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Problems Faced By The Students And Teachers In Learning And Teaching Mathematics In Schools: A Study On Class X Students And Teachers Of Nazira Sub-Division Of Sibsagar District Of Assam

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Abstract: Today's world largely depends on science and science in turn depends on mathematics. Modern math consisting of arithmetic, algebra and geometry has an important role in the field of education. Mathematics has a vital role in the classroom not only because of direct application of the syllabus material but because of the reasoning processes the student can develop. But many students develop fear towards Mathematics due to their misunderstanding, non-understanding and failure during previous lessons. Children with negative attitudes towards Mathematics have performance problems because they develop anxiety. The intent of the present paper is to find out the various problems faced by the class X students and teachers in learning and teaching mathematics in schools of Nazira sub-division of Sibsagar district of Assam.

Key words: Mathematics, attitudes, learning, teaching, Nazira, Sibsagar, Assam.

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I. INTRODUCTION:

It is widely believed that mathematics is very important to the economic, scientific and political development of any nation. It is because of this common phenomenon that made every nation in the world to make mathematics a compulsory subject in every aspect of educational system. The principles of mathematics are generally understood at an early age. When missed, it gives birth to anxiety which includes a feeling of tension, apprehension or fear that interferes with mathematics performance. Mathematics anxiety is a phenomenon that cuts across some students in secondary schools because they tend to miss its principles.

Modern experts on child development and early childhood education firmly mentioned that there are differences in individual thinking and they advocate that learning should be related to students own pace. Attitude towards mathematics denote interest or feeling towards studying mathematics. It is the disposition of an individual towards liking or disliking the study of Mathematics. The researchers Mathematics must be very remarkable and interesting courses that can help the students solve the many problems they actually have to face. If a problem is a realistic application using mathematics, then students can see the importance of the skill involved. Modern math consisting of arithmetic, algebra and geometry has an important role in the field of education. A math teacher is someone who inspires their students to look beyond the pages of the textbook to become problem solvers and critical thinkers. The researchers reveal that there is a marked difference in attitude between the ten years old and fourteen years olds towards mathematics. The studies also reveal that boys hold more favourable attitude towards mathematics. While going through the attitude of student and teacher towards mathematics the researcher find class X students and teachers face various problems in the process of learning and teaching mathematics in schools.

Significance of the study: Mathematics is widely regarded as one of the important subjects because it shapes the mind and prepares students for pure and social sciences. For this reason, it is important that all students have opportunities and necessary support to learn mathematics in depth and with understanding. In India, mathematics is a compulsory subject up to the secondary school level. But normally we see that students have a fear towards the subject mathematics. They are unable to understand the basic concepts of Mathematics and their techniques due to various reasons. Hence, for common students mathematics becomes a tougher subject and consequently, they try to avoid it. Moreover, most of the mathematics teachers are not aware of alternative simple methods of teaching mathematics and different skills of solving the same problem. Therefore, there is a need to study the problems faced both by students and teachers in learning and teaching mathematics in schools.

Objectives: The main objectives of the study are as follows:

1. To identify the various problems faced by the class X students in learning mathematics in schools of Nazira Sub-Division of Sibsagar District.
2. To study the problems faced by the teachers in teaching mathematics in high schools of Nazira Sub-Division of Sibsagar District.
3. To give some suggestive measures to reduce the problems faced by the class X students and teachers in learning and teaching mathematics in high schools.

II. METHODOLOGY:

The study is based on field survey. So, descriptive study method is used to collect data. Also secondary data have been used. Secondary sources include books, various journals and internet websites.

Population:

The population of the study comprised of all the class X students and teachers of Nazira Sub-division of Sibsagar district of Assam.

Sample of the study:

The researcher selects 5 govt. high schools by purposive sampling. 5 students and 1 mathematics teachers of class X from each of the 5 high schools of Nazira Sub-division of Sibsagar district are randomly selected by the researcher as a sample of study. As a result, 25 students and 5 teachers are selected as a sample of study.

Tools and Techniques of data collection:

The data have been collected by personal interview method by the investigators themselves with the help of an interview schedule. Also observation method is used by the 'researcher to collect the required data.

III. RESULT AND DISCUSSION:

Here, an attempt has been made to study the problems faced by the class X students and teachers in learning and teaching mathematics in schools of Nazira sub-division of Sibsagar district. The study carried out 25 students and 5 teachers of class X. The following results come out during the survey.

Table 1: Problems faced by the Students in learning Mathematics

SL.No	Nature of Problems	Frequency	Percentage
1.	Mathematics classes are not sufficient in schools	18	72%
2.	Lack of mathematics teacher in schools	12	48%
3.	Not interesting due to lack of practice	19	76%
4.	Too complex to understand	18	72%
5.	Lots of formula to be memorized	18	72%
6.	Needs more practices, so it is time consuming	9	36%
7.	Base of Mathematics is not perfectly clear at previous class.	*5*	*20%*
8.	Teacher concentrates on only bright students in the class.	7	28%

Source: Field Survey 2018

From the above table it is found that, 72% students say that Mathematics classes in schools are not sufficient, therefore extra coaching is required in the subject. This creates problem for the students from poor background who cannot afford the costly coaching. 48% students say that lack of mathematics teachers in schools for teaching the mathematics subject. 72% students reveal that mathematics is much complex to understand in comparison to other subjects. And also 72% students say that in mathematics lots of formula are to be memorised. Consequently the subject becomes much time consuming as revealed by 36% students. 20% of the students reveal that their mathematical base was not clear at previous class. Again, 28 % of the students say that sometimes their teachers concentrate on only bright students and ignored weak students.

Figure 1: Problems faced by the students in learning Mathematics

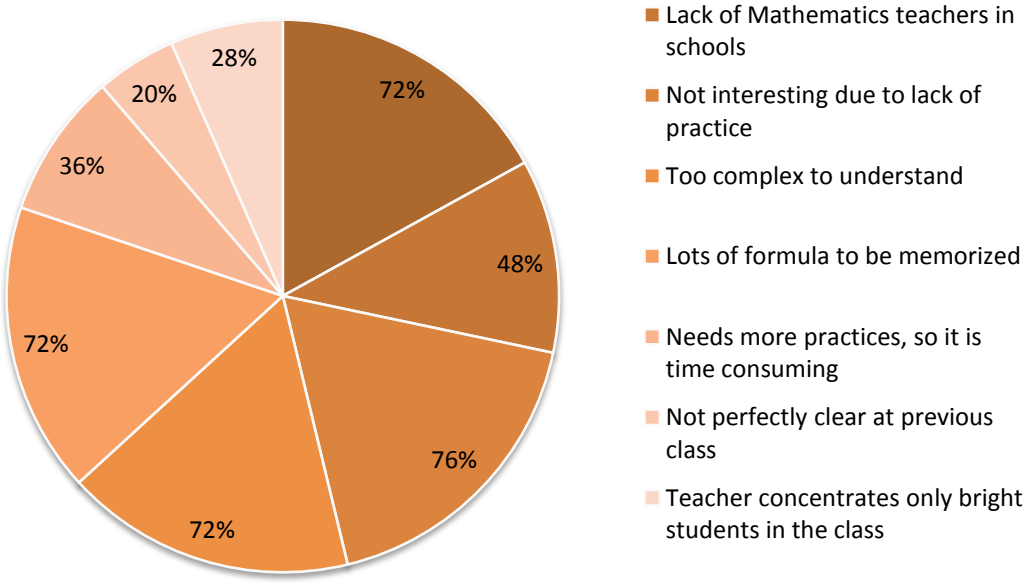


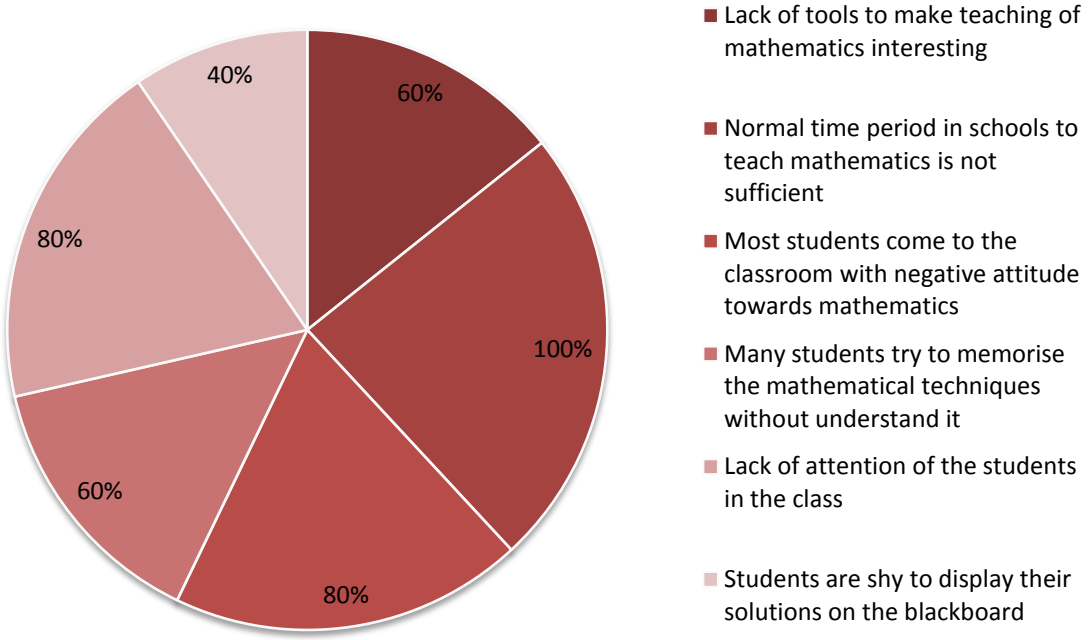
Table 2: Problems faced by Teachers in teaching Mathematics in Schools

SL.No	Nature of Problems	Frequency	Percentage
1.	Lack of tools to make teaching of mathematics interesting.	3	60%
2.	Normal time period in schools to teach mathematics is not sufficient.	5	100%
3.	Most students come to the classroom with negative attitude towards mathematics.	4	80%
4.	Many students try to memorise the mathematical techniques without understand it.	3	60%
5.	Lack of attention of the students in the class	4	80%
6.	Students are shy to display their solutions on the blackboard	2	40%

Source: Field Survey 2018

From the above table it is seen that, 60% teachers expressed that mathematics lack practical tools to make the subject interesting among students. 100% of the teachers says that normal time period of 40 or 45 minute in schools are not sufficient to teach mathematics. 80% teachers feel that most of the students come to class with a negative attitude towards mathematics. They have to fear the subject. 60% teachers say that many students try to memorise the mathematical problems without understanding it. Again, 80% of the teacher expressed that most of the students don't attention in the class. Again 40% of the teacher felt that most of their students are shy to display their solutions on the blackboard and also say that Students usually appear dull and fear mathematics.

Figure 2: Problems faced by the Teachers in Teaching Mathematics in Schools



IV. FINDINGS

On the basis of the field survey data regarding problems faced by the class X students and teachers in learning and teaching mathematics in schools of Nazira sub-division of Sibsagar district , some major observation can be summed up as follows:-

1. 72% of the students say that Mathematics classes are not sufficient in schools.
2. 48% of the students say that lack of mathematics teachers in schools in teaching the subject mathematics.
3. 28% students reveal that sometimes their teacher concentrate only bright students, and ignored weak students.
4. 20% students say that their mathematical base was not perfectly clear at previous class.
5. 60% teacher expressed that mathematics lack practical tools to make the subject interesting among students.
6. All i.e. 100% teachers say that normal time period are not sufficient to teach mathematics.
7. 60% teachers say that many students try to memorise the mathematical problems without understanding it.
8. 80% of the teacher feels that most of the students come to the class with a negative attitude towards mathematics.

V. SUGGESTIONS:

On the basis of the present study, the following are put forward for reduce the problems faced by class X students and teachers in learning and teaching mathematics in schools.

1. Most students did not consult their teachers, but greed that they solve mathematics problems quicker when they discuss them with peers and mainly studied through discussions with peers. Therefore, teacher should be encouraged teacher-learner and learner-learner interaction to enhance adaptation to mathematics learning in secondary schools.
2. Government should employ more mathematics teachers and supply adequate instructional materials and equip mathematics laboratory for effective teaching and learning of mathematics in secondary schools.
3. Teacher should be develop and maintain positive attitude towards mathematics by ensuring students adapt to mathematics learning mathematics in secondary schools.
4. Time period of mathematics classes in regular routine should be increased.
5. Student's readiness to learn is an indicator of learner's interest in mathematics. Therefore, there is need for teachers to arouse student's interest in learning mathematics by creating a friendly and interactive environment.

6. Mathematics teachers should endeavour to relate mathematics concepts to real life situation.
7. Exhibition of mathematical model at school level should be conducted.
8. Teachers need to provide immediate feedback by giving assignments, marking and revising to make learners adaptable to mathematics learning in secondary school.

VI. CONCLUSION:

From the above study it is found that the students and teachers of class X of Nazira sub-division of Sibsagar district faced various problems in learning and teaching mathematics in schools. Mathematics has been largely neglected in practice. The lack of connections to the use of mathematics and relevance in daily life or in relation to other sciences fosters low motivation and negative attitudes towards mathematics. With the help of the above mentioned suggestions, attempts can be made to develop positive attitude among students towards mathematics and to motivate the students to achieve better in their academics. Teachers should use the simplest and the most interesting method to teach mathematics. Moreover, Regular reference courses should be arranged for the mathematics teachers at district level.

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