

# **Diagnostic and Remedial Teaching in Mathematics**

The main aim of diagnostic evaluation is to determine the causes of learning problems and to formulate a plan for remedial action.

"A test that is sharply focused on some specific aspect of a skill or some specific cause of difficulty in acquiring a skill, and that is useful in suggesting specific remedial actions that might help to improve mastery of that skill is a diagnostic test." - **Thorndike**.

"A diagnostic test undertakes to provide a picture of strengths and weaknesses." - Payne.

A diagnostic test is a useful tool for analyzing difficulties but it is simply a starting point. Supplementary information concerning the physical, intellectual, social, and emotional development of the pupil is also needed before an effective remedial programme can be initiated.

## In diagnostic testing the following points must be kept in mind:

i) Who are the pupils who need help?ii) Where are the errors located?

iii) When did the error energy?

iii) Why did the error occur?

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## The essential steps in educational diagnosis are:

**Identifying the students who are having trouble or need help:** First, one must know the learners who require help. For this you can administer a general achievement test based on the topics already taught. After evaluation you will be in a position to make lists of students who are below average, average or above average. Next, one has to locate the area where the error occurs in order to have a deeper insight into the pupils' difficulties.

EACHERS

**Locating the errors or learning difficulties:** After identifying the students who need help and visualising the necessity of additional instructional material to improve the quality of learning, your main

role is to find out the area where the learner commits mistakes or which is the area where learning difficulties lie.

**Discovering the causal factors of slow learning:** In some cases of learning difficulties, the causal factors are relatively simple. A student may be inattentive during teaching-learning or may be committing errors due to insufficient practice or irregular attendance. Sometimes the cause is ill-health or faulty work habits etc. It has also been observed sometimes that the basic cause of low achievement is a feeling of helplessness or the complexity of the subject-matter which perhaps is much above the level of their comprehension.



## **Remedial Teaching**

Remedial instruction or teaching helps in overcoming the difficulties due to instruction. It helps the students to be with the normal students in acquiring the common level of achievement. The term 'remedial teaching' is generally used instead of remedial instruction by various educationists.

"Remedial teaching tries to be specific and exact. It attempts to find a procedure which will cause the child to correct his errors of the past and thus in a sense prevents future error." **-Yokam** 

## Salient Features of Remedial Teaching:

- Remedial teaching is a dynamic side of the diagnostic testing. Hence it depends on the educational diagnosis.
- To overcome the difficulties in learning and in acquisition of skills is the main purpose of remedial instruction.
- Remedial teaching is not only useful to cure the shortcomings but also in preventive measures.
- Remedial teaching is a short-term treatment.
- Remedial teaching helps the below average students to be with the normal students in acquiring the common level of achievement.

The ultimate aim of diagnosis is to remove the weaknesses and difficulties of students. If some emotional or physical factors are responsible for the weaknesses, then efforts should be made to eliminate these factors with the help of concerned peoples. After eliminating the factors, remedial teaching should be done. The mathematics teacher may also prepare corrective material for this purpose. Thus, by remedial teaching the success can be achieved in removing the weaknesses of the student.

