

Diagnosis of Learning Difficulties & Remediation: A Road to Enhance Learning Outcomes

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Bhopal-462013

Introduction

Film 2012 showcased a scene where a son asks his father as to why he dislikes his (son's) step father? The father replies calmly that he dislike him (stepfather) because he does not know anything about him (step father). Thus, in this context, the father though tried to coax his son but in real life the question is quite true as to why we cannot establish a harmonious relationship with our self and our surrounding. The similar answer as that given by the father to the son can be applicable here i.e. we are not able to establish harmonious relationship between our self and our surroundings because we either do not know our surrounding or we are not sensitive towards our surrounding. Here the role of education becomes significant.

Education helps us to develop sensitivity towards our surrounding and helps us to adjust with the environment. Education develops our creative thinking, critical thinking and enhances the analytical ability by giving opportunity to understand logical sequencing of situations or things. It is obvious that if education will help the individuals to think critically and analyze the different situations properly, it will help in eliminating social evils. Thus, education not only helps individual to develop self but also is an important tool for societal development. It is possible only when they are able to generalize the concepts they learn. For the generalization of the concept, it is necessary to strengthen the basic concepts from the very beginning. The concept clarity of the subject will enhance learning which lead to the students' higher achievement. It is the role of teacher to strengthen the learning of student from the very beginning, when students find meaning of their learning during their adolescent stage.

As per the recommendations given by National Curriculum Framework-2005 (NCF-2005) for strengthen the learning, Central board of Secondary Education (CBSE) took initiation and introduced Continuous and Comprehensive Evaluation (CCE) in their school. The core aspect of CCE is to Diagnose Learning Difficulties and Remediation.

Learning Difficulties

In the classroom, instructions are based on the commonalities of the children rather than their uniqueness i.e. classroom may have students between two extremes, gifted students and poor students in terms of their learning. Due to such differences some students are quick in learning some content area while some student are slow in learning the same content area although teacher provides same learning experiences to all students. Sternberg (1997) said that if the learning experiences suit students' preference, it will help student to learn easily, else he is not able to tune up with the teaching-learning processes in particular content area. As a result, he will never experience fullest learning. Thus the student remains weak in that content area. The area of the content in which the student remains weak can be termed as a 'difficult content area' for the student and the cause for weakness are termed as 'learning difficulty'.

To identify learning difficulties, it is necessary that teacher has to find out content area of the subject, that the students find difficult. This is possible by finding errors committed by the students which hinder the fullest achievement i.e. learning. By analyzing the errors teacher can find the pin-point causes for the errors, which is not same for the all the students. Various studies indicates that there are different types of errors leading to learning difficulties and has to be taken care of. Teacher must know the nature of error, whether is due to lack of mastery over the content or difficulties in visual interpretation or due to misconception. In other words, the teacher has to diagnose the errors to know the learning-difficulties. Such pin-pointed causes i.e. errors, which hinder student's learning.

Diagnosis of Learning Difficulties

Bush and Waugh (1982) "Identified the word 'diagnosis' for the first time in the field of medicine. Its etymological meaning is analysis of the cause or condition, situation or problem. To diagnose learning-difficulties in education is to carry out task analysis or test analysis."

According to Gronlund & Linn (1990) "Diagnostic Evaluation is a highly specialized procedure. It concerns with the persistence of recurring learning difficulties that are left unresolved by standard

corrective prescription of formative evaluation. If a pupil continues to experience failure in particular task/content, despite the use of prescribed alternate methods of instruction then a more detailed diagnosis is indicated.”

Diagnosis of learning-difficulty is a procedure to identify the causes of the learning problems of the student who continuously fail in performing certain task in particular content. Gronlund & Linn (1990) further stated, “Formative evaluation provides first aid treatment for simple learning problems and diagnostic evaluation searches for the underlying causes for those problems that do not respond to first aid treatment.” Thus diagnosis gives comprehensive idea about the problems, which is not possible through the errors shown in the formative evaluation.

If a teacher wants to diagnose the learning-difficulties s/he should answer to the following three questions:

1. Who are the students having problem in learning?
2. Where the learning-difficulties are?
3. Why the student has learning-difficulties?

So from the above discussion it is clear that, Diagnosis of learning difficulties is a process where teacher find pinpoint causes for the difficulties in learning of students. Here teacher critically analyze the task performed by the students in the diagnosis test and find out the specific area where students have difficulties. Then teacher comes to an inference why students are lagging behind in the particular content area. Such pin pointed causes should be rectified timely i.e. after diagnosing learning-difficulties a teacher should provide remedy to the students.

Remedial Teaching

When teacher diagnose learning difficulties, it should be followed by Remedial Instruction. NCF (2005) suggest, “Remedial work would require specifically developed material and planning so that the teacher can give one-on-one time to work with child, beginning with what students know and moving to what they need to learn, through a continuous process of assessment, through careful observation.”

Otto et.al (1973) “Remedial Instruction is appropriately reserved for the relatively few pupils who have extreme achievement deficits in the basic school subjects and whose deficits appear to stem them delimiting factor that demand intensive highly individualized attention.”

From the above definition, the following points were inferred:

- Remediation is for those students having learning difficulties.
- Remedial measure is based upon the principle of Individual Differences and learning is an individualized process. It means each child has different cause for the learning difficulties. Remediation varies from child to child.
- Remedial Instruction should be for such content area where child is facing difficulties in learning.

So from the above inferences we can say remedial instruction is not same as the general class-room instruction. Remedial is specialized instruction for each individual who is facing learning-difficulties. Various researches found different methods, media, approaches are significant in remedial instruction, but it should be selected as per nature of learning-difficulty and it should suit preference of student.

Classroom Implication of Diagnosis of Learning Difficulties and Remediation

- Formative assessment must amid various developmental aspects. Along with achievement, thinking skills, reasoning skills, problem solving skills and creativity and innovations should be promoted. Further, formative assessment should have added focus on development of affective attributes and skills; building attitude and social service motive.
- Analysis of Formative assessment should be done thoroughly.
- Along with testing content knowledge, diagnosis of learning difficulties and remediation must be a part of formative assessment.
- Learning difficulties could be identified by continuous and comprehensive observations, content analysis of note books & achievement test and diagnostic test.
- Diagnostic test should prepare by considering each and every possible aspects of errors committed. The diagnostic test may contain multiple choice questions, true or false, multiple response type questions, match pair and situation analysis test.
- Diagnosis must be followed by remediation.
- The remediation may cater various learning experiences, methods of teaching, approaches, media and material depending upon the nature of error and students profile.
- Diagnosis of learning difficulties and remediation could be done in all the aspects of the development.

Concluding Remark

Diagnosis and remediation is useful to bridge gap between the teaching style of teacher and learning style of student (Rathod, 2004) and it is proved that by diagnosis and remediation of learning-difficulties, errors committed by students in the content can be reduced and learning can be enhanced. Rastogi (1983), Bhardwaj (1987) and Patel (2007) found that diagnosis and remediation of learning-difficulty affects significantly in achievement of student.

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