

## PROBLEMS OF LEARNING MATHEMATICS AMONG THE STUDENTS OF STANDARD IX

By

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### Abstract

*To understand the learning difficulties that many students require by knowledge of mathematics, learning must determine the intellectual operative is essential in variety of mathematical processes. Initial from the utmost importance of semiotic image for any mathematical activity put onward a grouping of the various records of semiotic images that are mobilized in mathematical processes. Thus the present study is about the problems of learning Mathematics among the students of standard IX in Villupuram district, Tamilnadu. The present study consists of 200 students as sample selected by using stratified sampling technique. The finding of the study denotes that standard IX students are significantly differ in their learning of mathematics.*

**Keywords:** Learning difficulties, Learning Mathematics, Mathematical processes, Students of Standard IX.

### INTRODUCTION

Learning difficulty in mathematics, also known as Dyscalculia, is a learning disability that makes it problematic to understand numbers and signs and to perform mathematical calculations. Normally, it's known as the mathematical form of dyslexia. Dyscalculia can occur in people from across any IQ level. There will be some mistakes can occur for the learners like, number additions, substitutions, transpositions, omissions, and reversals in writing, reading, and recalling numbers. Mathematics is a quantitative subject that fosters the development of

cognitive abilities such as thinking (Shaffer, 2001). Reasoning skills are important for success in mathematics and other subjects' students study in schools. Mathematics, mostly, is a base for all scientific and technological studies. Also, mathematics has high significance and concrete applications to many real-life situations and problems. It is therefore a key and compulsory subject in many school systems. The study of mathematics has still unfortunately been not easy for many students. Similar in the domain, students have a wide range of problems with mathematics. Mathematics is one of the school subjects in which many students often perform poorly, improvements to be made to overcome the problems for teaching and learning. For example the instructors' methods of teaching and assessing mathematics in inclusive schools may also need to be reformed. In addition, the teaching and evaluation of integrated mathematical skills to students with learning difficulties in inclusive schools under the present SPN21 curriculum reforms might be quite challenging

## **REVIEW OF RELATED LITERATURE**

**Ram Krishna Panthi and Shashidhar Belbase (2017)** discussed major issues of mathematics teaching and learning in Nepal. The issues coming from theories such as social and radical constructivism suggest that teachers are not trained to use such approach in teaching mathematics, and there is a lack of teaching aids and materials and technological tools. The issues related to social aspects are gender issues, language issues, social justice issues, and issues related to the achievement gap. The cultural issues are related to the diversity of language and ethnicity. The issues related to political aspects are equity and access, economic status, pedagogical choice, and professional organizations and unions. The issues related to technology include the technological skills, use of technology, and affordance. Finally, we suggest that all the stakeholders should pay attention to resolving these issues by improving the curriculum, training teachers, resourcing the classroom with locally made and new technological tools.

**SenthamaraiKannan B et al. (2016)** attempts to study on problem solving ability in mathematics of IX standard students in Dindigul district, Tamil Nadu. The study was conducted on a sample 80 ninth standard students. The sample divided into two types of institute which are Government and private secondary schools. Problem solving ability test in mathematics was used to collect data. The investigator had adopted the survey method and random sampling technique was used. The results showed that the level of problem solving ability in mathematics of IX standard students is average.

### **NEED AND SIGNIFICANCE OF THE STUDY**

Normally we see that students have a fear towards the subject Mathematics. They are unable to understand the basic concepts of Mathematics and their technique due to various reasons. The problems that occur in the process of learning mathematics are relatively less in case of other subjects. Hence, for common students mathematics becomes a tougher subject and consequently, they try to avoid it. Problems related to mathematics occur not only in case of students but also in case of teachers. It is seen that most of the mathematics teachers are not aware of alternative simple methods of teaching mathematics and different skills of solving the same problem. Hence, there is a need to study in detail the problems faced both by students and teachers in learning and teaching mathematics. So present study has been conducted with the solve objective of identifying various problems faced by students in learning mathematics among the students of standard IX.

### **OBJECTIVES OF THE STUDY**

- ❖ To assess the level of Problems of learning Mathematics among the students of standard IX in Villupuram district.
- ❖ To find out the significance difference if any, in the problems of learning mathematics between boys and girls.
- ❖ To find out the significance difference if any, in the problems of learning mathematics between Tamil medium and English medium.

## **HYPOTHESES OF THE STUDY**

- ❖ The level of Problems of learning Mathematics among the students of standard IX in Villupuram district is not high.
- ❖ There is no significant difference in the Problems of learning Mathematics mean scores between boys and girls students.
- ❖ There is no significant difference in the Problems of learning Mathematics mean scores between Tamil medium and English medium students.

## **METHODOLOGY IN BRIEF**

The investigator followed the survey method for the study. Problems of learning Mathematics Scale was developed and administered by the investigator to the Students of standard IX in Villupuram District.

## **SAMPLE**

The population for the study consisted of students of standard IX in Villupuram District. The investigator selected 200 students from the selected schools by using stratified random sampling technique.

## **STATISTICAL TECHNIQUES**

The data were tabulated and statistically analysed by adopting mean, standard deviation and t-test.

## **DATA ANALYSIS**

### **HYPOTHESIS - 1**

The level of Problems of learning Mathematics among the students of standard IX in Villupuram district is not high.

**Table 4.1****The Mean and Standard Deviation of Problems of learning Mathematics among the students of standard IX**

<b>Variable</b>	<b>N</b>	<b>Mean</b>	<b>Maximum Score</b>	<b>S.D</b>
Problems of Learning Mathematics	200	95.8	120	10.7

From the above table (4.1) the Problems of Learning Mathematics of Students of Standard IX is found to be above average. This is evidenced by the Mean value 95.8, which is for above the mid value 47.9 of maximum score 120. It is inferred that the Problems of Learning Mathematics of Students of Standard IX are found to be above average level

**HYPOTHESIS - 2**

There is no significant difference in the Problems of learning Mathematics mean scores between boys and girls students.

**Table – 4.2****Problems of learning Mathematics mean scores of Students of Standard IX on the basis of their Gender**

<b>Gender</b>	<b>N</b>	<b>Mean</b>	<b>S.D</b>	<b>t-value</b>	<b>Level of Significance</b>
Boys	84	70.48	12.50	5.326	Significant
Girls	116	59.73	16.85		

The above table (4.2) presents the analysis of the mean scores of problem of learning mathematics of the students of standard IX on the basis of their gender. As revealed by the table the sample consists of 84 boys' students and 116 girls students. The problem of learning mathematics mean scores of boys' students is 70.48 and that

of the girl's students is 59.73. The Standard Deviations are 12.5 and 16.85 respectively. The calculated 't' value is 5.326 is higher than the critical value 2.58 at 0.01 level of significance. It implies that there is a significant difference in problem of learning mathematics of the students of standard IX between boys and girls. Further, the greater mean scores of boys have a problem of learning mathematics higher than the girls.

### **HYPOTHESIS - 3**

There is no significant difference in the Problems of learning Mathematics mean scores between Tamil medium and English medium students.

**Table – 4.3**

**Problems of learning Mathematics mean scores of students of standard IX on the basis of their Medium of Instruction**

<b>Medium of Instruction</b>	<b>N</b>	<b>Mean</b>	<b>S.D</b>	<b>t-value</b>	<b>Level of significance</b>
Tamil medium	103	61.72	17.56	1.97	Not Significant
English medium	97	63.80	15.12		

The above table (4.3) presents the analysis of the problem of learning mathematics scores of the students of standard IX, sub grouped on the basis of their Medium of Instruction. As revealed by the table the sample consists of 103 Tamil medium students and 97 English medium students. The Mean problem of learning mathematics score of Tamil medium students is 61.72 and that of the English medium students is 63.80. The Standard Deviations are 17.56 and 15.12 respectively. The calculated 't' value is less than the table value 1.97 at 0.05 level of significance. It implies that there is no significant difference in problem of learning mathematics between Tamil medium and English medium students.

## **FINDINGS OF THE STUDY**

The findings of the study are stated as follows:

- ❖ The level of problem of learning mathematics among the students of standard IX is at above average.
- ❖ Significant difference is found in the problem of learning mathematics of students of standard IX between boys and girls. The higher mean scores of students of standard IX boys students have a greater level of problem of learning mathematics than the girls students
- ❖ No significant difference is found in the problem of learning mathematics between the students of standard IX of Tamil medium and English medium.

## **CONCLUSION**

The present study has been done with a clear focus on the problem of learning mathematics of students of standard IX. But the findings and conclusion of the study are quiet relevant to the school level students of the entire state of Tamil Nadu. The study has presented an analysis of the students of standard IX in problem of learning mathematics. In the light of the research findings, it is felt that the present research may be contributed to problem of learning mathematics of students of standard IX. This study has also revealed that boys and girls, Tamil medium and English medium do have the adequate results in their level of problem of learning mathematics through this investigation.

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