

# Need for Remedial Teaching in Secondary Level Mathematics Learning

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**Abstract:** Free and compulsory education for all children up to the age of fourteen is a constitutional commitment in India. Sarva Shiksha Abhiyan (SSA) is the flagship programme of the Government of India which aims at providing quality elementary education to all children in the age group of 6 to 14 years. The National Curriculum Framework, 2005 also emphasises the need for improvement in the quality of education. The remedial measure is to ensure the desired quality of learning. It is very essential for ensuring effective learning and in improving the quality of education. This paper is intended to stimulate discussion related to the different learning difficulties of the learner in their secondary-level mathematics learning and also explore the need for remedial teaching in school-level Mathematics learning and the facts regarding remedial teaching in schools.

**Keywords:** Learning Difficulties, Remedial Teaching.

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## I. Introduction:

Our vision is All children should receive high-quality education and become responsible citizens with an acute sense of the other. Mathematics is the mainstay in today's systematic life. Without numerical and mathematical evidence, one cannot decide on many issues in day-to-day life. Servais, (Sonia Bhasin, 2005) says: "Mathematics is an abstract science, it is the science of abstraction, learning mathematics is learning to abstract, to handle abstractions and to use it" (P.3). The Kothari Commission report (1964-66) rightly points out that the study of mathematics plays a prominent part in modern education. At the secondary stage, a beginning will be made to teach mathematics as a discipline in a suitable manner. Even then the concepts of essential learning outcomes, minimum level of learning, and mastery learning are relevant and valid. In this connection, the NPE has very significant directives and every teacher of mathematics should know their implication in the teaching of mathematics. The NPE (1986) states: "To promote equality, it will be necessary to provide for equal opportunity to all not only in access but also in the conditions for success".

The unsatisfactory performance of the learner is a familiar topic to all educators. The probable reasons for these are each student is different in terms of intelligence, learning ability, academic performance, learning habit, learning environment, etc. Teachers currently are charged with the responsibility of providing remediation (in order to meet minimum competency standards) for those students who do not perform adequately. The commonly accepted idea of remediation as "a careful effort to reteach successfully what was not well taught or not well learned during the initial teaching" (Glennon & Wilson, 1972) gives the information on the difference between remedial teaching and initial teaching. It is the process of providing help to students who are experiencing difficulties. It can help the students catch up to their peers. Teachers provide support to the learners according to their abilities and needs.

### Objectives of the study:

The study is aimed at fulfilling the following objectives:

- ✓ To identify different learning difficulties of the learner
- ✓ To suggest some remedial teaching strategies
- ✓ To explore the facts regarding Remedial Teaching in Different Schools.

### Different learning difficulties of the learner in Secondary Level Mathematics:

A remedial teacher first diagnoses the learner's difficulties in Secondary Level Mathematics then she helps to return to the normal range of achievement. Diagnosis of a learner's traits and potentialities is an essential factor for remediation. It is not possible unless the source of difficulties is not pointed out. Success for the learner with learning disabilities requires a focus on individual achievement, individual progress, and individual learning. This requires specific, directed, individualized, intensive remedial instruction for students who are struggling. Remedial Education may be considered as special classes or teaching strategies that aim to help children with

learning difficulties to catch up with children within the normal range of achievement. Learners under the Intensive Remedial Teaching Programme have one or more than one of the following learning difficulties:

- Poor memory
- Short attention span and easily distracted by other things
- Relatively poor comprehensive power
- Lack of learning motivation
- Lack of self-confidence and relative low self-expectation
- Weak in problem-solving power
- Fail to grasp information effectively and mix things up easily
- Have difficulty in understanding new/abstract concepts
- Fail to transfer knowledge to the related learning areas appropriately
- Need more time to complete assignments

### **Some remedial teaching strategies:**

Students learn in different ways. Some learn best through listening, some by seeing, and others by doing. Learning comes more easily to students when instruction is presented using all three stimuli. If lectures are used, for example, they need to be accompanied by visual aids that could be pictures, objects, or cards with words. There should be opportunities for students to interact with the teacher or with other students by answering questions, taking notes, or writing on the dry board.

In order to select the appropriate remedial strategy for the learner,

- Diagnostic/prescriptive teaching is the most efficient method of remedial instruction (Heddens & Aquila, 1976). Diagnosis of the student's difficulties in learning is a necessary step in the remediation process. In order to determine an appropriate remedial strategy, the teacher must be able to assess correctly those concepts which are misunderstood.
- Analysis of student error is accomplished primarily through examination of the student's written work, both homework and tests, and through oral interviews with the student.
- A teacher must have a wide knowledge of several methods of teaching related concepts.
- Teachers need to include in each teaching presentation at least three (3) basic learning modalities (auditory, visual, and tactile), to meet the needs of most students, is a common thread among researchers. (Caudill, 1998; Gadt-Johnson, 2000; Willis, 2001).
- Using Multi sensory Integration strategies can help pupils to access, select and interpret information, recognize patterns, and accuracy, review and modify their work to improve the quality, communicate with others and present information, evaluate their work, improve their efficiency, be creative and take risks, gain confidence and independence.
- Practice helps students to retain the knowledge and skills that they have learned. The teacher must ensure that learners are practicing the right things.

### **Study regarding Remedial Teaching in Different Schools:**

A study was done on the practices of remedial teaching of Secondary Level Mathematics in different schools in West Bengal. The necessary data was collected from the Head Teacher and teachers who taught Mathematics at the secondary level. Only 12 head teachers and 39 teachers are involved in this study from 13 different schools under the West Bengal Board of Secondary Education. The Purposive sample was used to collect the data. An open-ended questionnaire was constructed for this purpose.

The study showed the following realities:

- Before two years (for the sessions 2013 & 2014) there was a scope for remedial classes for low achiever students. The remedial classes were scheduled as routine, two classes per week. These classes are being used to perform the following tasks in our school-
  - ✓ To revise ongoing lessons.
  - ✓ To revise the lesson and then completed the lessons.
  - ✓ To restore equity between otherwise low and good achievers. This is done by practicing under close observation. They try to identify their way of making mistakes and rectify it.
  - ✓ To help the slow learners to boost their performance by hand-to-hand solving of basic problems of day-to-day life.
  - ✓ Sometimes teachers used these classes as normal classes if there any syllabus was pending under time constraints.
- Now after summative examination, the learners are graded by A, B, C, and D. Learners who did not achieve the desired grade (i.e., A, B, C), a remedial examination (Very below standard oral examination or an

objective set of questions of one mark each, total 10 marks) are taken after remedial classes in very few schools. Then the low achiever achieves a letter grade 'C'.

- Most of the schools need not arranged remedial examinations as marks of project works in each subject bring learners to the desired grade.
- 95% of teachers in the study thought that Low Achiever Learners need a remedial study on school premises.
- Only 10% of Teachers (very few) give a remedial measure of low achiever learners after formative evaluation in the classroom. But they agree that it is a very hard job to give remedial measures during the regular teaching-learning process.
- 90% of teachers (most) want to give remedial measures to the low achiever but there has no time on school premises.

In the study, there are 3 schools (which were instructed by the West Bengal Board of Secondary Education that the school authority should arrange remedial measures for their low achiever students) was arranged remedial classes for their Class XI & X students daily in extra time. In the classes, they discussed the basics of the concepts of mathematics. But they faced different problems:

- ❖ Irregularity of student's participation
- ❖ Lack of parental awareness
- ❖ Lack of learning motivation of the learner

## **II. Conclusion:**

At the end of the study, it can conclude that most teachers are aware of the necessity of remedial teaching for the low achiever in mathematics on school premises. According to their opinion, they are trying their best but do not succeed due to time constraints, overcrowded classrooms, lack of learner's attitude, learning motivation, lack of parental awareness, and lack of proper instrument for the diagnosis of a learner's traits and potentialities. Teachers should provide support to the learners according to their abilities and needs. They should build their pupils physically fit, mentally alert, and emotionally balanced and whose home and school environment are good enough to fit them into the educational situation.

### **Limitations:**

The delimitations for the present study are:

- a) A very small sample of respondents has been involved.
- b) Only purposive sampling is used in the study.
- c) The study is done only for the school teacher community.

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