **Opinionnaire** : After implementation of special teaching programme investigator has implemented. The special teaching programme and find out the effectiveness.

Testing of hypothesis :

Ho- There is no significant difference between mean score of control group and experimental group taught by special teaching programme.

Table No : 2

Interpretation of data for 'T' test

Test	Mean	S.D.	d.f.	't'	't'	Decision
Pre Test	10.15	1.49	39	14.28	2.70	Rejected
Post Test	17.90	2.97				

Observation and interpretation :

- 1) Table no.2 shows the mean and standard deviation score obtained by 40 student of control group as well as experimental group. This table also shows calculated and observed 't' value 0.01 significant level
- 2) The calculated 't' value 14.28 exceeds than observed 't' table value at 0.01 significant level respectively hence value 18 taken to be significant resulting in the hypothesis Ho 1 and accepting the research hypothesis.

Ho 1 : No significant difference existing between the served frequencies and observed frequencies expected mental group student.

Category	Student	Calculated 'X' value
Medium	06	29.42
Good	16	
Best	18	

Major Findings :

- 1) Students are not trained in word problem solving before the special teaching.
- 2) Special teaching programme is effective for the student.

- 3) Responses of the students towards developed skill of mathematical word problem solving. The special teaching programme are found very positive.

Conculssion :

- 1) From above finding it concludes that mathematical word problems solving method taught in special teaching programme superior to previous method.
- 2) Special teaching programme in enhance the skill of problem solving.
- 3) Responses of the students towards developed problem solving method are found very positive.

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