

**A STUDY OF MEASURING AND FILLING THE LEARNING GAPS OF  
MATHEMATICS CONCEPTS OF GRADE V STUDENTS OF S.B. PATIL  
PUBLIC SCHOOL, RAVET, PUNE.**

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## TABLE OF CONTENTS

Research Title.....	4
Introduction.....	4
Research background.....	4
Objective.....	5
Research Questions.....	5
Hypothesis.....	5
Time Duration.....	5
Methodology.....	5
Sampling.....	5
BASELINE PERFORMANCE TEST 1, 2, 3.....	5
Data Collection.....	8
Observation.....	9
Findings.....	9
Pre Action Plan Implementation Observations	
Post Action Plan Implementation Observations	
Outcome of the action plan after implementation.....	10
Recommendations.....	10
References.....	11
Annexure1.....	12
Annexure2.....	15
Annexure3.....	18

## **TITLE**

**Report on the Action Research Project Of Measuring and Filling The Learning Gaps of Mathematics Concepts Of Grade V Students of S B Patil Public School, Ravet, Pune.**

## **INTRODUCTION**

This is a report on an action research project which investigates the extent to which guided practice can help students improve their mathematical concepts in Math subject. It documents a teacher-initiated, classroom-based action research which turned math basic concepts from the boring, complex types into enjoyable and simple ones. Respondents came from a sample of Grade 5 students in the school. Both qualitative and quantitative data were collected through baseline test conducted by the Gatuvit organisation.

## **RESEARCH BACKGROUND**

Calculation is a core skill that benefits students across the curriculum. This Action Research was held to devise simple and enjoyable methods to impart calculation and logical skills to the students.

### **Statement of Problem**

A STUDY OF MEASURING AND FILLING THE LEARNING GAPS OF MATHEMATICS CONCEPTS OF GRADE V STUDENTS OF S.B. PATIL PUBLIC SCHOOL, RAVET, PUNE.

### **Objective**

To identify Mathematical competencies of students studying in Grade 5  
To provide teachers training to enhance students' mathematical competencies.  
To study the effect of new interventions on students' mathematical competencies.  
To compare the pre and post test results.

### **Research Questions**

1. How can the scores enable teachers to plan better teaching/ pedagogical approaches?
2. How can teachers training be organised based on pre test scores?
3. How has teachers training improved the teaching – learning process?
4. What is comparative results of Pre and Post-tests?

### **Hypothesis**

The following was the Hypothesis

1. Significant difference in teacher's approach to teach mathematical competencies.
2. Significant difference in Pre / post test scores
3. Significant difference in student performance with new approaches.

### **Time Duration**

The project will be carried out from 17th August, 2021 to 17th November, 2022 with a total length of three months.

### **Sampling**

Students came from Grade V of S B Patil Public School, Ravet, Pune. Total 272 students from Grade 5 have given Base line test.

### **Baseline performance test**

This test expects students to score more than 70% on an average. The average percentage of class is 49%. However, the following graph will give a better idea of student distribution among 4 groups, to help you plan the inputs in the class.

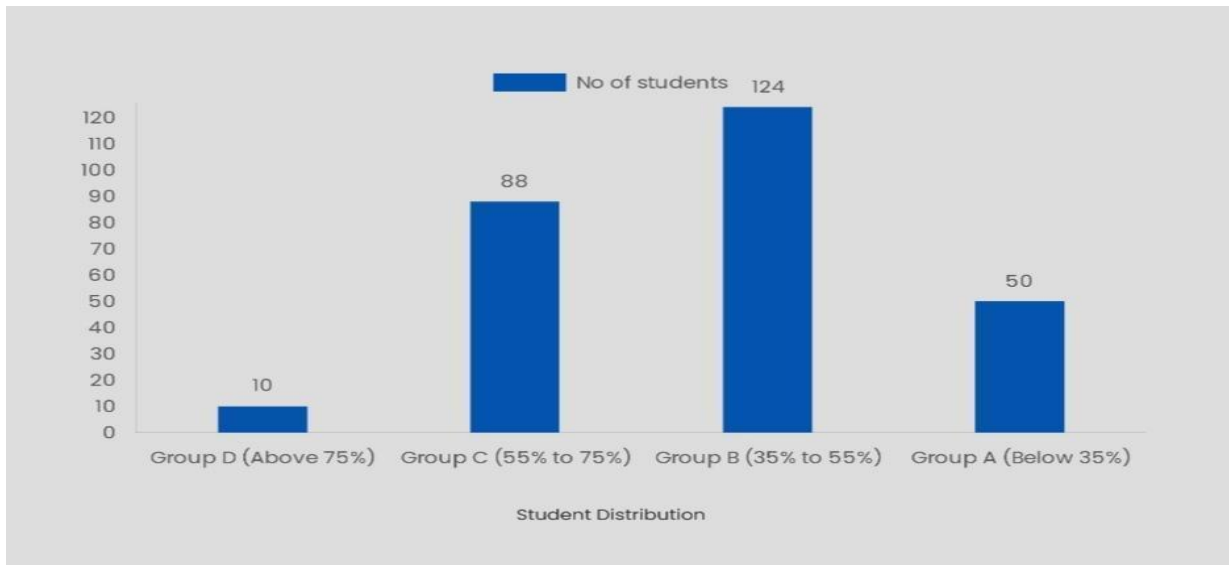
### **Data Collection**

The quantitative data is collected from the baseline test scores.

### **Observation**

Teacher carefully observed the scores in mathematical concept based activities and also the students' participation and responses during the

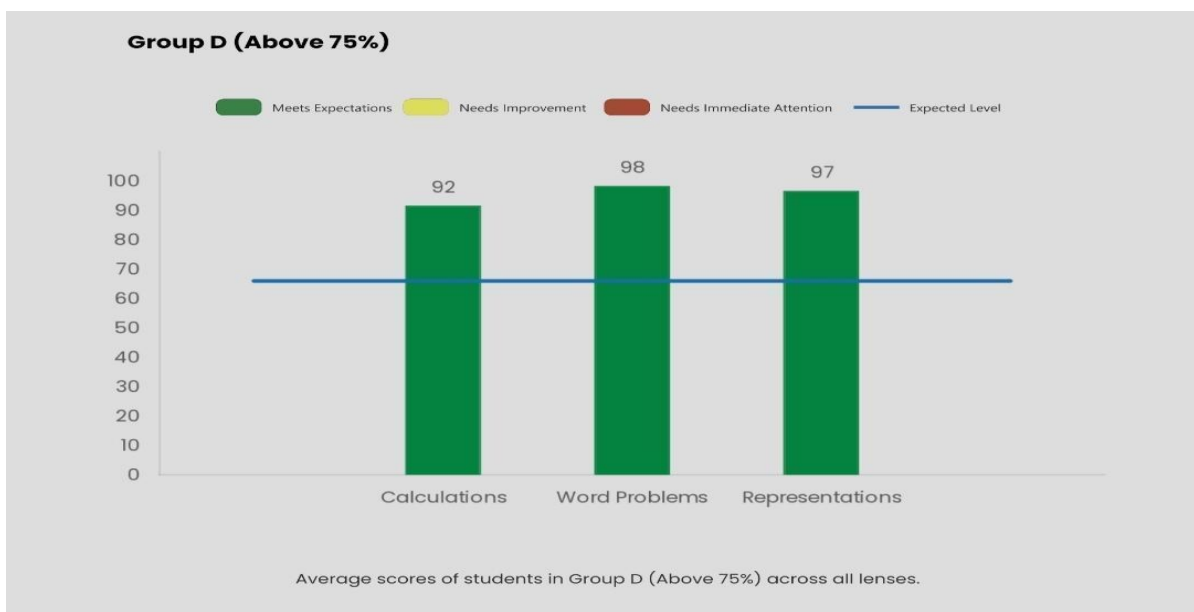
activities and made use of the observations to investigate, analyze and conclude the findings when the project came to an end.



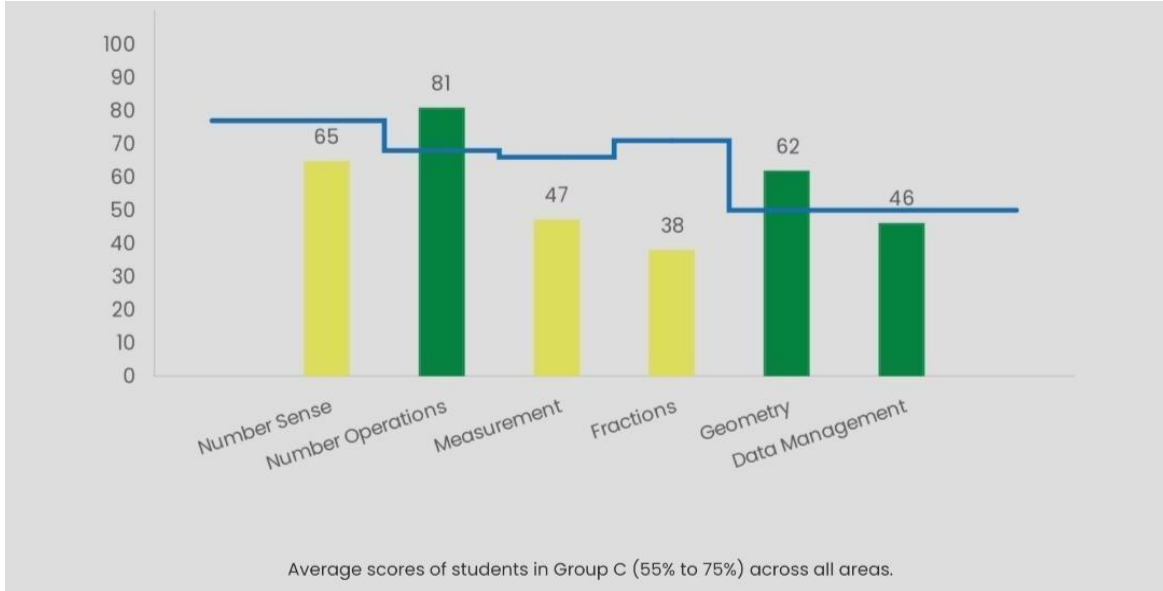
**Findings:**

**Baseline performance test Observations  
(Annexure 2)**

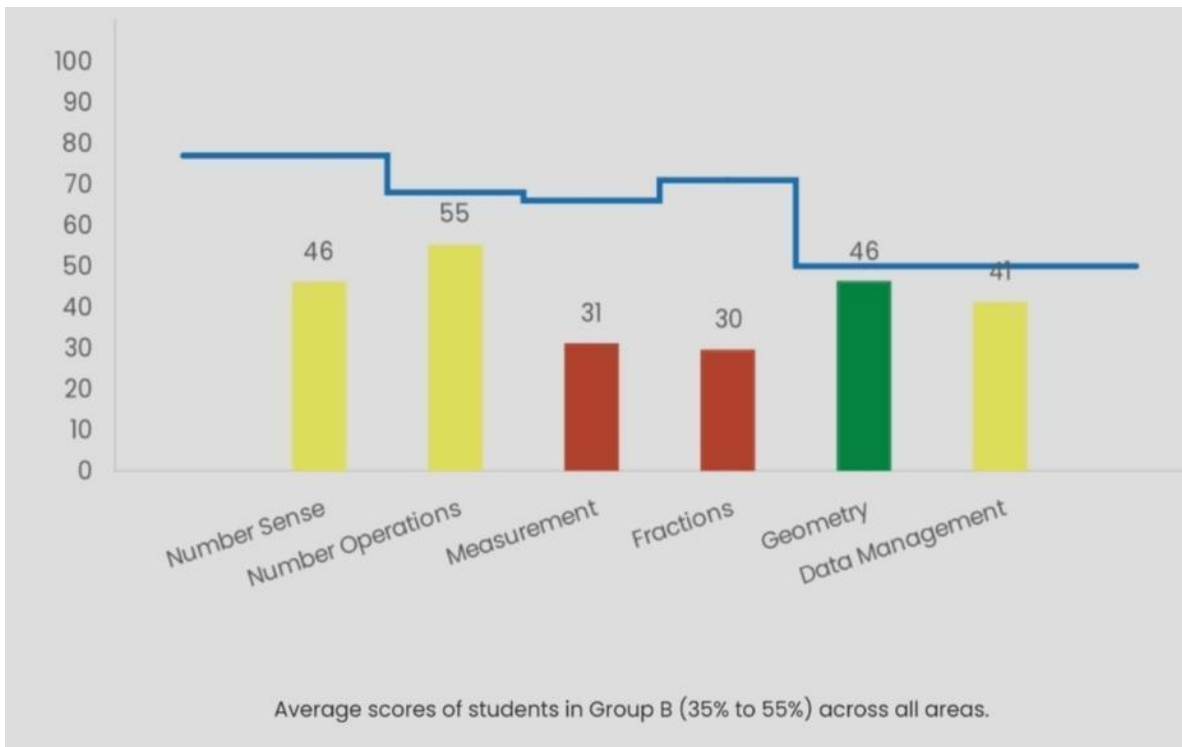
**Area wise status of Group D (Above 75%)**- This section shows how the students in Group D (Above 75%) performed across all the areas with a skyline of expected score in each area.



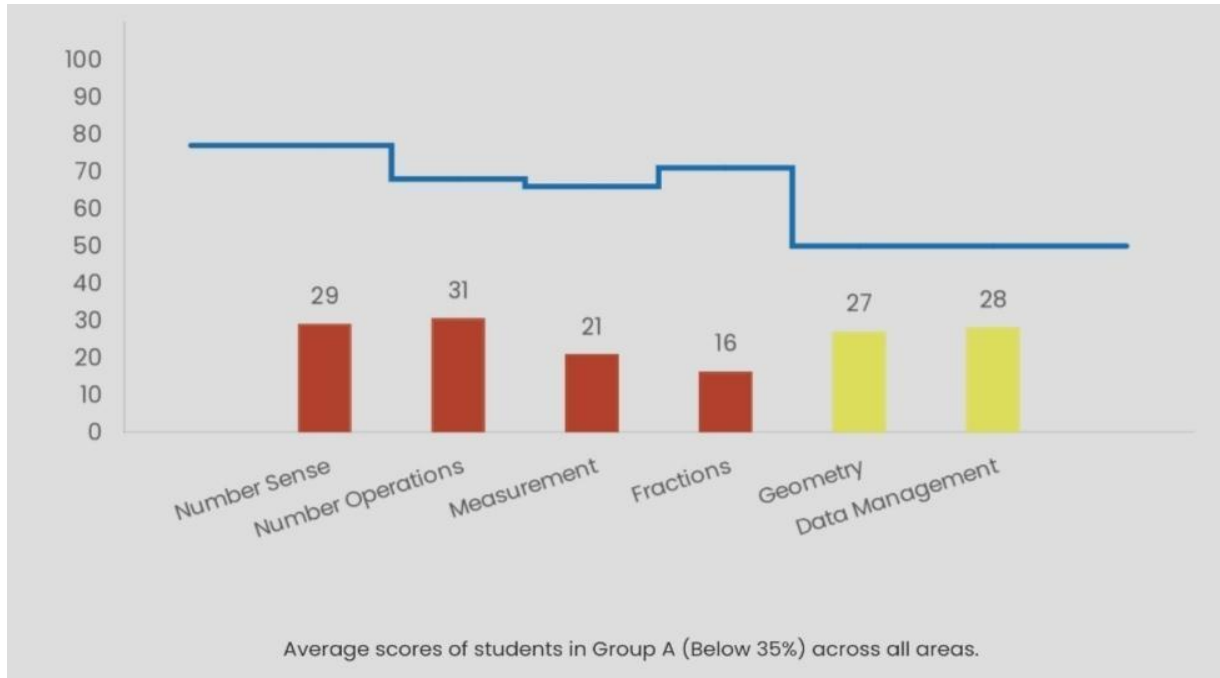
**Area wise status of Group C (55% to 75%)-** This section shows how the students in Group C (55% to 75%) performed across all the areas with a skyline of expected score in each area.



**Area wise status of Group B (35% to 55%)-** This section shows how the students in Group B (35% to 55%) performed across all the areas with a skyline of expected score in each area.



**Area wise status of Group A (Below 35%)**- This section shows how the students in Group A (Below 35%) performed across all the areas with a skyline of expected score in each area.



<b>Gatuvit data (2022-23)</b>					
	Cope well with their grade	About 1 grade behind	About 2 to 3 grades behind	Severe lack of foundational competencies	
Class\Range	D (Above 75%)	C (55% - 75%)	B (35% - 55%)	A (Below 35%)	Total
5A	1	12	22	6	41
5B	0	13	19	8	40
5C	2	7	23	7	39
5D	1	13	15	9	38
5E	1	14	18	4	37
5F	0	14	16	10	40
5G	5	15	11	6	37
<b>Total</b>	<b>10</b>	<b>88</b>	<b>124</b>	<b>50</b>	<b>272</b>



## Post Action Plan Implementation Observations

Teachers training- Teacher's will be given training on how to fill learning gaps found during baseline test.

2) Teacher will be conducting 2 sessions in a week for Group A and B for 2 months and Group A, B and C for 3 months.

## Time table and in charge teachers for Group A and Group B -

Group A1 (Madhura ma'am)	(5A,5B,5C,5E) = 25 Students
Group A2 (Deepali ma'am)	(5D,5F,5G) = 25 Students
Group B1 (Rupali ma'am)	(5A,5B) = 41 Students
Group B2 (Jyoti ma'am)	(5C,5D) = 38 Students
Group B3 (Nisha/Kiran ma'am)	(5E,5F,5G) = 45 Students

Gatuvit timetable Grade 5					
	5A	5B	5C	5D	5E
Wednesday 2:55 pm-3:25 pm	A1	A2	B1	B2	B3
Friday 2:25 pm - 2:55	A1	A2	B1	B2	B3

## Class Activity 1-



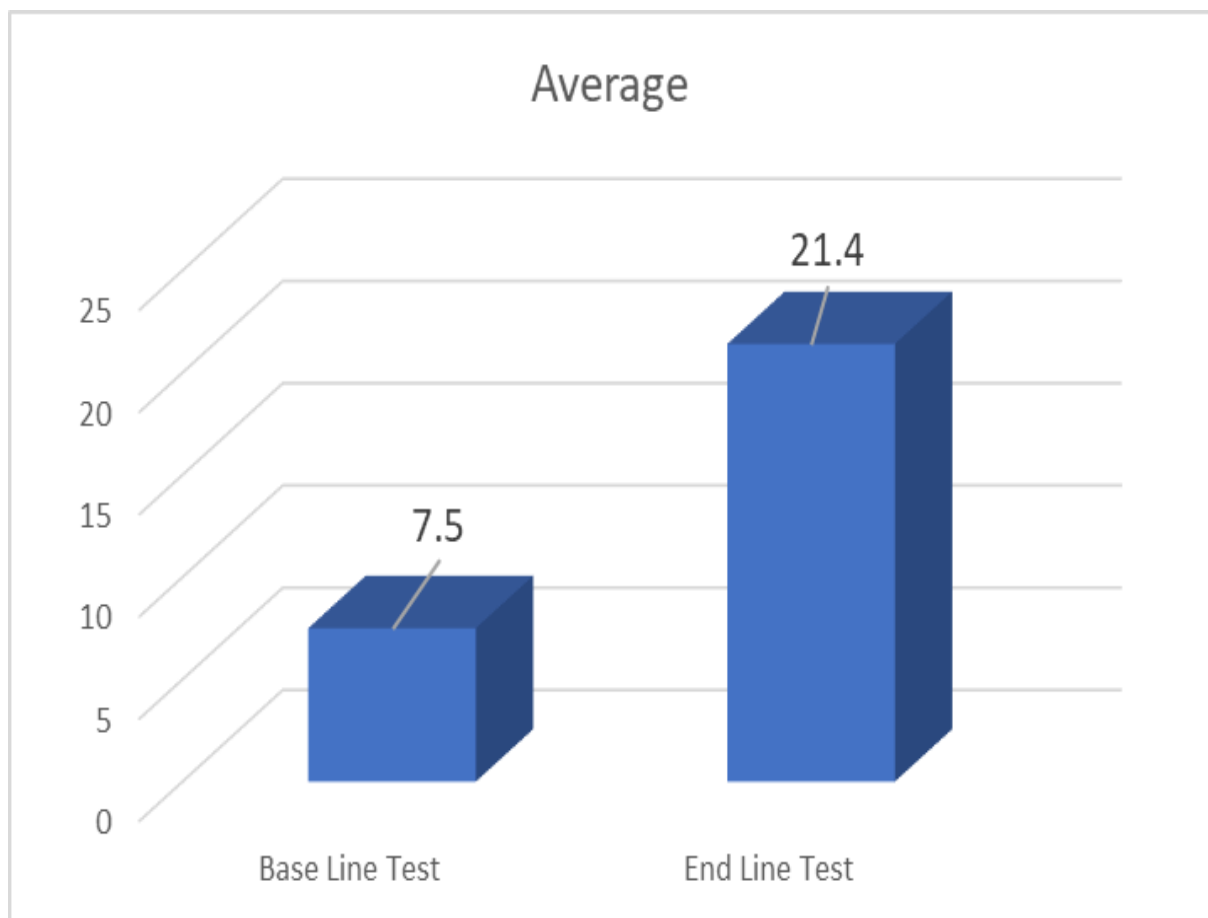
### Impact Analysis

**INPUT** – New Action research project taken up by Math department to measure and fill the learning gaps of Mathematical competencies of Grade V students.

**OUTPUT** –

- 1.Improved teaching learning approach for the teachers.
2. Interventions are done to develop mathematical competencies among students.

Average	Base Line Test	End Line Test	Out of Marks
	7.5	21.4	32



**INDIVIDUAL IMPACT-**

- 1.Help students to develop grade appropriate mathematical competency.
2. Better performance during assessment due to better teaching learning methods.

**INSTITUTION IMPACT-**

Craft and adopt the best suitable teaching pedagogy within TLP.  
Proper Instructional planning for school and classroom.

**SYSTEM IMPACT-**

Empower and help teachers to reflect on and improve their practice for continuous Professional development.