

FOR REFERENCE ONLY

**HANDBOOK
ON
POOR SCHOOL PERFORMANCE**

**PHILIP JOHN
SUSAN K. GEORGE
ANU B. MAMPILLY**

PUBLISHED BY



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HANDBOOK ON POOR SCHOOL PERFORMANCE

Page No.

Foreword

Preface

About this Handbook

- | | |
|--|----|
| 1. Diagnostic Approach to Poor School Performance | 1 |
| 2. Learning Disorders (LD) as a Major Cause | 5 |
| 3. Identifying Children with Learning Disorders (LD) : Pointers | 10 |
| 4. Diagnosing Poor School Performance : Multidisciplinary Approach | 15 |
| 5. What Causes Learning Disorders? | 19 |
| 6. Skill Deficits in Children with Learning Disorders | 23 |
| 7. Learning Disorders (LD) and Remediation | 34 |
| 8. Inclusive Schools and Poor School Performance :
Multiple Roles of a Teacher | 48 |
| 9. Support for Children with Poor School Performance | 50 |
| 10. Emotional and Behavioural Problems in Children with
Poor School Performance | 56 |
| 11. Support Strategies for Emotional and Behavioural Problems | 63 |
| 12. Can Medications Help Children with Poor School Performance? | 69 |
| 13. Poor School Performance : Partnership with Parents | 72 |
| 14. Children with Learning Disorders: Beyond School | 75 |

Text for Posters: Appendix - I & II

Glossary of Terms

References

भारत का संविधान

उद्देशिका

हम, भारत के लोग, भारत को एक ¹ [सम्पूर्ण प्रभुत्व-संपन्न समाजवादी पंथनिरपेक्ष लोकतंत्रात्मक गणराज्य] बनाने के लिए, तथा उसके समस्त नागरिकों को :

सामाजिक, आर्थिक और राजनैतिक न्याय,
विचार, अभिव्यक्ति, विश्वास, धर्म
और उपासना की स्वतंत्रता,
प्रतिष्ठा और अवसर की समता

प्राप्त कराने के लिए,
तथा उन सब में

व्यक्ति की गरिमा और ² [राष्ट्र की एकता
और अखण्डता] सुनिश्चित करने वाली बंधुता

बढ़ाने के लिए

दृढसंकल्प होकर अपनी इस संविधान सभा में आज तारीख 26 नवम्बर, 1949 ई० को एतद्वारा इस संविधान को अंगीकृत, अधिनियमित और आत्मार्पित करते हैं।

1. संविधान (बयालीसवां संशोधन) अधिनियम, 1976 की धारा 2 द्वारा (3.1.1977 से) "प्रभुत्व-संपन्न लोकतंत्रात्मक गणराज्य" के स्थान पर प्रतिस्थापित।
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भाग 4 क

मूल कर्तव्य

51क. मूल कर्तव्य - भारत के प्रत्येक नागरिक का यह कर्तव्य होगा कि वह -

- (क) संविधान का पालन करे और उसके आदर्शों, संस्थाओं, राष्ट्र ध्वज और राष्ट्र गान का आदर करे;
- (ख) स्वतंत्रता के लिए हमारे राष्ट्रीय आंदोलन को प्रेरित करने वाले उच्च आदर्शों को हृदय में संजोए रखें और उनका पालन करें;
- (ग) भारत की प्रभुता, एकता और अखंडता की रक्षा करें और उसे अक्षुण्ण रखें;
- (घ) देश की रक्षा करें और आह्वान किए जाने पर राष्ट्र की सेवा करें;
- (ङ) भारत के सभी लोगों में समरसता और समान भ्रातृत्व की भावना का निर्माण करें जो धर्म, भाषा और प्रदेश या वर्ग पर आधारित सभी भेदभाव से परे हों, ऐसी प्रथाओं का त्याग करें जो स्त्रियों के सम्मान के विरुद्ध हैं;
- (च) हमारी सामासिक संस्कृति की गौरवशाली परंपरा का महत्त्व समझें और उसका परिरक्षण करें;
- (छ) प्राकृतिक पर्यावरण की जिसके अंतर्गत वन, झील, नदी, और वन्य जीव हैं, रक्षा करें और उसका संवर्धन करें तथा प्राणि मात्र के प्रति दयाभाव रखें;
- (ज) वैज्ञानिक दृष्टिकोण, मानववाद और ज्ञानार्जन तथा सुधार की भावना का विकास करें;
- (झ) सार्वजनिक संपत्ति को सुरक्षित रखें और हिंसा से दूर रहें;
- (ञ) व्यक्तिगत और सामूहिक गतिविधियों के सभी क्षेत्रों में उत्कर्ष की ओर बढ़ने का सतत प्रयास करें जिससे राष्ट्र निरंतर बढ़ते हुए प्रयत्न और उपलब्धि की नई ऊंचाईयों को छू लें।

THE CONSTITUTION OF INDIA

PREAMBLE

WE, THE PEOPLE OF INDIA, having solemnly resolved to constitute India into a '[**SOVEREIGN SOCIALIST SECULAR DEMOCRATIC REPUBLIC**] and to secure to all its citizens :

JUSTICE, social, economic and political;

LIBERTY of thought, expression, belief, faith and worship;

EQUALITY of status and of opportunity; and to promote among them all

FRATERNITY assuring the dignity of the individual and the²[unity and integrity of the Nation];

IN OUR CONSTITUENT ASSEMBLY this twenty-sixth day of November, 1949, do **HEREBY ADOPT, ENACT AND GIVE TO OURSELVES THIS CONSTITUTION.**

-
1. Subs. by the Constitution (Forty-Second Amendment) Act. 1976, sec.2, for "Sovereign Democratic Republic (w.e.f. 3.1.1977)
 2. Subs. by the Constitution (Forty-Second Amendment) Act. 1976, sec.2, for "unity of the Nation (w.e.f. 3.1.1977)

THE CONSTITUTION OF INDIA

Chapter IV A Fundamental Duties

ARTICLE 51A

Fundamental Duties - It shall be the duty of every citizen of India-

- (a) to abide the Constitution and respect its ideals and institutions, the National Flag and the National Anthem;
- (b) to cherish and follow the noble ideals which inspired our national struggle for freedom;
- (c) to uphold and protect the sovereignty, unity and integrity of India;
- (d) to defend the country and render national service when called upon to do so;
- (e) To promote harmony and the spirit of common brotherhood amongst all the people of India transcending religious, linguistic and regional or sectional diversities; to renounce practices derogatory to the dignity of women;
- (f) to value and preserve the rich heritage of our composite culture;
- (g) to protect and improve the natural environment including forests, lakes, rivers, wild life and to have compassion for living creatures;
- (h) to develop the scientific temper, humanism and the spirit of inquiry and reform;
- (i) to safeguard public property and to abjure violence;
- (j) to strive towards excellence in all spheres of individual and collective activity so that the nation constantly rises to higher levels of endeavour and achievement.

FOREWORD

Traditionally, physical and mental disabilities have been regarded as individual and medical problem, a disease that could be diagnosed and the deficit within the child could be set right. This approach has created groups of professionals and experts who prescribe the 'treatment' of these children and this approach generally leads to segregation or creation of separate special school. This approach also leads to pity, prejudices and charity resulting, at times, discriminatory social practices.

In recent years, in most of the democratic countries as well as at the international level front the United Nations organization, the question of human rights and equity has been raised. The rights movement is forcing the schools and institutions to provide equal access to the disabled. However, in this process the schools or the institutions do not change, or they change only cosmetically to 'accommodate' the disabled. The children with disabilities are required to fit-in the school system, its curricula, pedagogy and assessment process. They are required to 'integrate' into the system, and this has given rise to the integrated education.

In case of inclusive education, however, children are accepted and welcomed as they are, and the system, the school changes itself to respond to the needs of all children. The school changes its policy, cultures and practices including assessment and evaluation procedures.

*After having done extensive research on children with mental disabilities or learning difficulties/disabilities. Prof. Peter Mittler writes in his recent book *Working towards inclusive Education. Social Context* (2000, London; Fulton);*

'In cases of 'disabilities' such as dyslexia, autism, attention deficit disorder there is little evidence to prove that accurate diagnosis of these or similar conditions necessarily call for syndrome-specific type of educational interventions. They all need

good teaching taking into account their individual patterns of learning.'

A school and curriculum that is established only on two types of intelligences: linguistic and logical-mathematical, may not be able to respond to the diverse needs and pattern of intelligences noticed in the children with disability. The school and the curricula need to redefine the existing narrow and traditional view on intelligence. H. Gardner in his book *Frames of Mind. The Theory of Multiple Intelligence* (1993, London: Fontana Press) has identified seven types of 'intelligence' - Linguistic, Logical-mathematical, Spacial, Musical, Kineasthetic, Interpersonal and Intra-personal. He derived his theory following the observations and studies of the capacities of children with disabilities and the meaning of intelligence in different cultures. Children not able to respond to the linguistic and logical-mathematical abilities may exhibit capabilities in other areas. They may learn also more effectively if other processes linked with spatial, musical kieaesthetic, interpersonal and intra-personal are used in schools and classrooms. Such a broad based approach to intelligence would address the learning needs of children being identified and labelled as those with 'learning disorders' or 'learning disability'

The inclusive learning environment in school can be generated by a series of teaching methodology and pedagogy, such as cooperative and collaborative work, peer tutoring, problem solving and project based learning, activity based teaching, evaluating individual progress and improvement etc.

The book *Handbook on Poor School Performance* may be seen in the background of emerging perspectives on education of children with disabilities-physical as well as mental. It should not create an impression in the minds of teacher that 'poor performance' by some children is due to certain defects within them. Instead of concentrating upon some children's defects the efforts should be made to find out the solutions in redesigning the approach to curriculum, pedagogy and assessment procedures that would create better learning situations for all children, in general and those with disabilities, in particular.

15th October 2001,

Madan Mohan Jha
Joint Secretary,
(School Education)
Ministry of Human Resource
Development Government of India.

PREFACE

*P*oor performance of school children has always been a cause of concern. Some students' grasping power may be very poor, some others may speak very slowly and many others may be confused with signs and make careless mistakes.

The teachers, parents and friends may know that the child is 'different' but might not be able to tell why. Often parents and others see the child's school difficulties and problem behaviors as intentional acts and put the blame on schools. Little do they realize that child is suffering from learning disability – a problem related to brain development that causes hyper activity, impulsive behavior and attention problems. The situation further worsens with their ignorance on this issue.

It is good that many schools have realized that with proper care, LD Children can make excellent progress. What is required is to identify the strengths and potentials of such children at the earliest possible age and develop individualised learning strategies for each of the them. The current scientific approach is to enable these children to integrate them into the main stream. CBSE strongly advocates and fosters inclusive education to enable education for all.

Sensing the need of such children the Board had organised a three days teachers' orientation programme on 'Diagnostic approach to Poor School Performance' at Sardar Patel Vidyalaya, Delhi in January, 2001. In order to further concretise, strengthen and enrich the efforts of our schools, the Board has developed and brought out this resource material for the teachers. A careful reading of

this material will enable us to know why children perform poorly and what remedial steps can be taken up to help them overcome their problems. Since our teachers are in direct touch with the young children, they are the first ones to detect and recognise their problems.

They are also the ones who would prepare a child to accept various remedial strategies which may also involve professional and outside agencies. The sincere efforts of a sensitized and aware teacher will make tremendous change in the lives of millions of our LD children. It is expected that school principals will hold discussion sessions with the staff members and develop action plans for their respective schools.

I am thankful to Dr. Philip John and his team of experts for developing this material. A lot of effort has gone into the planning of this manuscript to remove technical jargons and simplify the concepts for everyone's use. I express my appreciation to Shri G. Balasubramanian, Director (Acad.) & Smt. Sugandh Sharma for bringing out this document. We hope to receive your comments, reactions, case studies and suggestions for building meaningful and interactive partnerships on this issue.

Ashok Ganguly
Chairman

ABOUT THIS HANDBOOK

*E*ducation is meant to mould an individual to function effectively as a social being and a useful citizen. This involves a process of identifying the strengths and potential of each child and assisting him/her to develop that potential to the fullest, enabling him/her to achieve Human Excellence.

This assistance must also aim at overlooking or overcoming any educational handicaps that the children with Special Educational Needs may have.

Under-achievers in examinations account for at least a quarter of the strength of any school. It is now recognized that they can be assisted to perform to their full potential by scientifically identifying the cause for poor school performance and remedying the cause.

A teacher is an 'Applied Scientist' and must apply the above concepts in her profession. She is also a 'Therapist' - a Therapist especially to children with Learning problems. To be effective as Therapist, every teacher needs to be trained to 'diagnose' the various causes for poor school performance.

The objective of this handbook is to enable this diagnosis by sensitizing teachers to the numerous learning difficulties faced by school children. The book gives an overview of these learning problems with an emphasis on Learning Disorders. From simple concepts at the beginning, the reader may perceive a deliberately increasing level of complexity as she reads on; this is inevitable considering the multifactorial and heterogenous nature of these disorders.

Therefore, the book highlights the need for a pathbreaking and scientific approach – 'The Diagnostic Approach to Poor School Performance'. Basic information about Learning Disorders like Skill Deficits and Symptoms, that equips the teacher to diagnose Learning Disorders is outlined. Other Psychological and Developmental Disorders co-existing with Learning Disorders in such children are also described; this information is aimed at solving many a behavioural puzzle seen by teachers in some of their students.

It is our fervent hope that this Diagnostic Approach by Teachers would make it possible to shift the management of Learning and Behavioural problems in school children from the Health Sector to the Educational Sector.

We take this opportunity to salute the pioneering efforts of the CBSE Board in this altruistic direction.

We also place on record our gratitude to Sri Ashok Ganguly, Chairman, Sri. Balasubramanian, Director (Academic), Sri. Pavanesh Kumar, Controller of Examinations, Education Officer and other office bearers of the CBSE, Delhi. We also thank the scores of teachers who have indirectly contributed to this Handbook by sharing their experiences.

We humbly dedicate this handbook to the hundreds of children with Learning Disorders who have taught us most lessons in our clinical work.

Dr. Philip John M.D. (Psych)

Ms. Susan K. George, M.S.W, MSc(Psych), M.Phil

Ms. Anu B. Mampilly, M.S.W, Dip (Sp.Ed & IE), M.Phil

Cochin

August, 2001

DIAGNOSTIC APPROACH TO POOR SCHOOL PERFORMANCE

*“Education is not the amount of information
that is put into your brain and
runs riot there undigested....”*

(Swami Vivekananda)

A teacher puts in the best of her efforts to help every child achieve optimal academic performance. In spite of this, not all children rise up to the expectations of the teachers or parents. These underachievers are ‘Scholastically Backward’. The reasons or causes for this Scholastic Backwardness are several; the objective of this opening chapter is to spell out those various causes :

- 1) Some of these children are actually bright, but cannot get marks in spite of effort,
- 2) Some others have behaviour problems and may not be keen to make an effort to get good marks;
- 3) Some children cannot make adequate effort because of their physical or neurological handicaps.

Whatever be the underlying cause, all of them score ‘Poor Marks’.

‘POOR MARKS’ AS A SYMPTOM – BASIS OF ‘THE DIAGNOSTIC APPROACH’

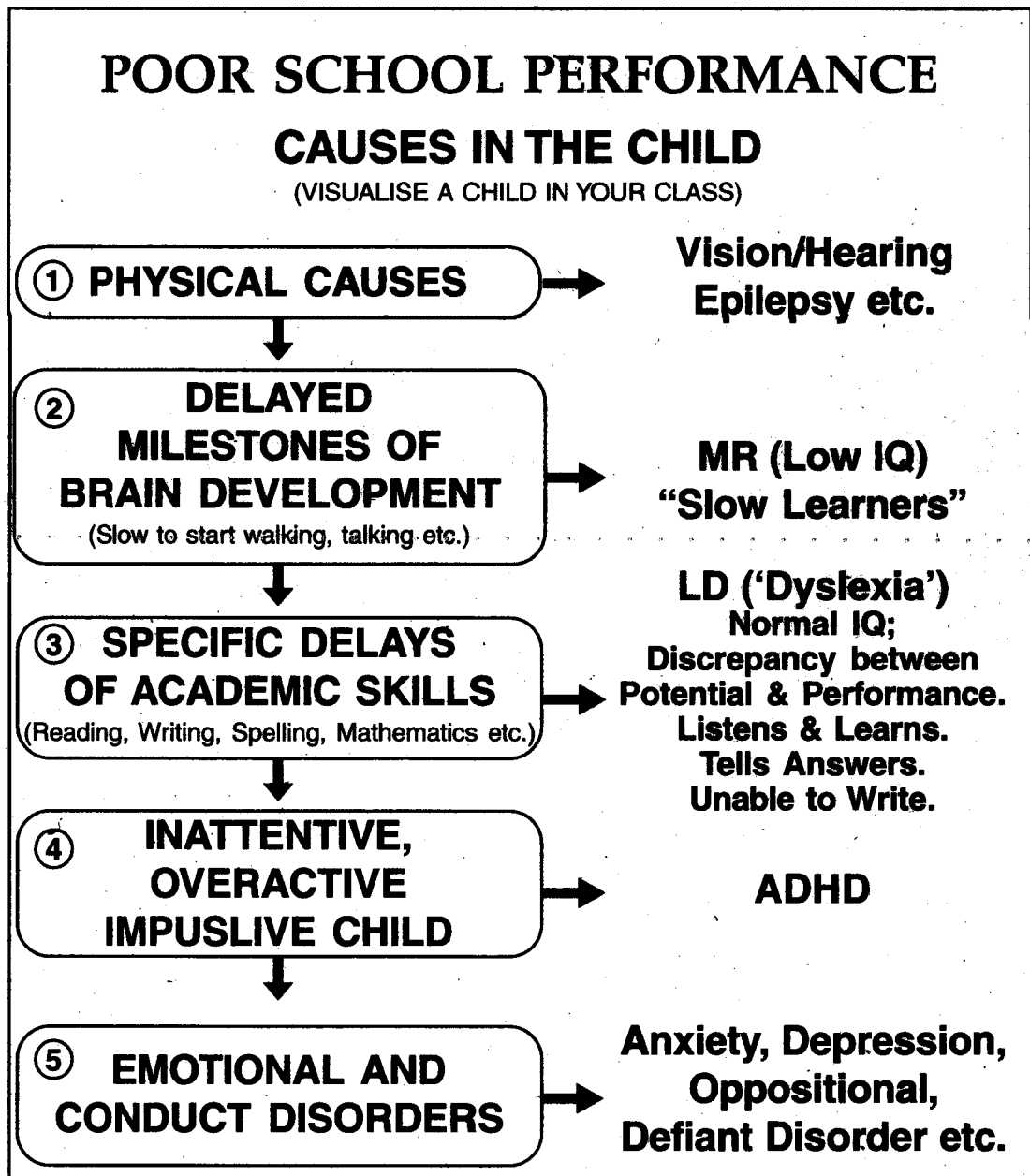
A cough is a physical symptom due to an underlying cause. When a patient seeks treatment for cough, the doctor uses a ‘Logical Approach’ to arrive at the diagnosis of the cause for the cough. This Diagnostic Approach is deductionistic and sequential; it follows an ‘Algorithm’ – a ‘Flow Chart’.

In the case of cough, the doctor arrives at a *diagnosis* by carefully *ruling out one cause after the other* and decides whether the cough results from Pharyngitis, Pneumonia, Tuberculosis or Cancer. Because this approach is simple and logical, the same ‘Diagnostic-Approach’ is followed to determine the specific cause for ‘Poor Marks’ in an underachieving child.

THE 'FLOW CHART' FOR DIAGNOSIS

If poor performance in a child is present from the beginning of education, the causes may be one set of Learning problems. If the child's academic performance declines later (eg: in 8th or 9th Std), the causes may be another set of problems. In a young child, the *causes* for poor marks may lie *in the child* himself. In an older child, the *causes* may be in the *environment*.

All such causes of poor marks in a child are sequentially listed in the Flow Chart given below.



'POOR MARKS' AS A 'SYMPTOM' – HOW TO USE A 'FLOW CHART' FOR DIAGNOSIS

If a child gets poor marks, we brand him 'lazy or 'stupid'. No child, we should realise, wants to be lazy or careless. Every child, on the contrary, loves to stand up and be counted. If he gets poor marks, it is only because he suffers from a Learning problem. Therefore, in a young child, Poor School Performance should be seen as a 'symptom' reflecting a larger underlying Disorder.

We should scientifically analyse this symptom, discover its underlying cause and find a remedy to help the child score better marks. This is the 'Diagnostic Approach – to diagnose the cause of the symptom (of poor marks) and to treat the cause.

Based on the 'Flow Chart', these causes are examined one after the other.

1. CAUSES IN THE CHILD FOR POOR SCHOOL PERFORMANCE (BASED ON THE FLOW CHART)

Causes in the child may be Physical problems, Intelligence Deficits, or Behavioural Disorders.

a) Physical Problems

Maya, a 3rd standard student, started faring poorly in class. Her teacher complained that the girl fails to copy what is written on the blackboard and does not complete her notes. By a stroke of luck one day, Maya's mother discovered that the little one could not clearly read the letters on the TV screen. The eye specialist whom they consulted prescribed glasses for her short-sight, and Maya bounced back to excellent academic performance in a few months.

Like Maya, some children have partial deficits in vision or hearing, which in turn cause poor performance.

b) Poor Intelligence

All children are not created equal. Some of them are slow to start standing, walking or talking. Such children with delayed 'milestones of development' may have inadequate global brain development. Therefore, they may have only below average Intelligence. Such children are Mentally Retarded and obviously score poor marks.

It is possible for Clinical or Educational Psychologists to assess Intelligence. Intelligence (IQ) tests tell us whether the child is Mentally Retarded ('Slow Learner'), leading to 'Poor Marks'.

c) Learning Disorders ('Dyslexia')

Some young children doing poorly at school are actually Intelligent. Their overall global brain growth is normal, but miniscule brain areas concerned with the Academic skills of Reading, Writing, Spelling, Mathematics or Language have not developed adequately. This is called Specific Delay in Development (in contrast to the global delay in development in the case of Mental Retardation).

The result is that this Intelligent child understands what he is taught, he is able to answer orally, but is not able to express the same in writing; that explains how an LD child gets poor marks.

d) Other Neurological Disorders Causing Learning Problems

'Manu is a bright six year old. He is quick on the uptake, quick to respond. But he is a problem child in school: persistently restless, walking around the class, nudging the next child in the assembly or breaking something all the time. He is impulsive and unable to sit still in the chair'.

Manu is an underachiever, because he has Attention Deficit Hyperactivity Disorder (ADHD). If he cannot hold his attention, he cannot concentrate and therefore he cannot learn.

e) Emotional Disorders

We know that many children with Emotional or Conduct problems score low marks, even though they may be intelligent. Some children may have an inherent fear of going to school. Some of them may be emotionally unstable due to reasons like Anxiety, while some others turn out to be Defiant or Disobedient. However, all of them get poor marks due to such 'Emotional Disorders'.

2. CAUSES IN THE ENVIRONMENT FOR POOR SCHOOL PERFORMANCE

No child can do well in a deprived or discordant environment at home or in school. Causes like poor discipline at home or school, broken homes or fighting parents, frightening friends or punitive teachers, frequent change of school or medium of instruction etc can lead to poor school performance.

Caveat

It is important to note that in a single child, more than one of the above causes may be affecting the child's scholastic performance at the same time (eg: a child with Learning Disorder can also have Attention Deficit Disorder).

Unless a teacher or parent is keenly aware of these causes, many children may get wrongly branded as 'Lazy', 'Stupid' or 'Careless'. Such children can end up receiving no educational support or remedies at all.

When you are confronted with a child performing poorly in class, think of the above causes listed above one after the other, before blaming or punishing him - look at the 'Flow Chart' once again.

More than five general causes in the child have been listed for poor school performance. The most common, yet the most underdiagnosed, are Learning Disorders (Dyslexia) described in the next chapter.

LEARNING DISORDERS (LD) AS A MAJOR CAUSE

*"He would be the smartest lad in the whole school,
if instruction were entirely oral"*

(Teacher)

Learning Disorders, as was mentioned in the previous chapter, constitute the major cause for academic underachievement in young children. Therefore, the thrust of this handbook is on this particular cause for Poor School Performance.

'Vikram, a 'smart' lad of class V is an outstanding participant in all the extra curricular activities in the school. He is a hero among his classmates. All his teachers appreciate him for his leadership qualities. He always has most of the answers when oral questions are asked. But teachers and his parents cannot figure out why this 'smartness' is absent in his written work in class, and exams. His parents report that he is very hesitant to read, reads slowly, makes innumerable spelling mistakes in writing and cannot organise his answers. They are upset about his declining grades.'

There are thousands of children like Vikram who intrigue us – they are smart at everything except studies. We fail to understand this discrepancy between what we think they are actually capable of, and how they finally perform in exams. This is because they have a 'Hidden Handicap' – a handicap that is not obvious to us as in the case of blindness.

These are children with Learning Disorders or Learning Disabilities(LD).

DEFINING LEARNING DISORDERS

Called 'Dyslexia' or Learning Disabilities in the past, *Learning Disorders (LD)* is a term that denotes a single, but heterogeneous group of disorders. This group of disorders is manifested as significant difficulties in the acquisition and use of basic Academic Skills – Skills of Reading, Reading comprehension, Writing, Spelling, Mathematics or Language. Academic skills are those skills which are used by the brain for the Learning process. These disorders are intrinsic to the individual and are due to dysfunction of the central nervous system.

These children with LD are slow in Learning, **despite normal or above normal Intelligence**. In most children, the problem may be only mild to moderate. But in some, it may be quite severe. *Krishnakumar of Std VI, could not even write his name correctly, in spite of being a good orator and painter.*

Any simple difficulty in Learning is not referred to as Learning Disorders. It is a specific term to denote inadequate development of certain areas of the brain which deal with Academic skills; it refers to specific Neurological handicaps. Learning disorders are not primarily due to Mental Retardation ('Slow Learners') or due to Sensory Handicaps, Emotional disturbances or Environmental problems.

This handicap used to be known by the names 'word blindness', 'Dyslexia', 'Learning Disability' etc. It is now classified in Diagnostic manuals as a Developmental Disorder, named 'Learning Disorder' in professional parlance.

Learning Disorders are different from Mental Retardation. In Mentally Retarded children, there is an overall (global) delay in brain development; their academic performance, in general, matches the brain's potential. On the other hand, children with Learning Disorders (LD) exhibit significant **discrepancy** between the potential for academic achievement and the actual performance. Children with LD, as in Vikram's case, understand what is read out to them, are able to answer orally, but are unable to put the same into writing. Teachers and parents are often perplexed by this staring discrepancy.

HISTORICAL BACKGROUND

Among the various Academic Skill Disorders leading to Learning Disorders, Reading Disorders was the first to be described in 1878. Dr. Kussmaul in that year described a man who was unable to learn to read in spite of his superior Intelligence. He called this problem 'Reading Blindness'. Nine years later, Dr. Berlin, another German doctor coined the term 'Dyslexia' (from Greek) to mean 'Difficulty with words'. In 1895, Dr. James Hinshelwood, a British eye surgeon called this condition 'Word Blindness'. Next year, Dr. Pringle Morgan described a fourteen year old boy with Reading Disability – the boy's teacher wrote, "He would be the smartest lad in the whole school if instruction were entirely oral".

In 1925, an American Neurologist, Dr. Samuel T. Orton proposed the developmental origins of this disorder and devised a number of Teaching Strategies which are still used.

It was a landmark in 1977, when Public Law 94 -142 was passed in the US, ensuring the rights of American children with Specific Learning Disorders to obtain special provisions in each school for the management of their problems.

In 1981, England and Scotland passed an Educational Act that stated that children with Learning disorders of all kinds were entitled to special provisions and help according to their special educational needs. This was revised in 1993 as the Education Act with an accompanying Code of Practice, listing Learning Disorders as a Special Educational Need (SEN).

In 1995, the Persons With Disabilities Act (PWD Act) was passed by the Indian Parliament, unfortunately without any mention of the children with Learning Disorders. Neither does the Rehabilitation Council of India (RCI) Act recognise LD as a disability.

Learning Disorders now receive much more attention than at any other time in the past. The ability to gain Academic Skills has become a crucial factor in our lives because of the highly competitive employment market that is evolving in India today. There has now been the realization that emotional problems of Adolescence and Adulthood also relate to school difficulties, damaging Self-esteem and the ability to cope with social and job stresses in later life. Today we stand at the crossroads of history, where Quality of Education has become the cornerstone of social success.

IN THE LEAGUE OF THE BRIGHT AND FAMOUS

In history there is a long list of famous personalities with Learning Disorders which includes names like Leonardo da Vinci, Thomas Alva Edison, Albert Einstein, Woodrow Wilson and Winston Churchill.

Churchill was a Prime Minister, a great orator and won a Nobel Prize for Literature. Yet his school report showed a boy doing miserably in class. His father wrote of him, "I have an idiot of a son". Churchill wrote of his school in 'My Early Life', "I was happy as a child with my toys in the nursery. I have been happier every year since I became a man. But this interlude of school makes a sombre, gray patch upon the chart of my journey". This "unhappy" interlude resulted from Churchill's Dyslexia.

But Dyslexic Churchill was fortunate to receive special coaching, entered the Royal Military College where he did not need much of writing skills and the rest is history.

Einstein was gifted with original scientific thinking, but he failed at school where he had difficulty in Learning to read. Even as an adult, writing continued to be a problem for him.

HOW COMMON ARE LEARNING DISORDERS (LD)?

Learning Disorders were thought to be rare, but current statistics in the West and India show that at least 10% of children are affected by this handicap. It is an alarming thought that in a school of 1000 children, about 100 could have a Learning Disorder! Fortunately, mild forms of Learning Disorders (LD) are more common than the severe forms. Due to genetic reasons, boys are affected three times more than girls.

CAN LD CHILDREN BE SPOTTED IN YOUR CLASS?

In many cases, it is the Teacher who first suspects that a child may have a Learning Disorder. This is because teachers are able to instantly compare a child's work and behaviour to that of his classmates and identify a child who is struggling with Academic skills. Also because, these days, Teachers get to spend more time with children than the parents themselves.

It is normal for a child in the first one or two standards to struggle with his Academic Skills of Reading, Writing or Arithmetic, but after this he should attain a basic level of competence. If a child struggles beyond this period, he may have a Learning Disorder. **It will also become clear in the class that the LD child is actually brighter than these disabilities in his academic work would indicate.** This difference or discrepancy between his good intelligence and his poor academic performance is the heart of the matter in Learning Disorders (LD).

In the class, the LD child may resent when asked to read aloud. His reading may be slow, with elementary errors. He may be unable to spell the words, despite trying very hard. He may sometimes be able to write neatly, but only if he writes very slowly.

The child's reading ability may be at least two years below his grade. Reversal of letters in writing ('d' for 'b', 'm' for 'w', 'p' for 'q', etc. are examples) may be coupled with spelling words phonetically by their sounds (example, 'inuf for enough, 'fest' for first). There is a tendency to omit commas, full stops and other punctuation marks, and to ignore the need for capital letters.

His mathematical skills may be affected, with an inability to do mathematical reasoning or arithmetical operations such as addition, subtraction or division.

A child with Learning Disorder (LD) has problems organising thoughts and ideas. He may think only concretely. Abstraction may be deficient and therefore application of information to solve problems becomes limited. Thus, some children with this deficit may do well academically till the fifth or even sixth standard (till when rote memory will suffice), and then start showing academic decline which many parents and teachers may attribute to laziness.

The child may have trouble drawing shapes and diagrams, although he understands and distinguishes them. Conceptualizing Time and Directions, Speed and Distance etc may be difficult for him.

An LD child may be clumsy, and may have confusion about handedness. He may switch hands to eat or draw a line. Visuo - spatial and fine motor disorders may affect self-help and social skills.

Some of these children may be hyperactive and reckless. Noises or sights around the class easily distract them while studying. Poor self-image, helplessness and social-pressure may lead to loss of motivation to study and to come to school. Reaction to poor performance at school may manifest in many ways

behaviorally. The child may become stubborn or oppositional, or may “play up” resulting in disruptive behaviour. However, many of these children are exceptional in certain areas of functioning – some of them show **unusual talent** with motors and machines, music and people, or sports and games.

BENEFITS OF EARLY IDENTIFICATION

Learning Disorders, being Developmental in origin, cannot be prevented completely, nor ‘cured’. It is a life long and permanent condition. However, the strategy of management is to identify the strengths and potential of these children at the earliest possible age and to develop Individualised Learning Strategies for each of them. This helps them to circumvent and overcome the Learning Disorder using those strategies. **“If the child can’t learn the way you teach, teach him the way he can learn”.**

Before Vikram was taught the way he could learn, he used to complain to his mother that he never understood why he could not write well and always ended up getting scolded, inspite of working hard. He was relieved when told that he was, after all, not at fault for being unable to write well. It was explained to him that it was due to the ‘difference’ in the functioning of his brain and that his Parents and Teachers understood what the problem is. The pressure on him eased and he became motivated to work harder when his self-esteem improved.

This is another advantage of making an Early Diagnosis. The diagnostic label of Learning Disorder, if sagaciously used, gives the child the comfort that he is not to be blamed after all. The parents also recognise that the child’s problem is a Neurological entity; that it is neither their fault nor the child’s. It helps them to counter guilt and complaints that the child is simply being lazy or careless. Having a name for the problem enables the Teachers to identify and use appropriate teaching strategies.

CONCLUSION

Learning Disorders should, nevertheless, be identified and diagnosed with care. It is not a term to be used for every child who fails at school or behaves badly.

It is a large group of related disorders; each child with Learning Disorders has a unique set of problems. Many teachers are unfortunately reluctant to accept these as a cause for Poor School Performance. They commonly ask, “When he is good at everything else, why is this backwardness only with studies?”, notwithstanding the fact that LD is the major known cause for poor school performance in young children.

Therefore, the need of the hour is to create Awareness about the causes of Poor Scholastic Performance in children among Teachers, Parents and School Authorities. Resource Centres with the services of various Specialists need to be set up in each District. Schools, individually or together, need to establish Resource Rooms with Specially Trained Teachers. Each trained teacher empowered to identify Learning Disorders will serve as a lamp, to light up the dark world of the harassed LD child.

IDENTIFYING CHILDREN WITH LEARNING DISORDERS (LD) : POINTERS

"Dear mother

*started store several weeks i have growed coisiderably I don't look
much like a Boy now hows all the fold did you receive a Box of Books
Memphis that he promised to send them languages....*

Your son Al" (19yrs)

This son Al was Thomas Alva Edison, thought to be a 'dunce' as a schoolboy and thrown out of public schools of Port Huron, Michigan. His mother, to whom he addressed the above letter at the age of nineteen, was instrumental in teaching him to use his inventing skills. The inventor of the Electric bulb and the Phonograph, holder of 1300 invention patents, Thomas Alva Edison (1847 – 1931) was Dyslexic and never really mastered the basic skills in Writing, Spelling or Arithmetic. None the less, he scaled amazing heights of creativity using his head and hands !

Like Edison, there are hundreds of children in our classrooms who remain a puzzle for their parents and teachers – children who have Learning Disorders (LD) and are mostly ridiculed as being 'idiots'.

The aim of this chapter is to create images of LD children who may then be identified by each teacher in her class.

'EXCELLENT WITH HIS HANDS'

Many parents have a routine description about their young child: "He is a smart boy, excellent with his hands. He can dismantle toys or electronic gadgets and put them together so well. He can paint, he can dance – but it is best not to talk about his studies". This is a clue to Learning Disorders: that the child actually seems 'brighter' than the performance in his school work would suggest.

'LOSES THE JOY OF LEARNING'

By the age of seven, the child with Learning Disorders (LD) may have severe difficulty in Reading, Writing or Spelling. He may become demotivated in studies. He loses the joy of learning; school becomes a burden. Older children who do not receive remedial help face repeated failure in written work, finally to be labelled as 'stupid' or 'lazy'.

Many of these children lose their confidence, and become frustrated. Their internal tensions may manifest as adjustment problems at home or in school. The child with a Learning Disorder (LD) gets easily distracted from studies and looks for the slightest excuse to evade academic work.

Getting addicted to TV or Computer provides an easy escape for these children. Quitting to run away, or giving up in defeat is another way of coping with Learning Disorders. Cheating in tests to avoid failure and forging progress reports, when seen in young children, should raise the suspicion of Learning Disorders and not be treated as a moral issue.

Naughtiness, aggressive behaviour and defiance can sometimes be a cover for low Self-esteem in a child with Learning Disorder (LD). Refusal to do school work, truancy etc may indicate an underlying Learning Disorder in the child.

Learning Disorders may appear first as a behaviour problem. Any young child 'losing the joy of learning' should be evaluated for a possible Learning Disorder (LD).

POINTERS FOR IDENTIFICATION OF CHILDREN WITH LEARNING DISORDERS (LD) IN THE CLASSROOM

There are many difficulties which children with Learning Disorders (LD) experience. Every such difficulty is not necessarily present in all children with Learning Disorders. **Each child with a Learning Disorder may have a different set of problems.** It is also true that many normal children may have some of these difficulties.

A **Teacher** who is sensitized to these academic and behaviour pointers is the **most suitable person** to diagnose a case of Learning Disorder (LD) in the classroom. Some pointers are mentioned below.

POINTERS FOR IDENTIFICATION – PRE-SCHOOL CHILDREN

- Delayed development in speech
- Poor clarity in speech, poor Language development
- Did not crawl, delay in walking
- Clumsy; excessive tripping and bumping

- Difficulty with buttoning, tying shoe-laces and using crayons
- Difficulty picking up rhymes, names of colours and shapes
- Difficulty narrating stories in sequence
- Reversing alphabets and numbers (b/d, q/p)
- Confusion with Left and Right
- Poor attention, concentration etc.

POINTERS FOR IDENTIFICATION – SCHOOL GOING CHILDREN

Reading tires the LD child easily; he is curious to read, but prefers being read to. He reads by following the text with his finger. He reads slowly and hesitantly, with omissions and additions of letters, and does not pay attention to punctuations. He fails to look carefully at the word, makes a guess from the first letter, eg: reads 'portion for proportion'. He reads aloud monotonously without intonation, word by word. He may lose orientation on a line or page while reading, miss lines or read the previously read lines again. Most often he finds it difficult to read lengthier words. He may be unable to mentally interpret the meaning of what he reads.

Writing is frustrating for a child with LD. He is extremely slow with writing and rarely completes his class notes or exam papers within the given time. His spellings are bad and so are grammar and sentence construction. Even spelling errors are inconsistent; the same word may be spelt differently in different places on the same page. He is unable to see the pattern in spellings like 'tion' in 'portion' and 'station'. The LD child may confuse letters while writing, like 'b' for 'd', 'n' for 'u'. Some letters may be mirror images like E for 3, 6 for 9. He omits capitals and punctuations. The handwriting may be poor and the pencil grip awkward. In more severe cases, word images may be transposed eg: 'saw' for 'was', 'no' for 'on' etc.

Indian languages seem to be more difficult for many LD children, as many letters are visually similar. Also, many letter sounds are similar.

Children with severe problems with writing may find it difficult to write words or letters from a dictation. Some of them may even be unable to pick out alphabets from a display, or match the same alphabets.

Many children have **confusion between Left and Right**. Some may be Left handed and there may be a delay in deciding which hand to use.

Arithmetic does not interest many of these children. They may use fingers for calculations even after 8 years. They may get confused with arithmetic signs like multiplication 'x' and addition '+'. They may do half the problem with the correct sign and the remaining with another. They may find it difficult to decide on correct operations for word problems, may go wrong in the order of operations. Many of

these children work out answers correctly in the working column, but may transpose the digits while writing out the answer eg: 2538 may become 5238.

These children may reverse numbers, eg: 12 may become 21 on reading or writing. They may subtract a smaller number in one column from a large number, without realising the value of the number, eg: $43 - 8$ may be answered as 45, subtracting 3 from 8.

WHAT IS TIME?

The concept of **Time, Space, Speed or Distance** may be difficult for some children with Learning Disorders (LD). Some find it very hard to tell the time from the face of a clock. Certain others have **trouble with maps, graphs and directions** making it difficult for them to draw or spot a place in a map or a puzzle.

Confusion about the days of the week, or even 'yesterday' and 'tomorrow' is seen. There is a difficulty in **Time Management** as in organising the every day activities, or managing to complete an examination within the given time.

Language skills are difficult for these children. They may not be able to narrate a story or an incident in a sequence. **Categorising, classifying and summarizing** are difficult as well. They may have difficulty with a sequential instruction like, "Go back to the classroom and fetch your number work, kept in the lowest drawer behind my chair". Some older children may still have difficulty finding the right word to express himself; for a 'toy' he may say 'the thing you play with'.

Social competence and Social skills do not come easily for some of these children. They feel very low about themselves. They may have difficulty giving and asking for the right information. The skills to win friends may be poor and they may feel isolated in a group. Many may not understand indirect meanings or jokes in conversations.

On the contrary, a good percentage of LD children does display social and interpersonal skills as their major asset.

Self-esteem in many children with Learning Disorders is abysmally low because of the poundings they receive from their Parents, Peers and Teachers. It affects their social skills and self confidence.

LOOKING FOR POTENTIAL WHILE LOOKING FOR POINTERS

The negative aspects in any child may be noticed more than the underlying potential, especially so in a Disabled child.

The meaning of Education, on the other hand, should be to ignore the handicaps and encourage the potential. As was mentioned earlier, most children with Learning Disorders(LD) have **enormous stores of dormant talent and potential**.

The child with Learning Disorder can become a good swimmer, though he may stumble with his words. He may not understand a riddle or a joke, but may be excellent in chess or checkers. Music and dance, sports and games, sketching or painting may be his forte. He may not subtract or divide, but may be brilliant with motors and machines.

CONCLUSION

Various difficulties faced by children with Learning Disorders (LD) are described above. The nature of difficulties may vary from child to child. **It is important to reiterate that the presence of a few of these pointers need not indicate Learning Disorder. On the other hand, a child with Learning Disorder need not have all these pointers.** Since the nature of difficulties differs, the pointers in different children may also differ.

A Teacher becomes a diagnostician for children with Learning Disorders (LD) when she notices every child in her class who struggles with these problems. Based on this 'Classroom Diagnosis', a Teacher can determine if the child suspected to have a Learning Disorder (LD) needs to go on to a more Comprehensive Assessment. This will depend upon the severity of the Learning problems and the co-existence of other Developmental or Behavioural disturbances in the child.

Such a decision for Referral and Multidisciplinary diagnosis needs consent from the school administration as well as the child's parents.

DIAGNOSING POOR SCHOOL PERFORMANCE : MULTIDISCIPLINARY APPROACH

*"The river that drowns an elephant
may be stopped at its source with a twig".*

(Proverb)

Specific causes for Poor School Performance can be detected by anyone using the Flow Chart (Ch. 1). Children suspected to have Learning Disorders (LD) can be identified by the Teacher in the classroom by using the Flow Chart (Ch. 1) and specific Pointers for Identification (Ch. 3). But a firm diagnosis may need several Specialists.

In Children with *Learning Disorders* (LD), different Academic Skills like Reading, Writing, Spelling, Arithmetic etc are affected. There may be associated *Developmental Motor Co-ordination* or *Speech and Language Disorders* too. *Emotional and Behaviour Disorders* also may co-exist. Every such possible cause for Poor School Performance must be looked for, and diagnosed.

Any child who is referred for a detailed Assessment and Diagnosis of Poor School Performance has to be carefully evaluated from all the above angles. Therefore, it **necessitates evaluation by a Multidisciplinary Team** ideally consisting of a Special Educator/Teacher, Psychologist, Speech and Language Pathologist, Social Worker and where necessary a Psychiatrist and Pediatrician.

The consent and participation of the parents is mandatory for this stage of Diagnosis. The assessment aims to identify the various Skill Deficits in the **particular child**, as well as his current level of functioning in various Academic Skills. The assessment also aims to **identify the Strengths** of each child. The evaluation thus generates adequate information on each child to give the requisite guidelines for Remediation.

The assessment usually proceeds according to a stepwise protocol :

1. INTAKE INTERVIEW

The following details are obtained in the Intake Interview :

The child's Current problems, Developmental history, Home Environment and Inputs, Recent Life events. Educational history, Past Academic progress, Positive attributes, Hobbies etc. A detailed report on the child from the Teacher is an important ingredient at this stage of assessment. The information gathered at this stage determines which other Specialist/Specialists need to examine this child.

2. EXAMINATION AND TESTING OF THE CHILD

A physical/neurological examination and tests, if necessary, of hearing and vision. Where indicated, a meticulous examination of the child's central nervous system including soft neurological signs is mandatory.

3. ACADEMIC SKILLS ASSESSMENT

The basic assessments are the following:

- (i) Tests to measure Intelligence (IQ) (Clinical Psychologist)
- (ii) Tests of Academic skills (Reading, Spelling, Writing, Mathematics) (Special Educator)
- (iii) Tests for Speech and Language (Receptive and Expressive Language ability, Speech clarity etc) (Speech and Language Pathologist)
- (iv) Test of Special abilities

4. ASSESSMENT OF CO-MORBID DISORDERS

Specialists may need to examine the child to rule out disorders such as Attention Deficit Hyperactivity Disorder (ADHD), Emotional disorders, Speech and Language disorders and Co-ordination disorders.

Assessment of Learning Disorders

A range of Tests is administered to the child to find out the factors hindering progress at school.

(i) *General Intelligence Test*

The most common IQ test for assessing Intelligence is Weschler Intelligence Scale for Children (WISC), originally developed in the US and modified to suit Indian children. This test is suited for children with reading and spelling difficulties as it does not involve reading and writing.

A normal child scores equally well or equally badly on all scales. On the other hand, the child with a Learning Disorder does well in one set of tests and badly in others.

(ii) Assessment of Reading Skills

To assess the Reading age and Reading Disorders of the child, there are a number of standardized tests. An informal Grade Based Reading Assessment can also be done and more valuable, individualised information can be obtained about Reading (Word attack skills) and Reading Comprehension. Specific Reading Disorders are recorded by analysing the reading performance.

(iii) Assessment of Spelling

The ability to spell is recognized as a complex and multifaceted process. Besides general Intelligence, the following factors affect the ability to spell words.:

- a) The ability to spell words that are phonetic
- b) The ability to spell words that involve roots, prefixes, suffixes and rules for combining.
- c) The ability to look at a word and reproduce it later.

An efficient Assessment procedure can clearly outline the relevant skills a child has or has not mastered, pin point patterns of errors and provide directions for systematic remedial instruction.

(iv) Assessment of Maths skills

Many Disabled Learners have difficulty Learning Mathematics, experiencing problems at all age levels. Skills in basic computations like Addition, Subtraction, Multiplication and Division and ability to solve statement problems are examined. There are a number of (commercial) Maths assessment kits; however, they yield little usable teaching information. On the other hand, Informal Assessment which consists of Observation, Oral interviews and Error analysis can provide us with enough information regarding the nature of the child's Disabilities.

(v) Other Assessments

Other areas assessed include Handwriting, Comprehension and Attention. These tests are used for children above six years of age.

Children below six years are assessed for Pre-Academic Skills. These include Visual discrimination, Auditory discrimination, Fine Motor Skills, Verbal Fluency, Memory, Attention and Handedness. Brigance Diagnostic Inventory of Basic Skills, Aston Index and Mann Suiter Test are some of the popular tests used to assess the 'Learning Readiness' of the preschool child.

CONCLUSION

The objective of this detailed Assessment and documentation is to bring out the level at which the particular child functions in each Academic Skill. It also examines the nature of the difficulties that the child exhibits. Based on the report, an *Individualised Education Programme (IEP)* is drawn up for the child in reference. The *Remedial Strategies for each child* assessed are worked out by the teachers based on such an IEP.

The concerned laws in the USA and UK make it a legal obligation for each school to undertake this assessment. According to the 1993 Education Act in the UK, each school should maintain a Special Educational Need (SEN) register as per the Legal Code of Practice. Class teachers identify the Special Educational Needs (Learning Disorders) and along with the SEN co-ordinator and the child's parents, help the child undergo a Multidisciplinary Assessment for Diagnosis as well as for Intervention. This procedure emphasises the significance of a Multidisciplinary Team.

WHAT CAUSES LEARNING DISORDERS ?

*"Children are open systems
whose experiences influence their brain mechanisms*

It is now clearly understood that Learning Disorders are of Neurological origin. An LD child's brain cells are arranged differently, or function differently from a normal person's. These brain cell abnormalities may arise from Genetic factors, or Environmental causes during the pre-natal, natal or post-natal period.

The brain cells and their functions or dysfunctions are inherited the same way as aspects of personality or physical characteristics. It has been shown that 88% of children with Learning Disorders have immediate relatives with the same disorder. Thus Learning Disorders are genetically inherited.

This is no matter to be ashamed of, The brain area possibly in my Right hemisphere which deals with the faculty for learning music is underdeveloped – so I cannot sing. (This brain mechanism too is genetically determined.) That explains why I cannot reproduce a tune (like the LD child who cannot 'write'), even if you teach it a hundred times! But, do I have to be ashamed of it? Does anyone ridicule me for this 'disorder'?

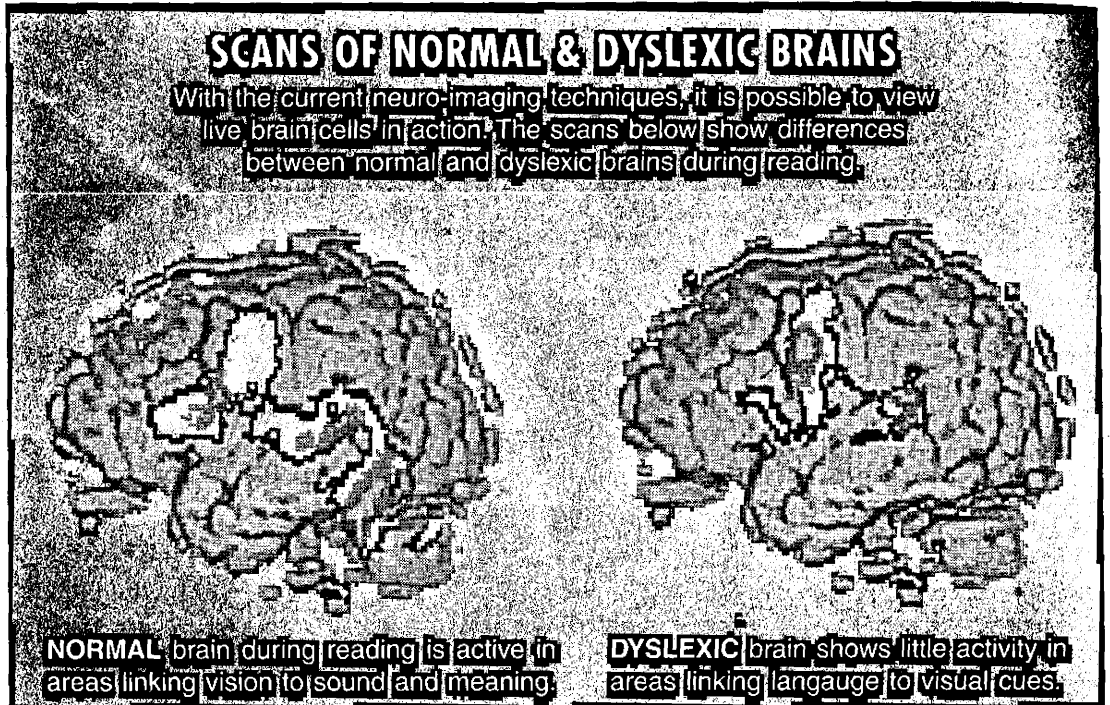
Armed with the knowledge of the neurological causes for Learning Disorders, teachers can accept each LD child for what he is and treat him with dignity. Knowledge always banishes stigma.

Boys with Learning Disorders outnumber girls three to one. The vulnerability of the male may suggest that genes carried on the X chromosome play a part, but other genes also may be involved.

Some Learning Disorders, on the other hand, may be caused by changes that occur in the brain from an illness or insult like a viral fever or anoxia – before, during or after birth. These are the Environmental factors.

WHAT AILS THE LD BRAIN ?

Whether due to genetic factors or environmental, the brain of the LD child functions inadequately or inappropriately because of damage, malformation, improper migration or inadequate maturation of concerned brain cells. Snapshots of these abnormalities can now be taken using special brain scans, as illustrated on the cover and below..



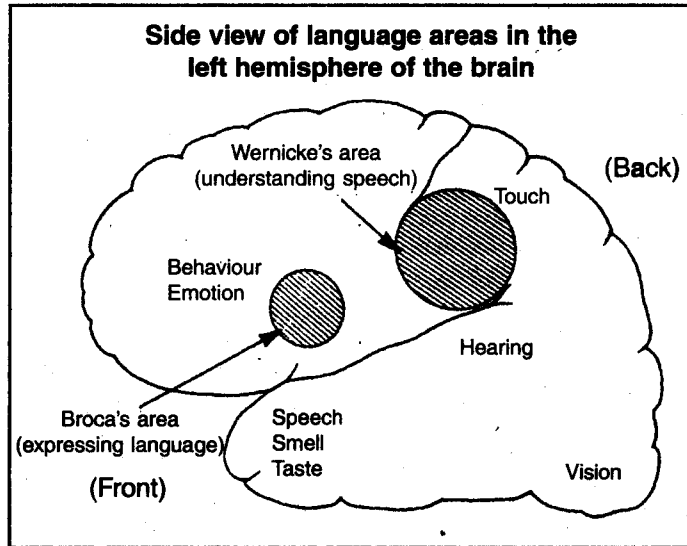
Insults such as viral infections, use of drugs, malnutrition during pregnancy, delayed labour and difficult delivery, illness in the early new born period etc can give rise to Learning Disorders without Mental Retardation. Such problems affect specific areas in the brain resulting in deficits in information-processing and transmission of nerve impulses from one area to another, leading to various Learning Disorders.

BRAIN – SEAT OF THE MIND, SEAT OF LEARNING

All the functions of the mind (including Academic skills and the processes of Learning) take place by integrated operation of various parts of the brain. The Mind and its processes are generated by the brain.

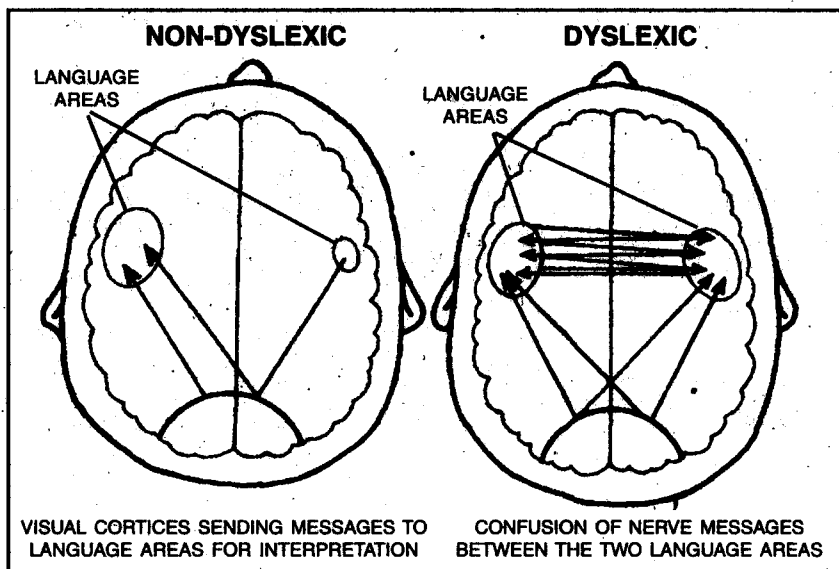
Broadly, we understand that the brain has two separate halves or hemispheres connected by a bridge called *corpus callosum*. These two halves, however, function in tandem to instantly produce an integrated output – spoken or written language, for instance.

The Right Hemisphere controls essentially Non-verbal and Abstract functions, Art and Music, Imagination and Intuition. The Left hemisphere controls Reasoning, Logical, Deductionistic or Mathematical thinking and Verbal skills. The left brain is also responsible for understanding (through hearing and reading), and expressing (through talking and writing) of Language.



A specific area towards the front of the Left brain (Broca's area) is in charge of expressing language; a location at the back (Wernicke's area) is where understanding of speech that we hear takes place. There is a tiny language area in the right hemisphere too.

A plethora of functions related to language are controlled by these various areas in the Left and Right Hemispheres, and by their communication with each other. Any Developmental deficiency in these functions gives rise to faulty comprehension or expression of language, causing Learning Disorders. This may be depicted by a diagram of the Non-Dyslexic and Dyslexic brains.



Sub-skills underlying Reading and Writing include : (a) dealing with symbols for sounds, (b) breaking words down into sound units or phonemes, (c) spelling, (d) deriving meaning from the symbols on the page etc. Crucial deficits in these sub-skills lead to Learning Disorders.

In this background, Dyslexic difficulties may be attributed to a lag in the maturation of the dedicated areas of the Left hemisphere. This does not imply any form of brain damage as such, but refers to individual differences in the complex brain organization during development.

VISUAL AND AUDITORY PROCESSING

Dyslexic brains have anatomical differences from the normal brains in the 'language-related areas' described above, or in the bridge between the two hemispheres, or in the connections involving the various visual and hearing related pathways in the brain.

Language skills operate through meaningful interpretation of what is seen (read) and what is heard - 'Visual and Auditory Processing' - in the appropriate areas of the brain.

Anatomical (structural) deficits therefore give rise to functional deficits in the processing and expression of language. Such functional deficits then manifest as Disabilities in various aspects of Learning, especially Reading and Writing.

CONCLUSION

With research, the future will reveal why some children learn with ease, while others struggle. The group of disorders we call Learning Disorders today may then get separated into various conditions, each with its own clear-cut cause.

SKILL DEFICITS IN CHILDREN WITH LEARNING DISORDERS

*"Tell me, I may forget
Show me, I may remember
But involve me and I will understand"*

(Chinese Proverb)

A Skill is an ability required to do a particular task. When there is an inadequacy in the acquisition and use of a skill, the task or activity which requires the use of that skill is affected. This inadequacy may be called a Skill Deficit.

The process of Learning, as was mentioned before, requires the use of Academic skills - Academic skills of Reading, Spelling, Writing, Mathematics, Non-verbal skills, Fine-Motor Co-ordination skills, Language and Social skills.

It is to be emphasised that Learning Disorders do not denote a homogenous group of disorders. It is not necessary that a child with Learning Disorders should have deficits in all the skills of Learning mentioned above. A child may have difficulty only in writing and not in arithmetic.

ASPECTS OF LEARNING AFFECTED

Reading

In children with **Dyslexia** or Reading Disorders, the Oral Reading Skills are affected. Their ability to recognize words is impaired. They make errors in oral reading, like omitting of words or letters which are present while reading; they may substitute words or letters, or may reverse words or sentences/letters. The process of Reading being affected, these children find it difficult to understand what they read. For some of these children, even simple direct meanings are difficult to comprehend. Some others find it hard to grasp indirect messages or inner meanings.

Spelling

Spelling disorder poses a major problem to many children, especially when it comes to written work. These children have difficulty with oral or written spellings.

The commonest errors are of vowels (for eg: 'cat' for 'cot'), combination of vowels (eg: 'rin' for 'rain'), blends ('back' for 'black') etc. Though Spelling Disorder is a relatively less significant disorder, children with this subtype of problem are a harassed lot. In our Educational system, performance is unfortunately assessed through written work. In such a situation spelling mistakes appear as glaring deficits.

Writing

Writing problems are major obstacles in academic performance. These children find it hard to express on paper the same answers that they easily give orally. Those with **Expressive Writing Disorder** are unable to organise their ideas and put them into a meaningful paragraph as a focussed answer.

Handwriting may be affected in many (due to problems in fine-tuning motor movements) causing lack of legibility and speed in writing.

Mathematics

Children with **Dyscalculia or Arithmetic Skill Disorder** find it difficult to master computational skills of Addition, Subtraction, Multiplication and Division. Statement sums are a puzzle for them, as they are unable to figure out the order of the steps for the problem. Many of these children may have trouble in understanding the concepts of Time, Speed, Distance etc and therefore have a difficulty in working with sums involving those concepts.

Mathematical reasoning is a deficit in certain other children.

Non-Verbal

Yet another type of Learning Disorder widely discussed is **Non-Verbal Learning Disorder (NLD)**. In these children, the use of Academic skills and Life skills are affected. The deficits seen are in Visuo-Spatial organisation, Grapho-Motor skills (eg: drawing a diagram), interpreting Visual and Tactile information, Non-verbal problem solving, and Motor Co-ordination for complex tasks. Their reading comprehension is poor, in spite of having good reading (word attack) skills. Such children may also have difficulty in adapting to a new situation. Non-Verbal communication is not their forte. However, their disorder being Non-verbal, these children are good at Reading (decoding), Spelling, and seem to have good memory.

Motor Co-ordination

Children with **Motor Co-ordination Disorder** may become embarrassed in public because of their inability to acquire and use skills which require Fine-Motor movements. It may appear strange that some of these bright school going children simply cannot do their buttons, shoe-laces or knots, cannot thread a needle, or use a

pair of scissors. They may have difficulty with scribbling, drawing straight lines or circles, and have poor handwriting. Some of them may also have difficulty with running, climbing stairs, throwing and catching a ball etc. If pressurized to perform on the school playing-fields, these children lose their self-esteem and confidence.

Language

Language consists of thoughts that are expressed. Deficits in the expression of thoughts can cause a major impediment to the child's overall performance.

Effective use of **Language** for communication is impaired in many children with Learning Disorders. It is observed that these children have difficulties in word comprehension. For instance, it is hard for them to understand the meaning of words that express spatial, temporal or kinship relationships (such as 'here', 'there' (spatial), 'before', 'after' (temporal), 'uncle', 'aunt' (kinship) etc.). Difficulties with grammar, sentence construction and vocabulary are very common in these children. They may find it hard to initiate and participate in discussions, and may interrupt conversations inappropriately.

Social Skills

Social Skills are learned by the brain like any other skill. Some children spontaneously pick it up; that may not be true for children with Learning Disorders. This skill involves the ability of the brain to understand social conventions. It is significantly affected in these children. They are unable to pick up environmental cues like other children of their age. They may get over-friendly with strangers, and are often unable to think of the consequences of their actions. They may not understand facial expressions. These children are deficient in assertive skills and many of them become loners as they lack the skills to mix with peers. Often, they are seen with children younger to them (they merge because of their immaturity), or elder to them (allowances are made for their inappropriate behaviour).

These subtypes of Learning problems described above have been delineated for theoretical purposes. However, in practice, it is found that this type of compartmentalisation is not valid. Almost all children with one Learning Disorder may have some difficulty with another Learning skill.

SKILL DEFICITS

To make an accurate diagnosis of Learning Disorders in a child, the Teacher and Parent need to identify the Deficits in the various Academic skills. Such an identification is also important to make an appropriate Individualised Educational Plan (IEP) for each child with his individual deficits.

In order to make such an identification easy, a list of major '*Skill Deficits*' contributing to the corresponding subtype of Disorder is provided in the following pages.

The **subtypes** discussed are:

- 1) Reading Disorder
- 2) Spelling Disorder
- 3) Writing Disorder
- 4) Mathematics Disorder
- 5) Mixed Disorder of Learning Skills
- 6) Non-verbal Learning Disorder (NLD)
 - 7) Motor Co-ordination Skill Deficits
 - 8) Language Skill Deficits, and
 - 9) Social Skill Deficits

SUBTYPES AND CORRESPONDING SKILL DEFICITS

1. READING DISORDER (DYSLEXIA)

Academic skill

Reading

Skill Deficits

* Word recognition skills

Difficulty to break a word and read

Eg: mat / ter (matter)

* Oral reading skills

Errors in oral reading skills

(Omissions, Substitutions, Reversals of words in sentences, or letters within words)

Eg: 'when' for 'went' 'Soup' for 'soap'
(substitution)

'Climb' for 'climbed' (omission)

'On' for 'no' (reversals)

* Reading comprehension skills

(Ability to mentally interpret what one is reading while the brain undertakes the process of reading.)

2. SPELLING DISORDER

Academic Skill

Spelling

Skill Deficits

* Oral spelling deficits (spelling aloud)

* Written spelling

Eg: common errors —

Errors of vowels - 'cat'-'cut'

vowel combinations - 'rain'-'rian',

'blends' - 'black'-'back' etc.

STD II
Age 7yrs 6mths

q t → cat
bo | l → ball
~~t n a t~~ → the
Re d → Red (Corrected)
b | g
see
A o
w o l → wall
d o g → dog
have ← h a v e
(Corrected)

STD II
7yrs 2mths
case

bed 'b' was pro
as model to co
hop
can
bus
car
man

Age: 9yrs. 6mths
SD: IV

मूक	कुख
फाल	फल
एक	
गार	घर
हाथी	
और	
माँ	मोर
पाप	पानी
अम	मम
तीन	नीला

3. WRITING DISORDER

Academic Skill

* Written expression

Skill Deficits

* Idea Generation skills,

* Idea Elaboration skills

* Idea Organization skills

(ordering of paragraphs, putting related ideas in a paragraph)

* Handwriting

* Legibility, speed, pencil grip, letter formation, spacing etc.

My School

Std: IV
9 yrs. 2 mths
CBSE

In my school there is teachers us. and all
there is a beautiful garden in my shed.

In my school there is my interests
one is in 7th and other is in 1th

my class teacher's name is giriga. ~~is~~

my ~~teacher's~~ ~~no~~ the class teacher's name is prea

My school's name is

My name is

I am studying

4 Std. My school have teachers

My school has lot of children.

My school have desk, table and.

Beach In my class there is black
board In my class there
is lots of book. In my
class have 33 children.

Age: 9yr 3mths
Std: IV
CBSE

4. MATHEMATICS DISORDER

Academic Skill

Skill Deficits

* Arithmetic Calculations

* Mastery of basic computational skills

(Addition, Subtraction, Multiplication, Division)

* Statement sums

(difficulty with the correct sequence when multiple operations are involved, understanding mathematical terms like difference, greater than etc.)

* Mathematical Reasoning

* Abstract mathematical skills involved in algebra, trigonometry, geometry, calculus etc.

* Use of concepts of Time, Speed, Distance etc.

Std. V - 11 yrs.

A set of mangoes is divided into 908 equal parts with a balance of 8 mangoes left in the set. Each part has 11 mangoes.

(1) How many mangoes were there in the set?
 (2) How many more mangoes are needed to form the 909th part?

$$\begin{array}{r}
 908 \times 11 = 8899 \quad (\text{Number transposed}) \\
 - 8899 - 8 \\
 \hline
 = 1988 \quad (\text{Number transposed})
 \end{array}$$

$$\begin{array}{r}
 11 - 8 \\
 \hline
 = 3 \quad (\text{Statement not generated})
 \end{array}$$

$$\begin{array}{r}
 908 \times 11 \\
 \hline
 9088 \\
 9080 \\
 \hline
 9988 \\
 8899 - \\
 \hline
 8891 \quad (\text{had to be added})
 \end{array}$$

Std. IV
9 yrs. 8 mths
CBSE

There are 31 cows in a field.
39 more cows join them. How many
cows are there in the field now?

number of cows in the field = 31
number of cows join in the field = 39 question
∴ Total number of cows = 61 Copied was
wrong.

Std. IV
9 yrs. 8 mths
CBSE

The cost of 1 book is Rs 250. What will
be the cost of 19 such books?

250
X 19

059

Correct operation
Wrong process

Std. IV
9 yrs. 3 mths

Std II
Age: 9yr 3mths

268
- 141

127 (8+1)

329
+ 568

887

① did not
carry 1

Std. II & III

Std II
Age: 7yr 1mth

Std III
Age: 8yr 2mths

25
- 18

13

wrong
direction of
operation

② 14
- 16

18

did not
regroup

5) MIXED DISORDER OF LEARNING SKILLS

Academic Skill

Skill Deficits

- * Reading, spelling, writing, maths
- * Impairment in all the Skill areas together

6) NON VERBAL LEARNING DISABILITIES (NLD)

Skill Area

Skill Deficits

- * Non-verbal skills
- * Difficulties in grapho motor skills, (eg: drawing a diagram)
- * Difficulties in reading comprehension,
- * Mathematical reasoning
- * Tasks in science involving complex concept formation
- * Severe Social behaviour problems.
- * Poor recognition and mastery of body language etc.

7) DEVELOPMENTAL CO-ORDINATION DISORDER

Academic Skill

Skill Deficits

- * Motor Co-ordination – Fine and Gross Motor skills.
- * Difficulty with doing buttons and shoe-laces, knots, cutting with scissors, threading needle, using tools etc.
- * Difficulty with scribbling, drawing straight lines/ circles, writing within the lines, pencil grip etc.
- * Difficulty with running, climbing stairs, kicking ball, skating, throwing and catching.

8) LANGUAGE PROBLEM IN CHILDREN WITH LEARNING DISORDERS

Academic Skill

Skill Deficits

- * Effective use of language (Language as set of symbols used for interpersonal communications- needed for play, social relationships, thinking and reasoning, speaking, reading and writing)
- * **problems in word comprehension**
- ** Difficulty to understand words that express Relationships
 - Spatial – prepositions like here, there, in, on
 - Temporal – before, after
 - Kinship – uncle, aunt

*** word retrieval difficulties**

-Difficulty accessing words from mental dictionaries / lexicon

eg: 'Give me the thing you write with" (instead of 'pen')

*** difficulty with syntactic production**

- Problems with grammar, sentence structure.
- Inability to use compound/complex sentences.
- Repeated stereotyped use of the same phrase
- Poor variety in vocabulary

*** pragmatic difficulties**

(Social communication aspect of language – to situations)

- May interrupt inappropriately
- Difficulty in discussions (initiate, participate)
- Narrations, requests, acknowledgements

9) SOCIAL SKILLS DEFICITS

Skill

Skill Deficits

* Ability of the brain to understand social conventions (i.e Social Cognition)

*** Deficit in Social Cognition**

- described as 'Socially tone deaf'

* Do not pick up the same social cues as other children of the same age.

* Poor recognition and mastery of body language

* Do not seem to predict the social consequences of their actions

* Overfriendly with strangers

* Do not read obvious facial expressions

* Lack the skill to mix with peers

- Become loners or play with younger children or older children. Or get spontaneously isolated.

* Poor assertive skills

CONCLUSION

This chapter on 'Skill Deficits' is planned to be distinct from the one on Pointers. The 'Pointers' described in chapter 3 are meant to be used to visualise a child with learning problems. On the contrary, this chapter is explicitly intended to point out the individual Skill Deficits as the basis on which Remediation is planned for each child.

The ability of a Teacher to recognise one or more of these Skill Deficits in a child in her class, her knowledge to enable her to put that Skill Deficit under a Subtype, and her capacity to institute a Remedial Strategy for the child in question will make a world of difference to that LD child who suffers in silence.

LEARNING DISORDERS (LD) AND REMEDIATION

*“ If I can't learn the way you teach,
Will you teach me the way I can learn?”*

Learning Disorders as earlier discussed are neurological deficits which cannot be prevented or cured, but early diagnosis and intervention can help to circumvent and overcome the problem. This requires the identification of the appropriate methods to remediate the Skill deficits.

Remediation implies the fortification of the child's learning skills. The child's strengths are used to work on his areas of skill deficits, thus helping the child to cope with the curriculum. To illustrate, a child who is good at remembering 'rules'/oral information can apply these skills to monitor operations in Maths and Spellings. A child who is good at drawing diagrams can be trained to represent information by way of diagrams to make learning easier. To help a child with various skill deficits, such appropriate remedial strategies suitable for each child need to be planned.

REMEDIAL STRATEGIES FOR READING, SPELLING, WRITING AND ARITHMETIC DISORDERS

a) Helping a Learning Disabled Child with Reading Disorder

*“ When the English tongue we speak
Why is 'break' not rhymed with 'freak'?
Will you tell me why it's true
We say 'sew' but likewise 'few'?
Wherefore 'done' but 'gone' and 'lone',
Is there any reasons known?
And, in short, it seems to me,
Sounds and letters disagree!”*

(Anonymous)

Reading is a complex skill which is often taken for granted. Reading and Writing are opposite processes. In Reading, printed symbols (*Graphemes*) are converted into their corresponding sounds (*Phonemes*); in Writing, Phonemes (*sounds*) are converted into their corresponding Graphemes (*Written symbol*). It is expected that children acquire these skills automatically. For the majority of children, this may be an automatic process where the teacher only facilitates it; but in the case of an LD child, the teacher has to make a deliberate effort.

To be able to read efficiently, the child should acquire and use the knowledge of alphabets and letters, be aware of the sound of the letter, and know the combinations of letters that make up a word. Apart from this, the child should also know the sounds of letters when they are combined, the meaning of words, and the sequence of the words that make up a sentence.

In short, the *act of reading* comprises of two basic processes: 1) '*Decoding*' of the written form and 2) *Comprehension* of the message produced by the written form (written language comprehension). Majority of dyslexic children may have a difficulty with one or both of the above skills. Lack of ability to 'decode' the written form produces Reading disability (Disorders). Such children may, on the other hand, quickly learn through the 'sound' modality – when you read out to them. Very often parents make a statement: "He is eager to listen to a story, but he refuses to read on his own; he likes it to be read out to him".

The approach to teaching 'Reading' is based on the principles of following a structured protocol. The age of the child and his level of functioning should be considered while doing this. Children with LD can benefit by enhancing and supplementing the processes of 'decoding' and 'comprehension'.

Certain **guidelines** are useful to help young children with Reading Disorder:

Diagnosis and Remediation of Reading Disorder should take into account the degree of difficulty. Too much emphasis has been paid to certain elementary characteristics of children's reading, such as the reversals of 'b' and 'd', reluctance to read aloud, or the tendency to follow the text with the finger when reading. These characteristics are not diagnostic. On the other hand, the crux of this disorder is the child's inability to 'decode' the written symbol into its sound. The greater the Phonological deficit, the higher the degree of Reading Disorder. In practical terms, the more complex the words, the greater the reading disability.

In this background, the strategy for helping the child with Reading Disorder should focus on simplifying the methods by which the child can 'decode' the written symbols into their sound form. The resultant sound form is meaningfully interpreted in the brain to create Reading Comprehension – the comprehension of the material that is read.

Reading Comprehension in a child with Reading Disorder can be enhanced by letting him skip the step of having to read on his own. His academic proficiency in comprehension can be augmented significantly if a lesson can be read out and verbally explained to him. The strategy may be adopted for children with severe word attack skills. It should not, however, be at the cost of the child developing reading skills on his own.

In **Key word approach**, exercises are given where children need to pick out the Key words from the paragraphs of the lesson. This helps them to understand and remember the content of the lesson more easily.

In a lesson titled 'Birds', the child is asked to pick out the key words eg: birds, feathers, nesting habits, beaks, claws, ducks, hens etc. This gives the child an idea about what is being discussed in it, helping him to comprehend and remember the lesson better.

Reading speed and proficiency can be enhanced by enriching *word attack* skills:

The development of **Basic sight vocabulary** (words which should be read at sight without effort) eg: words like 'on', 'no', 'of', 'is' etc will be helpful to speed up the process of reading. In any book, 20% of words are 'sight words'. Sight words can be taught using flash cards and a 'core' set of common words.

Phonic method is extremely useful when there is a difficulty with 'phoneme-grapheme correspondence' (sound-letter associations). The child is taught the sounds of letters and then encouraged to blend these into a word for eg; dog= /d/o/g/. With practice, he learns to decode and read more complex 'phoneme-grapheme correspondences' on his own.

In the **phonetic method**, phoneme-grapheme correspondences are taught in an organised way, starting with individual letter-sounds and proceeding to families of words that have the same sounds. This method deals with various spelling units systematically, until words can be broken into patterns (such as 'ar', 'tion', 'tch') which the child learns to recognize and read quickly.

Syllabication also helps to improve on *word attack* skills. This provides the child exercises in syllable awareness. He is asked to read words by breaking it into respective syllables. Eg: bask/et, mat/ter, stick/er. This skill improves the child's ability to read lengthier words. This is a major strategy for reading that the child has to build on.

The use of **punctuation and intonation** in reading includes both 'mechanical' and 'higher' order skills. It initially would include the recognition that a full stop marks the end of a sentence, at least, a pause for breath. Later on, intonation, the stress in pronunciation, the question or exclamation marks etc. may be introduced. Children can have fun by reading sentences with different stress patterns, with consequent differential meanings. (eg: 'He's come? which means 'Has he come', and 'He's come!, which means 'He has come, great!')

Teaching a child with Reading Disorder involves Individual Assessment and Individualised Education Programme (IEP). Most programmes are aimed at improving the child's phonological skills. There are multiple schemes created for children with reading disorders. Remedial teachers need to undergo training in these schemes (Alpha to Omega, Orton-Gillingham Stillman scheme etc are examples), before they undertake work for the more severely disabled children.

b) Helping a Learning Disabled Child with Spellings

There are three types of problems that make a child's written work poor. The most glaring problem is of **Spelling** difficulty where words may be so badly spelt that they lose their meaning. The other is a **Writing Disorder**, where the handwriting may be illegible. The third problem lies in the **Written Language** itself, where the language used may be disorganized, erroneous or inadequate.

It has been the tradition in our Educational system to often ignore the content of the child's writing, while giving undue priority to spellings. This may be unfair to the child's intelligence.

Spellings require the knowledge of the rules for converting phonemes into corresponding graphemes:

"And the maker of a 'verse'

Cannot cap his 'horse' with 'worse'.

'Beard' sounds not the same as 'heard'

'Cord' is different from 'word'".

This poem illustrates how variable and inconsistent these rules of converting phonemes into graphemes are. A particular phoneme (sound) may be represented by different graphemes (written symbol) (For eg: 'verse' and 'worse'). On the other hand, the same grapheme may correspond to different phonemes (For eg: 'cord' and 'word').

Spelling errors in children with Spelling Disorder are of different types. Each type of spelling errors is thought to indicate a different type of deficit. Not all spelling errors, for example, are due to phoneme-grapheme conversion difficulties. Each individual child may have a combination of several errors.

The remedial methods, therefore, need to be tailored to the type of error. These individual techniques address different skill-deficits in various age groups of children. Working with these remedial techniques need training and practical experience.

Multisensory Techniques usually used for smaller children, involve the various sensory modalities (*Visual, Auditory, Kinesthetic and Tactile*) and are referred to as the VAKT approach. This involves the child seeing the letters, hearing their sounds,

feeling the movement by tracing the letters with eyes closed. It is known that inputs through multiple sensory modalities at the same time consolidate the learning process.

Simultaneous Oral Spelling (SOS) is an offshoot of the above VAKT programmes. There are different versions of this technique, but all of them involve the simultaneous use of more than one sensory modality – for example, the child calling out the letter or sounds in the word as each letter is being written. This helps the ‘sound –symbol conversion’, and provides a motor or kinesthetic memory of the letter. After this, the written work is read aloud reinforcing the visual and auditory components.

Spelling rules are helpful for older children. Use of these rules with participatory examples can de-mystify spellings. An example is the **Plural Rule**: (If a vowel occurs before ‘y’ as in ‘toy’ then the plural is obtained by adding ‘s’. If a consonant occurs before, the plural is derived by dropping ‘y’ and adding ‘ies’, as in ‘babies’).

Several ancillary techniques are available to remediate Spelling disorder. These have to be chosen according to the individual need of the child and the severity of his difficulty.

Many spelling programmes involve the judicious use of flash cards to teach the child ‘Phoneme-Grapheme’ conversions, Basic sight vocabulary etc. Programmes using Worksheets, Word games and Playing cards are also popular in the Resource rooms.

Educational software with spelling programmes are available, but may be inaccessible to many of our children. **Spelling dictionaries** are useful for young children with spelling disorder. These dictionaries enter words under the correct spelling in black, and the incorrect spelling in red (‘knife’ in black, and ‘nife’ in red). Computer dictionaries are also available where typing in a possible spelling will give the child the correct spelling, like the Spellcheck in Microsoft (MS) Programs.

The importance of spelling need not be overemphasized. Many accomplished writers are known to have possessed poor spelling ability. It is helpful to know, therefore, that expressive language skills are distinct from spelling skills.

c) Helping the Child with Writing Disorder

Of the various components of Writing Disorder, the two major rubrics are deficits in the mechanics of **Handwriting** and in **Written Expression skills**. Children with these deficits are often confused. Therefore, clarifying the basis of their writing problems and acknowledging that it is not their fault motivates them to participate positively in Remediation.

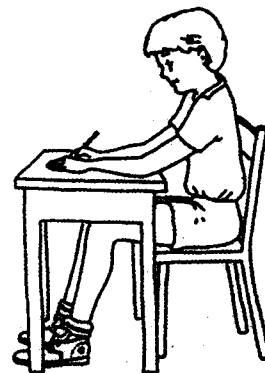
Handwriting

Handwriting difficulties can be eminently overcome if remediation is made available to these children by trained teachers. These remedial teachers use their special skills to analyze the child's Handwriting, its mechanics, the formation of letters and their arrangement on the page. This analysis is used to correct the deficits.

The way the child sits and holds the pen to write is important, but it is not the core problem. Writing skills vary from child to child and there are no hard and fast rules about the mode of writing. Allowances should be made for individual differences. The younger the child, the easier it is to change the child's posture and pencil grip. In an older child, awkward postures that are difficult to change must be accepted. In this analysis, emphasis is always on the letter formations.

Right or Left ?

Right-handers and Left-handers can choose their own ideal writing positions. Children should be encouraged to hold the paper or book with the non-writing hand. That hand should not be used to support the head. The feet should be touching the floor and the back erect.



The ideal position (Right Hander)

Handedness being determined by the brain, the child must elect to use his more versatile hand for writing. If he chooses the Left hand to write with, there is nothing abnormal about it, but then he must stay with it. Most Left-handers write as quickly as Right-handers. The Left-hander's writing position should take into consideration the fact that he writes towards the body. The right edge of the paper, therefore, needs to be held down with the right hand.

The pen or pencil should be held at least two centimetres from the point, so that the writer can see what he is writing. Pressure of grip on the writing tool should not be too tight.

Many Left-handed children have awkward pencil grip because they are not trained from the early years. Left-handers may produce messy work because their arms are being pushed over what they are writing, leaving messy smears on paper.

Learning to write legibly is one of the writing problems which harass many children, both Right as well as Left handed. Yet, many teachers and parents of Left handed children attribute lack of legibility to Left-handedness and blame the child.



The Ideal position (Left Hander)

Children with low muscle tone may have fine-motor co-ordination problems. For such children, as well as for Left-handers, plastic pencil grips moulded to the shape of the thumb and index finger may be useful. Applying the right amount of pressure on the grip, achieving adequate speed within a given time, etc need careful training.

Dynamic Tripod Grip

The ideal pencil grip is called the 'dynamic tripod grip'. The pencil resting comfortably on one finger, aided delicately by the other two, automatically takes care of the issues of grip, pressure, speed and legibility.

Many children have variations of this grip. Some of those may be acceptable, but the 'dagger' grip (all fingers around the pencil), and the 'hooked' posture of the Left hander (where he folds the wrist towards the body) should be strongly discouraged.

For children who cannot overcome the writing difficulty, a quiet typewriter or a computer may come in handy.

The issues of the mechanics of handwriting are usually ignored in the early years. They become a major problem when the child grows up and has to cope with speed and legibility. It is, therefore, essential to work on children with handwriting problems from the very early years.

Written-expression skills

Among the writing skills, Written Expression is the most difficult for the child to learn and the teacher to teach. Both Right and Left brain hemispheres have to function with coherence to convert Ideas arising in the Right brain, to effective Language in the Left.

The child must have a clear idea about the topic. The writing must be organised, and presented with clarity of concepts. It must be written legibly and contain correct spellings and grammar. Children can be taught specific steps, to help them to improve on their written expression. While answering questions, it is important to organise the answers to suit the available time as well as marks.

The important steps in the Writing process include :

i) Idea Generation ii) Idea Elaboration and iii) Organisation

Idea generation consists of gathering related thoughts and information within an outline that is suitable for the topic chosen. More and more appropriate thoughts may arise as the child writes, enabling the connecting up of related ideas.

Idea Elaboration (elaborating the generated ideas) is the second step of the writing process. This is the stage of writing where importance is given to the content more than the spellings or handwriting. The generated thoughts and ideas are expanded and elaborated into sentences.

The stage of **Organisation** in writing comprises of organising, checking and correcting the content. The piece of written work must be organised and polished in this step. The child must check if the explanation of the main idea is complete, if there is repetition of ideas and if the sentences are too lengthy. Clarity of description and correctness of paragraph divisions need attention. The right use of punctuations and capitals has to be carefully checked. Any mistakes in spellings also need to be looked at, although the quality of content must be the major concern.

Once a child is identified to have deficits of written expression, the teachers must adopt deliberate strategies to help him generate the above steps in the writing process. Repeated exercise of these brain functions creates a pattern, helping the child to overcome these skill- deficits in the long run.

There are a number of such strategies which can be helpful to teach children Written Expression.

d) Helping the LD Child with Arithmetic Disorder

The entire field of Mathematics may not be difficult for every given child. But, specific difficulties are seen in multiple areas in mathematics in a large number of children. Difficulties in Arithmetic have received most attention because children do

Arithmetic calculations from the early years of school and these calculations play a part in everyday life.

Although the skill deficits in this area are classified into those of Computational skills, Statement sums and Concept of time, speed and distance, it is quite evident that handling Mathematical problems calls for a larger number of skills. It is therefore necessary for the concerned teacher to assist the child in such skill areas too. Arithmetic problems require Language comprehension skills – the child has to understand the sum. If the child has a Reading disability, he may not understand the written Arithmetic problem. A child with Writing Disorder may make mistakes writing down numbers and symbols. In other children, Mathematical comprehension itself may be deficient. An example is the child's inability to understand what a number stands for, or what quantity it represents.

It is noteworthy that much has been written about 'Arithmetic Anxiety' but academicians do not talk about Reading or Spelling Anxiety! It is quite likely that Arithmetic induces fear and distress in a large number of children. It is, thus, essential to teach Arithmetic in a positive and interesting manner. The study of Arithmetic should be like fun and games for the child. The teacher can work with Arithmetical concepts and practice from the child's everyday life. She can discuss things that involve numbers and encourage the child to take part in activities that involve counting. Making small purchases on his own, playing games with a dice, measuring ingredients for a cooking class etc help to give the child 'experiential learning'. On the ground, this also assists the child to grasp Mathematical concepts. Experiential learning is not likely to be forgotten.

As with any other Academic Skills Disorder, it is important to know the exact nature of problems in each individual child with Arithmetic Disorder. Basic Arithmetic taught to young children is not very complex and remains fundamentally the same, no matter what syllabus is followed.

While teaching a young child with Arithmetic Disorder, it is essential to return to basics and to teach the child skills such as counting, addition, subtraction etc all over again. Teachers can show great ingenuity in finding enjoyable ways to teach children these basic skills.

Without Self-esteem being enhanced by the teacher, the child may not like a subject. If a child likes the teacher, he is likely to enjoy the repeated practice for skill development under her supervision. And a large component of Arithmetical skill development involves repeated practice. Therefore, the ideal Mathematics teacher must be pleasant and positive.

The **basic computational skills** are acquired when the child goes through two or three stages of Mathematical Concept development. These stages include numbers, counting, sorting objects into groups, matching objects by size, colour and shape, arranging numbers in order etc.

Addition, Subtraction, Multiplication, and Division may be affected by the child's inability to understand their symbols. Using innovative methods, the teacher can correct these deficits. Teaching by 'hands-on' experience – experiential teaching is a core concept for remediating computational skill deficits.

Solving statement sums is a difficulty that many LD children are beset with. Many of them are unsure about how to proceed. Some find it hard to understand the language of Maths and to figure out which step follows the next.

Children with these problems have to be taught strategies to work out statement sums. Sequential steps in the problem solving process have to be practised. The sequences need to be taught repeatedly with examples:

In teaching steps or sequences, mnemonics are handy.

RIDDES is a Mnemonic that helps younger children to work out statement sums.

R - Read the question (Read and understand the questions).

I - Identify the key words and labels (pick out the essential information including the given numbers involved, and underline them. Generate statements using the key words).

D - Draw a diagram or a picture. (Describe the question using a diagram or picture to clarify the written matter).

D - Decide on operation

(Decide whether the problem calls for addition, subtraction, multiplication, division etc.

Write the equation for the problem, check whether further statements are necessary).

E - Estimate your answer (Form a rough idea in your mind of what the answer will be like, the amount, the quantity, the units etc).

S - Solve the problem and check your answer.

(Use the operation you have decided on and solve the problem. Check whether your answer is close to your estimate).

The LD child may do a sum like this to use the mnemonic:

A drum contains 2000 litres of oil. If 750 litres is sold in the morning, and 1100 litres is sold in the evening, how much oil is left in the drum?

R - First read and understand the question.

I - Identify the keywords? – Drum- 2000 litres. Oil sold, morning 750 litres, evening 1100. How much left?

Underline them

Generate statement using these words.

Amount contained in the drum = 2000 litres

Amount sold in the morning = 750 litres

Amount sold in the evening = 1100 litres

Amount left in the drum = ?

D - Draw a diagram showing the problem in detail

D - Decide on the operation

Add the two quantities sold to find out the total amount sold. Subtract that from the amount of oil that was originally in the drum. We can now write the equation:
Total amount left in the drum = Total amount in the drum - The total amount sold.

We have $2000 - (1100 + 750) = 150$

E - The child can estimate his answer now. Visualise the quantity of oil left in the drum. The answer has to be smaller than the total amount and smaller than the quantity sold.

S - Solve and recheck the answer. $2000 - 150$ will be equal to $1100 + 750$.

A - Personal Checklist to Help the Child Check His Work

It is not enough that children learn to solve problems correctly. They must also learn to check their work to rule out errors. Children often make mistakes while copying down numbers, or may put them in the wrong order while computing. They may even make mistakes while transposing the answers from the working column. (For example, 8126 in the working column should be checked digit by digit while writing the final answer). To avoid errors and to check work systematically they can be encouraged to keep personal checklists of questions that they ask themselves while solving problems.

A Mnemonic to help the child remember the questions to ask himself while solving problems is **WODESOLA**.

W - Did I Write down the numbers correctly ?

O - Did I write all the numbers in **Order**?

D - Did I confuse the Direction of the x and y when I drew the graph?

E - Is my answer close to my **Estimate** ?

S - Did I make any **Sign** errors?

O - Did I use the correct **Operations**?

L - Did I **Label** my answer correctly (Rs, units)?

A - Is there **Anything** else that I have forgotten?

Many children find Maths to be a difficult subject. Faulty learning compounds the problem. These children find it easier to cope with Maths if the processes involved in problem solving are explained to them repeatedly in detail. A child who is kept back by difficulties with Arithmetical operations in spite of all these strategies may be helped a great deal by the use of a calculator. There are computer programmes available now for teaching and practising Arithmetic on a computer.

Each Maths teacher should innovate strategies to help LD children with their individual problems. They should be personalised solutions based on broad guidelines as enumerated above. However, Remedial Teachers have to work on much more structured protocols.

LEARNING STRATEGIES : STUDY SKILLS

Learning-strategies are defined as techniques, principles or rules that enable a learner to learn, to solve problems, and to complete tasks independently. The 'Learning-strategies Approach' helps students cope with the complex demands of the curriculum. The approach helps students learn Course Content (lessons in various subjects) through instruction in Study Skills necessary to acquire, store and to express Content. Basically it focuses on teaching learners 'How to learn' and 'How to demonstrate their knowledge' in performing academic tasks.

Application of these Study skills means efficiently learning how to learn, and discovering how to acquire, retain and use new information in a variety of learning situations.

Study Skills can be classified as:

Preparatory study skills: These skills serve as important pre-requisites for effective learning. Eg: Time management, Self management.

Acquisition study skills: These skills aim at developing expertise in information gathering (from written and spoken inputs) and organisation. Eg: Preparatory Reading Skills , Note-taking.

Expression study skills: These skills are meant to demonstrate knowledge in classroom tests and written assignments. This includes Oral expression and Written expression skills.

Discovering How to Acquire Information **(as an example of a study skill)**

There is an extensive demand for information from reading sources (textbooks, internet, etc) Students with learning problems must be taught strategies to acquire information quickly from a variety of printed materials:

a) Skimming

It is a systematic and efficient reading strategy (study skill) that helps students in dealing with the reading and study demands of the curriculum. In this strategy, students identify and rapidly read the **key sentences, words and phrases to locate the main ideas**, using five steps:

- (i) Read the **title and headings** (in dark print)
- (ii) Read the **introduction** i.e. a few paragraphs at the beginnings of a chapter.
- (iii) Read the **first sentence of each subsequent paragraph** (in textbooks the first sentence usually contains the main idea).
- (iv) Read the **captions of pictures, and study illustrations if any.**
- (v) Read the **conclusion or chapter summary.**

b) Scanning

It is another reading and study strategy for children to deal with the demands of acquiring information. It involves the quick reading of key sentences, phrases and **words to locate specific information**. This information could be an **important term, definition or an answer to a question**. Scanning is of great help in reading and studying because it enables the reader to find **specific terms** rapidly as follows.

- i) **Remember the specific question to be answered.**
- ii) **Estimate in what form the answer will appear** (i.e. word, key phrases or sentences, number, date etc.).
- iii) Use the **expected answer form as clues for locating it.**
- iv) **Look for clues by moving the eyes quickly over the page.** When a section that appears to contain the answer is found, read it more carefully.
- v) **Find the answer, write it and stop reading.**

These are just two examples of study skills acquisition strategies. Using these Learning Strategies, remedial teaching methods can also be fortified. Repetition of the remedial steps adds strength to the child's Learning process. Children are likely to remember answers that have been recalled and repeated on various occasions. Answers that have 'experiential inputs' are remembered for a life time.

These strategies are equally relevant for all mainstream children, with and without Special Educational Needs.

REMEDIATION - CONCLUSION

The key to Remediation is identification of skill deficits in each area of Learning Disorder in each individual child. The next step is planning on Classroom Remediation or requisitioning Special Educator/Resource Room help. This will depend upon the severity of the child's problems as well as the extent of co-operation from the respective subject teachers and parents.

LD children learn best from structured, Multisensory Programmes of learning Literacy skills. We have attempted to outline a few of these programmes and schemes in Remediation.

Detailed strategies vary from scheme to scheme depending on the skill deficits. Application of these appropriate methods to remediate specific skill-deficits calls for formal training in these schemes to be imparted to Educators.

It is essential, however, to recognize that every child with Special Educational Needs (SEN) has a right to suitable help and educational support to achieve his maximum potential.

INCLUSIVE SCHOOLS AND LEARNING DISORDERS: MULTIPLE ROLES OF A TEACHER

"The Teacher is a Classroom Manager...."

• ('Education for Human Excellence' – CBSE)

Children with Learning Disorders are children with Special Educational Needs (SEN). The current, scientific approach is to enable these children to integrate into the Mainstream Educational Infrastructure. Remedial inputs for these children with Special Needs are given in the mainstream school itself. This concept of Inclusive Education is the objective of forward-looking Educational Boards all over the world, to enable 'Education for All'.

For the concept of Inclusive Education, the Classroom Teacher is the most significant contributor as a Manager and as a Therapist. The Teacher's role becomes multiple in order to deal with any child with Special Educational Needs:

As has been alluded to in another chapter, the teacher may be the first person to identify a child with Learning problems and to diagnose this as Learning Disorder. Then it becomes incumbent on the Teacher to activate various related agencies to create a package to help the child with the Special Educational Need.

The School Administration and the School Counsellor/Co-ordinator may need to be notified. The greatest burden of responsibility for the Teacher is to discuss the probable diagnosis with the child's parents. It is quite often seen that many parents faced with such a situation turn out to be hostile or uncooperative. However, for any further step to help the child, the Teacher needs to get into a partnership with the child's parents. This needs excellent skills of communication.

It is also a major responsibility on the shoulders of the teacher to prepare a child to accept various Remedial Strategies, which may also involve Professional and outside agencies.

It is the Teacher's onus to protect the child from stigma from his peers and from other staff members. It is also important to encourage the peer group to support the child in his Special Educational Needs. The whole class can then work in partnership, without the child losing his dignity and Self-esteem. The teacher sets this supportive tone for her entire class.

Teaching strategies in consultation with other teachers, based on a properly planned Individualised Educational Programme (IEP), can be put in place only at the Class Teacher's initiative. Co-ordinating with other Teachers, Resource Room Staff and School Counsellor is yet another responsibility.

Constant participatory communication with the parents, evolving common Teaching Strategies to be used inside the class and outside uniformly, communicating with any other agency involved in Remediation etc are important roles which the Teacher may have to continuously undertake.

CONCLUSION

All this exercise is with the sole objective of optimising the child's academic performance, restoring and building on his Self-esteem, discovering his various strengths and potential and nurturing them, to make him a confident and self-reliant citizen.

In this exercise, the 'Teacher' becomes a 'Manager' and a 'Therapist'.

SUPPORT FOR CHILDREN WITH POOR SCHOOL PERFORMANCE

"First and foremost, do no harm"

(Hippocrates)

Once a child starts struggling with his studies, the school environment turns 'hostile' to him. Teachers scold or punish him, and peers joke about him. The young child is clueless as to why he cannot score like his classmates, in spite of effort. He reacts to all this the way children do – either turn defiant and fight back, or swallow the insults and give up.

A sensitive Teacher, sensitised to the various causes of poor school performance can turn out to be his saviour and guardian angel. She can identify the cause of this particular child's failure and institute an appropriate remedial strategy.

Early identification and remediation of Learning Disorders can prevent accumulation of problems ending in failure and frustration. A child who is told of his academic problems in simple terms by a sensitised teacher can then stop cursing himself for the failures. Identifying a 'guardian angel' in a teacher who understands his problems helps him to keep trying, even if he totters and trips.

A child with Learning problems cannot function successfully in school without adequate support from his teachers, parents and peers. The sheer force of numbers of children doing poorly in school - one fourth of any school – persuades us that help must reach these children in a General Classroom itself.

This Inclusive Classroom environment must be non-threatening and non-ridiculing ("Do no harm") for the LD child with Special Educational Needs. A supportive atmosphere enables the child to 'believe in himself'. This enhances his self-esteem.

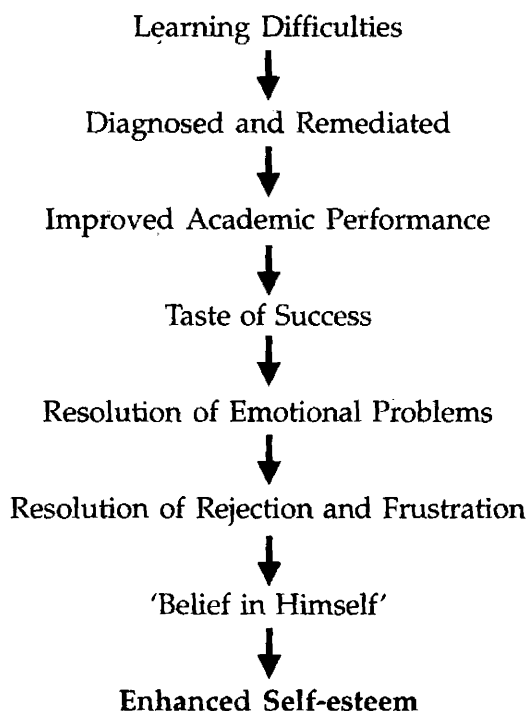
ENHANCING SELF-ESTEEM

It is Self-esteem that drives any child for endeavour, even if the path of duty does not lead to glory. The will to struggle on this path of '*incessant, desireless action*' gives the child the confidence and courage even to fail.

Self-esteem helps us to seek and find our strengths, talents and potential. Every child struggling with his academic work has other strengths, talents and potential. Only a sensitive teacher can help him to discover them so that he can set realistic academic and life-goals, to help him grow into a self-confident and self-reliant adult.

Therefore, it is realised today that the most important support that an LD child can receive at school is enhancement of Self-esteem. Hence the inclusion of this (non-technical) chapter in this handbook.

The deficits in Academic skills impose limitations on the LD child's performance. The problem is further compounded in these children who may also suffer from Social Skill Deficits. Children compare themselves to their peers from an early age. LD children soon realise that they face hurdles that other children obviously do not. However, children receiving support at school devise successful mechanisms for maintaining their self-esteem despite their difficulties by using their other talents and strengths. Self-esteem is crucial for their survival against odds.



If children have faith in themselves, they relentlessly pursue the activities that they have to carry out. If not they give up, eroding their self-esteem. Low self-esteem takes away the motivation to study. This leads to further failure, causing the vicious cycle of failure. Children caught in this vicious cycle try to evade failure by avoiding challenges.

The response of avoiding or facing challenges has important implications for the LD children's future. Children with good self-esteem cope successfully with life, even if their Academic skills are poor.

ROLE OF TEACHERS

It is pivotal to start by accepting the child as he is, with all his skill deficits. The concern and respect for him as a person should not be contingent upon his achievement. Emphasise a little more on the child's positive attitudes, even on his quality to smile. Give him plenty of praise openly for his efforts and endeavour, instead of performance. Of course, make it clear what he is being praised for - for instance, "You've made a good attempt at reading".

Encourage the child to set realistic goals so that he can taste a bit of success. It is equally important to help the child evaluate his achievement without being too critical of himself. If the child is about to attempt a task too difficult for him, guide him tactfully to a more suitable activity.

The child needs to be taught to praise himself. If he makes some achievement, do ask him, "How do you think you fared?" or "Are you pleased with the spelling of these words now?". He must also be taught to praise others for their good work. Only a Teacher who is pleasant and positive can teach this, seeing "the glass as half-full".

Spend 'quality time' with the child when you can. Give the child attention in a way that he too feels special, in a way that will add to his self-esteem. This can be done even as you pass him on the corridor.

Little things to improve his confidence must come naturally to teachers. Help him make a little choice - like the book to be taken from the library. Admire his choices. Praise his attempts at self-sufficiency. Create opportunities for him to learn self-reliance - in projects he can lead or execute, in monitoring the class for sometime etc.

LD CHILD IN THE GENERAL CLASSROOM

Supporting an LD child in the classroom depends on the nature and severity of his skill deficits. A lot of general help is, however, always possible.

- Seat the LD children at the front of the class to enable some personal teaching in proximity. These children learn better under your nose.

Make the child listen to the lesson being read out as an effective strategy for comprehension and retention.

- Give positive feedback and constant encouragement, without drawing undue attention on the pupil.
- Help the pupil to develop effective study skills and personalised learning strategies with one to one teaching.
- Unobtrusively check if note-taking and copying have been done efficiently. .
- Encourage 'peer support'. An efficient, helping friend can do some 'peer tutoring' which will help both. This also makes the class environment supportive and positive.
- An informal and innovative Teacher can devise many other means of helping a child with Special Educational Needs.

Nevertheless, some of these children may require extra help from a Special Teacher in the Resource Room (RR).

THE RESOURCE ROOM (RR)

It is a special room where the child with Special Educational Needs (enrolled in the regular mainstream class) goes only for special instruction. A Specialist Teacher - Special Educator is available there to help the child during the short periods away from his regular class.

A Resource Room with its trained personnel and infrastructure is not only desirable but essential in every regular school.

- Unlike the popular notion, it is inexpensive to set up and maintain. A properly trained teacher can start the ball rolling.
- Even if 10% of the school population has Special Educational Needs, the number of children that may require special help is enormous.
- Problems are varied and the syllabus too heavy, making it difficult for the class teacher to cater to all these children in the regular classrooms.
- Curriculum-based Remediation is most beneficial in our educational system, and is best provided in the Inclusive schools.
- The class teacher knows the child the best; She must keep herself informed about special support strategies that can benefit every LD child in her class.

There must be co-operation and co-ordination among the Class Teacher, Subject Teachers and the Special Teacher. The regular classroom teachers should be clearly informed about the status of the children attending the Resource Room (RR). Skills that are taught in the RR should be informed to the regular teachers. Learning Strategies

which can be used in the regular classroom must be communicated to the subject teachers from time-to-time, so that continuity in the remedial programmes maintained. A full-time Co-ordinator who may be a trained person needs to be in charge of this function. The same Co-ordinator can also liaison with the child's parents, School Counsellor, outside Professionals and Doctors, the School administration and the Education Board, as and when necessary.

The School Counsellor also may need to know every child in the school with Special Educational Needs, and must function in tandem with the Specialist Teacher and Co-ordinator.

In order to avoid any stigma about the Resource Room and its environment, it is advisable that the Specialist Teachers and Co-ordinator also function as mainstream subject teachers in regular classrooms. This helps better integration of the children with Special Educational Needs.

Other regular teachers should never look at the Resource Room as a 'dumping ground' for poor performers. We have heard stories of children with LD being told in the open class, "If you don't perform better in the next test, I will have you sent to the Resource Room!" On the contrary, the subject teachers need to see the Resource Room as an essential and proud extension of the regular classroom – from which children who use and even those who do not use it regularly can benefit. Even the teachers can benefit by picking up effective teaching strategies.

WORKING OF A RESOURCE ROOM

A regular classroom with the essential teaching materials like a blackboard, books, cupboards, bulletin boards etc will suffice. Specially created Worksheets, Flashcards, Educational games, Graded Readers, writing material and Teaching Aids to suit the needs of each type of learning difficulties need to be stored.

Parental consent, individual files and careful documentation about each child attending the resource room are pre-requisites.

SCHEDULING OF THE RESOURCE ROOM

The Specialist Teacher and the Class teachers need to co-ordinate the hours when the child receives help in the resource room. Care must be given not to pull the child out of activities that give him fulfillment and self-esteem, like sports or music in which he is doing well. Teachers should objectively demarcate the subjects and areas that the child must receive inputs in the RR. For instance, if a child of the III grade is functioning at I grade in Maths in the RR evaluation of skill deficits, he receives his Maths instruction in the Resource Room.

INDIVIDUAL EDUCATION PROGRAMME (IEP)

For effective remediation, every child receiving help in the Resource Room should have a detailed plan which describes the skill deficit areas, the strengths of the child, and the areas to be worked on. IEP refers to instruction that enables the student to

work on appropriate tasks or content over time, under conditions that motivate. It outlines the 'plan' (outcomes, curriculum, teacher, responsibility, schedule and settings) that facilitate instruction. It does not imply that each student should receive one-to-one instruction. It means that students receive instruction tailored according to each one's needs. Various instructional arrangements can be opted; small groups, peer teaching, large groups etc.

COMPONENTS OF INTEGRATED EDUCATION PROGRAMME

Levels of performance: What grade does the child function at, with respect to the Academic skills of Reading, Writing, Spelling, Maths etc. What skill does the child possess, what are his deficits, and what are his strengths.

Short term goals: They must be described in specific measurable terms as goals to be achieved for a shorter duration. Achievement of short term goals will lead to successful achievement of the annual goals.

Annual goals: These are what the child should achieve for the particular academic year, comprising the entire spectrum of short term objectives in each specified area.

PROFESSIONAL SUPPORT

Children with Learning Disorders require professional support in terms of Assessment, Diagnostic and Guidance services. Assessment and Guidance services give the child and parents the necessary guidance to cope with the Learning Disorders. This needs the involvement of a Multidisciplinary team doing this type of work.

PROVISIONS

The various Educational Boards, with pioneering efforts from the CBSE, have given several provisions to compensate for the specific handicaps of children with SEN in their examinations. Teachers have to familiarize themselves with these special provisions which can benefit seriously-handicapped children with Special Educational Needs.

CONCLUSION

It is evident that children with Special Needs require extra effort to optimize their performance. This support needs to be both Educational and Emotional. It is only the Teacher who can facilitate this Emotional component to make the environment encouraging and friendly. Children with Special Needs will yearn to flourish in the warmth of that environment, instead of feeling repelled.

The objective of this chapter is to highlight this aspect in the background of the Comprehensive Support that these children need at School – to ensure 'Education for All'.

EMOTIONAL AND BEHAVIOUR PROBLEMS IN CHILDREN WITH POOR SCHOOL-PERFORMANCE

*“ We, our joys and our sorrows, our memories and our ambitions,
our sense of personal identity and free will,
are all in fact, no more than the behaviour
of a vast assembly of nerve cells in the brain”.*

Francis Crick (DNA fame, Nobel Laureate)

‘Gaurav, a student of Std V sometimes can disrupt the entire class. Some children get bullied by him and others do not like to sit next to him. He may distract them or even nudge them. He too gets easily distracted by everything that goes on around him. Teachers know that he is smart and quick on the uptake. But he is very inattentive, and hardly sits in his seat. He may blurt out answers in the class out of turn, and is not bothered if he is right or wrong. His parents find his behaviour embarrassing at social gatherings, where he constantly moves around and even opens the food packets before being served’.

Each one of you as teachers may be able to recall some of your pupils in the lower classes who are similar to Gaurav. Gaurav is a child with Attention Deficit Hyperactivity Disorder (ADHD) which is distinct and different from Learning Disorders. But it is extremely common to find the same child suffering from ADHD as well as Learning Disorders. This is called co-morbidity - one disorder co-existing with another in the same child.

There are several such disorders which appear in the child along with Learning Disorders (LD). These may be called Co-morbid Disorders. Some Co-morbid Disorders, like LD, are Developmental in origin and may be present from birth. Some other Co-morbid disorders like School Phobia or Anxiety may arise in the child *because* of the Learning problems that the child suffers from.

It is essential to identify and differentially diagnose each of these disorders because the management strategies need to involve remediation for all disorders in the child. Correction of one disorder, while leaving another unattended, will not help to improve the child's performance.

CO-MORBID CHILDHOOD DISORDERS (CO-EXISTING WITH LD)

There are three broad categories of these disorders – Category (1): *Developmental Disorders*, Category (2): *Disruptive Behaviour disorders*, and Category (3): *Emotional Disorders*.

Category (1) : DEVELOPMENTAL DISORDERS

As has been made clear, Learning Disorders are Developmental disorders. Our experience at Cochin has shown that children with LD almost always have other co-morbid Developmental Deficits. Difficulties in Motor Co-ordination (fine-tuning of movements affecting pencil grip, hand-writing , shoe-lacing, buttoning etc.) are called **Developmental Co-ordination Disorders (DCD)**. A large number of children with LD have problems with Speech and use of Language. This is called **Communication Disorder (CD)**.

It is, therefore, incumbent on us to look for DCD or CD symptoms in every child with LD.

Category (2) : DISRUPTIVE BEHAVIOUR DISORDERS

[(A) ADHD, (B) CONDUCT DISORDERS]

(A) Attention Deficit Hyperactivity Disorder (ADHD)

Gaurav, whose case is described at the outset, is a child with this disruptive behaviour disorder which has a developmental basis. ADHD is attributed to a delay in the maturation of the brain cells which control Attention and Activity.

The core features of ADHD fall under three headings a) **Inattention** b) **Hyperactivity** and c) **Impulsivity**. These symptoms of the child can **disrupt** any environment.

a) *Inattention:*

This child -

- i) Often fails to give close attention to details, or makes careless mistakes in school work or other activities.
- ii) Often has difficulty sustaining attention in tasks or play-activities.
- iii) Often does not seem to listen when spoken to directly
- iv) Often does not follow through on instructions, and fails to finish schoolwork, chores, or duties (not due to oppositional behaviour or failure to understand instruction)
- v) Often has difficulty organising tasks and activities

- vi) Often avoids, dislikes, or is reluctant to engage in tasks that require sustained mental effort (such as schoolwork or homework)
- vii) Often loses things necessary for tasks or activities (eg: toys, school assignments, pencils, books or tools)
- viii) Is often easily distracted by extraneous stimuli
- ix) Is often forgetful in daily activities

b) *Hyperactivity*

- i) Often fidgets with hands or feet, or squirms in seat
- ii) Often leaves seat in classroom or in other situations in which remaining seated is expected
- iii) Often runs about or climbs excessively in situations in which it is inappropriate (in adolescents or adults, may be limited to subjective feelings of restlessness)
- iv) Often has difficulty playing or engaging in leisure activities quietly
- v) Is often 'on the go' or often acts as if "driven by a motor"
- vi) Often talks excessively

c) *Impulsivity*

- i) Often blurts out answers before questions have been completed
- ii) Often has difficulty awaiting turn
- iii) Often interrupts or intrudes on others (eg: butts into conversations or games)

ADHD children generally have normal or above normal intelligence. They are usually quick on the uptake and may "speak like elders". Most of them go through tasks with speed and hurry.

A few of the above symptoms do not constitute a disorder; to call it a disorder, there must be evidence of clinically significant impairment in social and academic functioning. The presence of a few of the above pointers would not confirm a diagnosis; absence of some of them may not rule out a diagnosis. Presence of symptoms of Anxiety, Oppositional/Defiant and reckless behaviour may sometimes complicate the diagnosis.

Classroom observation yields valuable information on children with ADHD. Observation for too brief a period may not show obvious indicators of the problem. Teacher's observation helps in communicating to parents, and aids in drawing up a plan for classroom management.

If a child has ADHD, he has the probability of having LD too. It is seen that ADHD co-exists with LD to a greater degree than all the other co-morbid disorders.

Both are brain-Developmental Disorders which significantly affect a child's academic and social functioning.

Children with ADHD can neither control their hyperactivity, nor sustain attention to a task for an adequate period of time, *howsoever deliberately they may try*. This inability explains why children with ADHD do not respond fully to disciplining, and may need judicious medication.

(B) Conduct Disorders

Conduct Disorders are characterised by a repetitive and persistent pattern of dissocial, aggressive or defiant conduct, more severe than ordinary childhood mischief or rebelliousness. Unlike in ADHD, these children may have no brain damage. Some children who perform poorly in school are prone to 'acting out', which results in behaviour that is socially unacceptable. In its milder form, these manifestations may be called Oppositional, Defiant Disorder (ODD).

They may show severe disobedience, defiant and provocative behaviour, frequent and severe temper tantrums, labile mood swings etc. Some of them have a tendency to truant from school, or run away from home. Many of them have the habit of lying or stealing. Frequent fights and bullying make them terrors at school. In truth, these children have abysmally low self-esteem and enormous frustration. They *externalize* these as Conduct Disorders. Effective management of their behaviour problems centres on identifying and openly nurturing their positive qualities.

Often it turns out that these children perform very poorly in class. Remedial help in their academic work and subsequent better performance usually resolves their behaviour problems.

Category (3) : EMOTIONAL DISORDERS

Children with these disorders *internalize* their pangs and pains which then manifest as Anxiety or Depression. Most Emotional Disorders are stress related. The children with LD are obviously under chronic stress – stress to perform.

Anxiety Disorders constitute the major category in this group of disorders.

The stress of performance in class can give rise to **fear of school** and the **refusal** to start out in the morning. These children develop repeated physical symptoms of Anxiety, like nausea, vomiting, stomachache, headache etc. Younger children may express their distress as screaming and wailing or temper tantrums. If a child shows persistent school refusal, it is worthwhile to check if he has Learning Disorder.

Children with learning problems may experience persistent Anxiety. This affects their performance and sets up a vicious cycle. Although Anxiety is a Psychological disturbance, it produces a great number of corresponding Physical symptoms.

The Psychological component is a constant feeling of apprehension – a feeling of weight on the chest. But Children mostly manifest only the physical symptoms which are distressing and therefore easily recognizable. These physical symptoms may be grouped under three headings:

(1) Muscle tension Increase

- a) Trembling, Feeling shaky
- b) Aches and pains (Headache, backache, chestpain etc.)
- c) Fidgettiness, Restlessness
- d) Easy fatiguability

(2) Symptoms of Internal organ Dysfunction

- a) Palpitations (Heart beating fast and hard)
- b) Breathlessness / sighing / choking sensation in the chest.
- c) Dry mouth
- d) Blurring of vision
- e) Increased sweating esp. palms/soles
- f) Dizziness
- g) Sense of 'lump in the throat'.
- h) Nausea, 'Butterflies in the stomach', 'Gas' problems
- i) Frequent urination
- j) Tingling / numbness / burning sensation of hands and legs etc

(3) Symptoms of Vigilance

- a) Feeling keyed up, listless, wound up,
- b) Loss of concentration.
- c) Mind 'going blank' due to anxiety (eg: in exams)
- d) Irritability
- e) Problems of sleep etc...

Phobia is a type of Anxiety Disorder, but specific to an activity or situation like the examination. Children when faced with that activity or situation can suffer from a frightening panic attack which may produce all physical symptoms of anxiety described above. **Social phobia** which is a fear of facing social situations such as the class or the assembly is very common among LD children. When these children have an inherent problem to read, asking them to read aloud in the class can be petrifying. Phobia for examination generates severe anxiety in the children, once the exam time table is announced.

These children need to be handled with understanding and 'desensitized' gradually to enable them to comfortably face the phobic situations.

Anxiety is the commonest human emotion. It is abnormal only when it interferes with the child's day-to-day functioning. The Psychological symptoms of Anxiety and Phobia need to be managed through Counseling and Reassurance. The Physical symptoms, when necessary, can be effectively blocked off by the discriminate use of behaviour therapy and medications.

Depression is a mood disorder which many children especially those with learning problems, suffer from. It may be periodic, or often continuous. Children with depression are usually withdrawn and do not undertake pleasurable activities. Games and play are inhibited. They have poor attention and concentration and may seem to be brooding or day-dreaming. They do get recurrent thoughts of unworthiness and pessimism. Some of them are led to tears easily. Sleep may be disturbed, and many of them may appear drowsy in class. Depressed children eat poorly and fatigue very easily. Lack of self-confidence, feelings of guilt and some times suicidal thoughts are characteristic of depression. Irritability and tantrums may often be symptoms of depression in children.

Obsessive Disorders have in our experience a special significance in children with Learning Disorders. Children with Obsessive Disorders have a need for perfectionism. They may need to arrange and rearrange their tables, check and recheck their answers, or clean and wash again and again. These children may be stubborn and excessively fussy about neatness, orderliness and sameness. If some one disturbs their stack of books, they may get into a rage. Obsessive children may not allow others to handle or share or touch their belongings. They may be perfectly-behaved children outside their homes, but inside they may express unbelievable rage when frustrated.

They are meticulous and mostly hardworking. Driven by their obsessive need for perfection, they prepare for examinations well in advance. Unfortunately, this group of children also has the risk of giving up too soon when faced with stress. If, for instance, the revision schedule for the oncoming examination has not been completed perfectly, some of the obsessives panic the night before, and quickly give up.

Another group of obsessive children is afflicted by a slowness which is morbid. To get them started off to school in the morning is a major task for the mother, having to push them from one morning-chore to another. Some of them are obsessive procrastinators, deferring a duty from one day to another.

The past years of working with LD children have clearly shown that a great number of them have disturbing obsessive behaviour. These children tend to be

defensive and secretive. It is therefore worthwhile to deliberately look for these symptoms in the perfectionistic LD children. It is important to identify Obsessive Disorders early, because it is eminently treatable with combinations of medications and behaviour therapy.

Some LD children suffer from Tic Disorders. These disorders in children manifest as involuntary, rapid tics, Muscular or Vocal. The common tics are eye-blinking, neck-jerking, shoulder-shrugging or facial grimacing. If worse, child may hit himself, or poke his neighbour impulsively. The vocal tics are throat clearing, grunting, snorting, sniffing, hissing etc. These tics are the result of certain brain disturbances and are treatable with medications.

Self esteem is one of the strongest pre-requisites for successful performance. LD children who fail repeatedly obviously lose their self-esteem. This gives rise to secondary Emotional and Behaviour problems.

Children with low self-esteem are extremely sensitive about discussions on their studies and tend to get angry or start crying. Slowly they develop an aversion to studies, causing distress in the teachers and parents. In view of the importance of self-esteem in Human Excellence, this is discussed in detail in another chapter.

CONCLUSION

A broad awareness of the existence of these Emotional and Behaviour disorders in children enables the Teacher to identify the symptoms early enough. Giving these disorders a name facilitates Early Intervention. In severe cases, parents need to be notified to convince them about the need for a detailed Multidisciplinary evaluation and further management. Management of these disorders by informed, unbiased teachers, parents and professionals invariably enhances academic performance.

SUPPORT STRATEGIES FOR EMOTIONAL AND BEHAVIOUR PROBLEMS

*“The central focus of all learning systems
is the human being and his well-being”...*

(‘Education for Human Excellence’-CBSE)

Emotional and Behaviour problems as enumerated in the previous chapter are common in children with Learning Disorders. Most often, the behavioural disorders in such children may be more distressing than the Learning Disorders. In such cases, the management of disorders co-existing with the Learning Disorder becomes the priority. Children are observed to cope better with Academic skills when the Emotional and Behaviour disorders are resolved appropriately.

Handling such children is a challenge for the Teacher. Co-existence of Emotional Disorders with Learning Disorders significantly affects the child’s Behaviour, Social skills, Self esteem as well as Learning. This means that various facets of the child’s life are affected. Therefore, a Multidisciplinary Approach that includes (a) Emotional, (b) Behavioural, (c) Academic, (d) Family, and (e) Pharmacological Strategies is called for to manage these Disorders.

TEACHER OBSERVATION AND DIAGNOSIS

In order to arrive at a comprehensive management plan, a precise diagnosis is necessary. An observant teacher is an important facilitator in the diagnostic process, providing information.

The teacher would be able to identify children with suspected problems like ADHD, Anxiety or Tics (refer to symptoms in the previous chapter), once she has made such observations.

She may discuss her observations with her colleagues and also ask for their observations. Wherever a School Counsellor trained in Developmental Disorders is accessible, she can also contribute. Once the teacher has enough information to suspect that the child may be having a Disorder, a discussion must be held with the parents to

get additional information from them. This also gives the teacher an opportunity to apprise the parents about a possible problem.

In many cases, the Teacher can attempt intervention in the class room. If it *proves to be successful*, the intervention may be continued and the progress reviewed periodically. If a Specialist evaluation is necessary, the child must be directed after consulting his parents.

If the intervention in the classroom by the teacher *does not prove successful*, the parents need to be apprised of the need for a Comprehensive assessment. A detailed evaluation by the Specialists makes it possible to co-ordinate with the parents and concerned teachers, and to institute appropriate management strategies for each individual child.

MANAGEMENT STRATEGIES

Understanding the disorders, and the willingness to make thorough changes in the approach to them are keys to the successful handling of children with Emotional disorders. A comprehensive management plan includes the simultaneous use of all strategies described below.

[The Management Strategies discussed here are those used for handling children with Attention Deficit Hyperactivity Disorder as a prototype. This can be applied to children with the other disorders too.]

(a) Emotional Support Strategies

A child with emotional and behaviour disorders is often rejected by peers or blamed as 'unmanageable' for no fault of his. His Self-esteem gets significantly eroded and this further affects his behaviour and learning.

Accept the child with his limitations. Avoid gatherings where the child is bound to get into trouble. Never lose an opportunity to give the child some positive strokes. Ignoring his negative behaviour, enable him to thrive on positive reinforcement. Work on the child's self-esteem as the major strategy by praising him for his effort.

(b) Behaviour Support Strategies

Behavioural problems appear to be more when children are undirected. Well organized and carefully planned behaviour support strategies can help children with Attention Deficit Disorders to cope better with the problem.

'Limit setting' to curb disruptive behaviour is the master plan to manage behaviour problems of a child with Attention Deficit Disorders.

Clarity of expectations is a critical factor in preventing disruptive behaviour. The child needs to be verbally told as to what is acceptable and what is not

acceptable. (eg: "You are to remain in the classroom till the bell rings. You are not to leave the class before the bell rings"). He needs to have a *structure* provided for him through *clear communication, expectations, rules, consequences and follow-up for every activity*. This applies both to the classroom and home situation. (Teach your expectations for materials that are required in the classroom - sharpened pencils, erasers, note books, paper etc. If the student comes to the class unprepared, give him a strong negative stroke. This will show the seriousness of expectations).

Rules need to be taught for the classroom and home situations. Rules should be clear, comprehensive and stated in a positive fashion. (eg: 'walk on the corridor', rather than 'Do not run on the corridor'). Rules and their rationale need to be reviewed; consequences of infringement should be explained. Consistent firmness is the key.

Positive reinforcement is the best behaviour strategy that builds self esteem and respect. There is no substitute for positive reinforcement. Spot the student who does what you expect to be done. Reward the student by praising specific instances (eg: "I like the way Vishnu remembers to raise his hands and wait for his turn"), giving privileges (eg: classroom jobs and responsibilities), and providing tangible rewards (eg: stickers, sweets).

'Time-outs' and 'Time-aways' are very effective disciplinary methods which may be necessary for children with Attention Deficit Disorders. This refers to the removal of the child for a specific and relatively short period from a situation that is enjoyable for him and full of positive reinforcement, to a much less pleasant situation. 'Time-out' is a wonderful alternative to scolding or spanking a young child. Asking the child to stand in a corner of a classroom for his negative behaviour during an enjoyable session teaches him self control. Time-outs should not be overused. The child has to be clearly told about the behaviour that caused him to receive the Time-out.

A child with ADHD and LD cannot handle all of the stimulation in the classroom continuously. He may become worked up and lose control over himself. Time-away from the group may be needed to calm him down and help him regain self-control. It is an excellent way to remove a child from a potentially explosive situation. A child who becomes disruptive in the classroom may be sent, for eg. to the staff-room to work on a short assignment.

Use of the above methods discriminately is seen to be very effective to introduce firmness and discipline in dealing with children with Disruptive Behaviour Disorders. However, indiscriminate use of these in the cases of emotional disorders like Anxiety or Depression (Internalizing Disorders) may become counter productive.

Proximity control is found to be essential for the child with ADHD. Staying close to the child with attention or behaviour problems is useful. He should be seated close

to the teacher or between children with good attention, avoiding a seat near doors, windows or other distractions.

It is important to discuss the specific behaviour problems of the child calmly and across the table, emphasising on his positive qualities. Concerns about the child must also be discussed with his parents in the same vein.

It is crucial for all teachers and the same teacher to apply *consistency* in the behavioural strategies towards the child in question. Being punitive for a disruptive behaviour on one occasion and condescending about the same at another, can only confuse the child.

c) Academic Support Strategies

The most important pre-requisite for improving academic skills in children ADD/ADHD include working on i) Attention Enhancement ii) Organisational skills.

(i) Attention Enhancement

It is important to rule out Learning Disorder (LD). Presence of LD may require use of additional management strategies. A child with Attention Deficit Disorder needs help to focus and maintain Attention. For instance, this may require a technique of signalling to the child. The teacher may raise one hand to signal the young child to raise hands; she may make a loud command followed by a short silence before proceeding in a normal tone to give directions.

The child with Attention Deficits needs training to maintain eye-contact while speaking, especially when instructions are given. Use of short and simple sentences is easier for the child to listen to. Insist on an immediate feedback from the child in order to know how much he has understood.

Use of Multisensory Teaching methods is of great use. A child learns best through auditory, visual, tactile and kinesthetic modalities; combinations of these methods are found to be more useful to sustain attention.

Use of visual aids, or a picture on the board or the overhead projector may hold *zzzz* attention better. Use of colours to highlight on the chalkboard or in the written work can help. Every innovative method to enhance attention improves the child's academic skills and performance.

(ii) Organizational skills

A vital skill area for optimal academic performance is that of organisational and study skills. Unfortunately, this is an aspect which is overlooked by most educators. It is important to realise that deficits in these areas produce significant problems in

the child's performance. Therefore, it is imperative to formally impart assistance and training in organisational and study skills to the child in need.

Time management is a major hurdle for these children. This skill needs to be specifically taught. Practical training to prioritize the daily work, manage the daily class and home assignments, finish the written exam within the given time etc needs to be imparted.

The child can be taught to record assignments with the use of assignment calendars and diaries. Teacher can check to see if the assignment calendars are complete. The child may be helped to write a 'things-to-do' list for every assignment. Such 'things-to-do' / 'things to take' lists serve as an effective organizer. The tasks which are covered or completed can be crossed off. Markers/stickers or book marks to locate pages are always helpful.

The disorganized child must be taught to 'avoid clutter' on desks. He should be guided to keep as little as possible on the desktops. Time must be set aside to sort and clean out the desks and note books. A child with severe problems in organization may need an adult or peer to help him sort and dump unnecessary papers periodically. Organising study material and notes and arranging them in different files help remove a lot of chaos. Finding what he needs quickly is a major pre-requisite to starting his work.

Help the child to split major projects into small segments. Discuss about time frames and sequences for each segment.

Constant assistance and supervision, checking and rechecking and teaching these children to do the same, builds organisational skills by practice.

(d) Family Support Strategies

Coping with a hard-to-manage child is difficult, be it in the classroom or home. Unless intervention in the classroom extends harmoniously into the home, the child may even get worse. It is therefore, important to be in constant communication with the parents.

Parents are likely to deny the child's problems initially. Some parents may be punitive and may even abuse the child. Over-involvement, sometimes amounting to interference with the classroom strategies, is a response from certain parents. Parental undercutting, leading to one parent being critical and the other condescending, can be a major problem. This one-up-manship leads to serious inconsistency in the child's disciplining.

Saying 'no' to the child's demand in the morning and 'changing it to 'yes' by afternoon following his tantrum is a pattern that many parents in this generation follow. Children of such parents develop very poor frustration tolerance and they aggressively demand instant gratification of their pleasure needs.

Support for the child with an educational problem, therefore, also calls for correcting these parenting patterns with firmness and perseverance.

Extending support for the child into his home also involves adequate information and guidance being given to the parents about the child's skill deficits and remediation. Parents need to be realistic about the slow pace of progress, failing which they are likely to get frustrated. Patience is a great virtue to be cultivated by parents and teachers of children with Special Needs.

e) Pharmacological (Medical) Support Strategies

This is a strategy which needs serious consideration in many cases. It is now recognized that many children with various Developmental Disorders have problems which cannot be managed only by the strategies described above. Such cases may benefit a great deal by the discerning use of medications by informed physicians. However, this is an intervention which parents of the child alone can decide on. It is to be understood that this is a modality which is not the anchor of management, but only an adjunct in the comprehensive management plan for the child.

CONCLUSION

The objective of this chapter is to convey the concept of a Comprehensive management for poor school performance. Dealing only with the academic and educational skill deficits of the child does not consider the issue of '*Human Excellence*'. The child as a human being cannot deal with his academic problems compartmentally. Addressing and resolving his Emotional and Behavioural problems are decisive for his overall well-being and consequent school performance.

CAN MEDICATIONS HELP CHILDREN WITH POOR SCHOOL PERFORMANCE ?

When we go back to the Flow Chart on the causes of Poor School Performance, it is possible to find a list of Neurological and Neuropsychological Disorders including Attention Deficit Hyperactivity Disorders (ADHD) which are amenable to the use of time tested medications.

In the West, Attention Deficit Hyperactivity Disorder (ADHD) is a condition for which cerebral stimulants have been used with very high rates of success. In children who have ADHD and Learning Disorders, the treatment of ADHD dramatically improves Educational Performance. Children who have spells of altered consciousness lasting for a few seconds, but occurring tens of times during the day ('Absence Attacks') are usually blamed by Teachers for 'daydreaming'. This is a common type of Seizure Disorder in children which responds completely to treatment.

We are familiar with children who have Multiple (Muscle) Tics like eyeblinking, winking, twitching of lips, face etc as well as vocal tics like sniffing, grunting or even howling noises. Neither teachers nor parents recognize this as a Neurological Disorder which can be easily treated with medications. Unfortunately these poor children go on to become the butt of many jokes in their class with various nicknames.

Children with or without Learning Disorders who have fear of going to school manifest Anxiety with various bodily symptoms. When a child complains of headache or leg pain, stomachache or vomiting, he is not pretending to be sick; he genuinely suffers from an Anxiety induced symptom. We often ridicule the child without recognizing this, little realizing that Medications and Counseling together can stop these symptoms.

Other Emotional Disorders including Obsessive symptoms, Anxiety or Depression need a Multidisciplinary management. For some of these, medicines used judiciously become a handy tool.

WHAT YOU NEED TO KNOW ABOUT MEDICATIONS

We lean heavily on two books to apprise readers about the use of medications. Both are books written by Special Educators on poorly-performing children – by Elaine K. Mc Evan and Sandra F. Rief. They are both strong advocates for the sensible use of medications.

Medication is only one of the interventions for improving a child's ability to function and succeed in school. However, medications can make a significant difference in the lives of children with treatable disorders. To quote Sandra F. Rief, "Over years of working with children with ADHD, I have witnessed children improve dramatically once their physician prescribed and regulated the proper medication and dosage". Elaine Mc Evan writes, "The medicine has worked wonderfully. There is a night and day difference with Rachael. She likes school again this year...."

Whether to use medications or not in children on long-term may be one of the most difficult decisions facing parents as well as concerned doctors.

It should be left to the parents and physicians whether the child receives medical treatment. While parents would not refuse insulin for a diabetic child, they may feel differently about medications for Poor School Performance, whatever be the cause. Parents often feel fearful and guilty for administering medication on long-term for children.

However, scientific knowledge today enables the safe use of medications. The popular resistance to medications is often based on myths and old wives' tales. The best advice to give the parents is to ask them to become informed based on scientific material, before a decision is made on medications. Once that decision is made, personal judgements about the 'rights' or 'wrongs' of medications should not become an issue. The child taking medications may need the support of the teacher and the school. Without the right kind of support and optimal changes in the child's school and home environment, these medications don't work either.

Misconceptions that medications prescribed for these purposes are sleeping pills, and may make children sleep, or that they may turn children into zombies or stunt their growth etc. may affect decision making. This kind of stigma can be removed only with knowledge, and parents therefore need to discuss the issue of medications with the child's informed physician.

Children who are on medications need regular periodic follow-up with their doctor. The doctor needs to be in touch with the Team members supporting the child with Remedial Teaching. Teachers also need to provide the physician with appropriate inputs and observations about the child and voice any concerns that they might have

about medications. The physician may choose the type and dosage of medications based on these observations of the child's actual functioning.

CONCLUSION

Medications do not 'control' the child. Medications are not a 'cure'. They help to filter out distractions allowing the child to concentrate. Medicines diminish impulsivity and inhibit overactivity, helping the child to perform better.

Though medications are best suited for ADHD, this option is also available for Tics, Obsessive Disorders, Anxiety, Phobia, Depression, various bodily symptoms produced through anxiety etc.

Medications are effective when chosen correctly and combined with Educational Strategies specific to the child. Behavioural Modification techniques, Parental Awareness, Remedial Training and Counselling for the child, and Management of the child's environment should be resorted to. Pharmacological support, when required, is only one of the multiple strategies that are put in place for a child with learning problems.

POOR SCHOOL PERFORMANCE : PARTNERSHIP WITH PARENTS

*" The real issue in education is to see that
when the child leaves the school, he is well established
in goodness- both outwardly and inwardly."*

(J. Krishnamurthy)

Learning Disorder is permanent and cannot be prevented or cured; once an LD, always an LD. Consequently these children need long term support, which can be frustrating and taxing for parents. Beyond school, nevertheless, these children can become successful performers in life provided the school and parents together can discover their talents and nurture them.

Parents play a crucial role in the education of the child with Special Needs. The parent is the child's first and best tutor, if there is emotional commitment. Studies show that children of parents who display interest in their school work and academic success show much greater progress than whose parents are less involved.

It is in this background that parents need to be roped in as partners to work with the school to help the child face his educational difficulties. It is initially difficult for the parents to accept the child's deficits. It then becomes the responsibility of the school to provide parents enough information on the disorders so that they can identify the child's problems and accept him as he is, with his strengths and weaknesses. It is the non-judgemental, unconditional respect and love from the parents that helps the child to evolve into a self-reliant personality.

It is the duty of the sensitized teacher to incorporate the help of the parents to work with the child with Special Needs. The inputs at school and at home should be uniform and complementary. Two areas that are important are :

a) Self-esteem

The Self-esteem that the school deliberately generates in the child should not be wiped out by the reprimanding parent at home. The encouragement of independence,

self-reliance and responsibility given at school leading to better self-esteem should be continued at home too. It should not be marred by comparisons with siblings or cousins at home. With appropriate participatory inputs from school, the home environment also can become supportive and positive.

b) Organisation

Schedules and routines of the child at school and home should be a continuum. The day-to-day activities and study schedule can be worked out at school with the involvement of the parents.

Checklists of things to be taken to school, daily homework, projects, messages etc can also be worked out with parental participation. A daily diary of this sort generates accountability in the parents. Organizing lessons, simplifying their content, organizing his study materials etc should have parental participation at home. Proximity control is an essential ingredient of assistance in Learning Strategies even at home. The parents must make sure that the LD child is provided a distraction free environment and a clutter free space for his work at home.

ATTRIBUTES OF PARTICIPATORY PARENTS

Working Together

Informed parents maintain a good relationship with school and the teachers who come in contact with the child. Some parents can suggest to the school, ways in which their child can be helped in school. Reading out the question paper during exams or relaxing the ordeal of copying notes are provisions that the parents may request for. Pragmatic parents remember that there is little gain in confronting the teacher if they feel frustrated about an apparent lack of progress. The best way forward for an LD child is through an effective 'Home - School Partnership'.

Patience and Perservance

A child with Developmental Disorders may be slow or clumsy and may need help. He may take longer to learn to do things. Parents need to be taught to show patience and never to give up. They will need to repeat the processes of teaching the child without losing temper, and without being negative.

Awareness and Advocacy

If the parents are not on the child's side, who else will be? The best that a parent can do for the child with Special Needs is to become informed and aware about the child's condition. The parents should also become aware of their child's particular difficulties. This may need a great amount of communication with the teachers. Awareness also stops the parents from making comparisons with others in the family

or at school. It helps them to build on his strengths and skills. Awareness encourages them to praise his little successes and perseverance. Advocacy helps them to talk to parents of similar children and create support groups. The right of children with Special Needs can be secured only through advocacy. It can stop others from teasing or bullying their children with handicaps.

Support for Themselves

Caring for a child with LD can be frustrating because of poor progress despite hardwork. A teacher who has an empathic relationship with the parents can keep them going. The school can share with them experiences of other parents and encourage them by talking to them about their child's accomplishments at school. Teachers can also share with the parents Specialised Teaching Strategies, Books, Reading Materials etc. In this process of partnership, it is the child with the Special Needs who benefits.

CONCLUSION

The school's partnership with parents ultimately brings benefit to any child by making the school-years a pleasant experience. Parents of children with Special Needs have a greater role to play by being active participants rather than passive consultants. This role for the parents is possible only if the school is pro-active.

CHILDREN WITH LEARNING DISORDERS : BEYOND SCHOOL

Most children with Learning Disorders exhaust themselves struggling with basic Academic skills while at school. This leaves no time or space to identify and nurture their inherent potential, strengths and abilities. In most cases, Parents and Teachers give them no opportunity to express their inherent creativity. In such situations, their talents do not even get identified.

The aim of Education, as was stated before, is to identify inherent talents, overlook handicaps and to enable the child to be an independent useful citizen. Every LD child too, therefore, needs to choose a vocation. There is a strength in every LD child – Drawing, Painting, Music, Acting, Designing, People–skills, Motors, Machines etc. It must be possible for every such child to create a career out of one of these skills.

'Mohan is an only child, born nine years after the marriage of his parents. His Learning Disorder was so severe that he would sign his full name with a different spelling each time. His mother considered him a 'no good' child. But his father was proud of his interpersonal skills, describing how efficiently Mohan looked after the guests visiting their home. This revelation about the 'no good' child made it possible for Mohan to do a diploma in the Hospitality Industry. He earns more money from his vocation, than the father from his. He is, today, a self reliant and useful citizen.'

This is an example that can be replicated over and over again to create successful careers beyond school for every LD child.

Human Excellence comes through careful nurturing. Discerning Teachers and Sensible parents can do this by participatory guidance for LD children in their learning and career choices. To cope with life's stresses and to achieve psychosocial competence, it is our duty to teach these Children 'Life Skills'.

Children, LD children specially so, must acquire through wise guidance the courage even to fail, yet to keep on fighting. It needs great inner strength to cope with failure and frustration. Children with Special Needs must be taught to deal positively with their emotions including romance or rejection, yet to keep the focus clearly on the long term goals of life. Most importantly, they must acquire confidence and self-esteem which ultimately defines every child's success in life — Beyond School.

APPENDIX - I (Poster)

**WHY DOES THIS CHILD SCORE POOR MARKS?
CAUSES IN THE CHILD & CAUSES IN THE ENVIRONMENT**

POOR SCHOOL PERFORMANCE

CAUSES IN THE CHILD

(VISUALISE A CHILD IN YOUR CLASS)

① **PHYSICAL CAUSES**

**Vision/Hearing
Epilepsy etc.**

② **DELAYED
MILESTONES OF
BRAIN DEVELOPMENT**
(Slow to start walking, talking etc.)

**MR (Low IQ)
"Slow Learners"**

③ **SPECIFIC DELAYS
OF ACADEMIC SKILLS**
(Reading, Writing, Spelling, Mathematics etc.)

**Learning Disorder(LD)
(‘Dyslexia’)
Normal IQ;
Discrepancy between
Potential & Performance.
Listens & Learns.
Tells Answers.
But, Unable to Write.**

④ **INATTENTIVE,
OVERACTIVE
IMPUSLIVE CHILD**

**ADHD
Inability for Attention.
Restless Hands and Legs.
Disorganised.**

⑤ **EMOTIONAL AND
CONDUCT DISORDERS**

**School Phobia,
Anxiety, Depression,
Oppositional,
Defiant Disorder etc.**

APPENDIX - II (Poster)

LEARNING DISORDERS (LD)

- Learning Disorder (LD) is the major cause of Poor School Performance in young children. Present from the beginning, it is a Developmental Disorder. It is not mental retardation or mental illness.
- LD is the inborn difficulty to acquire and use Academic Skills. Academic Skills are skills used for Learning, such as Reading, Reading-comprehension, Writing, Spelling, Mathematics, Language, Motor Co-ordination, Social Skills etc.
- LD children may be 'smart' in everything else. They have Normal or Above Normal Intelligence. Da Vinci, Einstein, Edison, Churchill were all L D.
- Learning Disorders may first appear as behaviour problems : Attention-deficit, Hyperactivity, naughtiness, defiance, aggression, addiction to TV or computer, forging progress reports, Tics, Obsessive disorders, Anxiety, Depression, School phobia etc.

POINTERS TO L D (FOR TEACHERS)

- ☞ Difficulty to read and write — reads slowly word by word, with omission or addition or guessing of words. Misses lines or reads lines again.
- ☞ Does not understand what he himself reads, but comprehends when you read out to him.
- ☞ Listens and Learns quickly. Can answer questions orally, but unable to write the same correctly. Hence **discrepancy** between what he knows and what is expressed on paper.
- ☞ Slow to write; poor handwriting. Reversal of letters or numbers (b/d, 6/9, 15/51). Glaring mistakes in spellings; incomplete notes and answers.
- ☞ Difficulty with Arithmetic operations or statements. Transposes answers when copying (32481 becomes 34281).
- ☞ Hard to master speech and languages; difficulty to do buttons, thread a needle, draw a straight line or a good circle.
- ☞ Pounded by everyone, poor Self-esteem. Poor Social skills. Poor motivation for studies.
- ☞ Bright and alert in matters not connected to reading or writing — music and dance, sketching and painting, sports and games, motors and machines!

MANY NORMAL CHILDREN DISPLAY SOME OF THESE SYMPTOMS.

NOT ALL L D CHILDREN DISPLAY ALL POINTERS.

SEVERE PROBLEMS NEED MULTIDISCIPLINARY ASSESSMENT.

TEACHERS MUST EASE PRESSURE, START REMEDIAL TEACHING.

ISSUED BY CBSE, DELHI, 2001 (for Poster)

GLOSSARY OF TERMS

- Algorithm** : Procedures or steps in a systematic process, (Eg: steps in computer programming).
The Flow Chart for Diagnostic Approach to Scholastic Backwardness follows an Algorithm.
- Assessment** : Estimate of the intensity of disability or disorder. For an LD child a detailed assessment of academic skills, language and motor skills is done to find out the levels of functioning.
- Behaviour Modification**: Modifying or changing undesirable behaviour to desirable or more acceptable ones. It involves systematic application of the principles of the Learning Theory.
- Co-morbid Disorders**: Presence of another disorder along with an already existing disorder.
- Comprehension** : Refers to the ability to understand, and is the objective in reading.
- Counsellor** : A professional (usually with a masters degree in Psychology or Social Work) who is trained to analyse a social or psychological problem and help the client find an alternate solution.
- Decoding** : A process in reading. It involves understanding the phoneme-grapheme relationships and translating printed words into spoken language. These skills enable to pronounce words correctly.
- Diagnostic Approach** : An approach in which the diagnosis or identification of a disease or disorder is made by means of symptoms.
- Diagnostic Manuals** : Books of instruction that contain the symptoms of diseases or disorders that aid in the diagnosis. Diagnostic and Statistical Manual (DSM) Ed. IV, and International Classification of Diseases (ICD) Revision X are examples.
- Diagnostic Test** : A test that provides an in-depth assessment of a skill area, including strengths and weaknesses and error patterns.
- Discrepancy** : Inconsistency, or failure to correspond. There is an inconsistency or difference between a child's innate ability or potential and his performance (performance on paper does not correspond to actual potential).
- Disorder** : A disturbance which upsets physical or psychological functions. A Learning Disorder is caused because of defective brain areas responsible for academic skills like reading, writing etc.
- Dyscalculia** : Difficulty to calculate, manipulate number or do simple sums, caused due to impairment in related areas in the brain.
- Dysfunction** : Malfunction or impairment of function. LD is referred to as a Central Nervous System (CNS) dysfunction because the brain areas responsible for academic skills are affected.
- Dyslexia** : Difficulty to read (Greek word: dys-difficulty, lexis-words), Children with Dyslexia find it difficult to read or to understand what is read.

Flow Chart : Graphic representation of the successive steps in a procedure. or system. A flow chart indicating the possible causes of poor school performance is used to diagnose the causes for scholastic backwardness in a given child.

Grapheme : The written symbols. A child is able to write words or spell only if he possesses good Phoneme-Grapheme correspondence (sound-letter associations). LD children may have difficulty with phoneme-grapheme correspondence.

Grapho Motor skills : Ability to draw diagrams or to sketch using motor co-ordination skills.

Handicap : A disadvantage or impediment. Children with LD are handicapped because their academic skills do not function optimally.

I E P : Individualized Education Programme. It is an educational programme formulated for each child with Special Needs, in accordance with the child's deficits (Needs) and skills.

Impulsivity : A sudden inclination to act without thinking of consequences. Many children with Attention Deficit Disorders are found to be impulsive.

Inclusive Education : The system of education where children with special needs are integrated in regular mainstream schools, thus minimizing segregation from peers.

IQ Tests : Tests for measuring Intelligence Quotient. Provide a global estimate of scholastic potential. IQ tests are generally done to rule out poor intelligence.

Mental Retardation : Sub-average general intellectual functioning. The impairment may be reflected in a slow rate of maturation, reduced learning capacity and / or inadequate social adjustment, present singly or in combinations. Children with Borderline Intelligence are also called Slow Learners.

Milestones of development : Specific stages of development in the life cycle of a child. A child is expected to attain certain stages of development at specific period of time. Example – holding head erect at three months, talking monosyllables by eight months to fifteen months etc.

Mnemonic : A short form or symbol or code intended to aid memory. It is a clue for retrieving learned information. Mnemonic devices help students to remember content.

Morbidity : A state of illness, disease or disorder.

Motor Co-ordination Skills : The ability of the brain to co-ordinate gross and fine motor movements. Fine-Motor Co-ordination is the ability to use the small muscles to accomplish tasks requiring precision such as writing, buttoning, lacing, cutting etc. Gross-Motor Co-ordination is the ability to use the large muscles in a co-ordinated, purposeful manner to engage in activities like running, throwing and kicking. In LD children, the activities affected are self help skills like buttoning, lacing and academic tasks like handwriting, drawing diagrams, copying shapes etc.

Multidisciplinary Approach : An Approach using combination of various Disciplines to tackle a problem / situation. The LD child requires a combination of services of professionals from various disciplines like Psychiatry, Psychology, Social Work, Speech Pathology, Special Education etc. due to the multiple problems in his growth and development.

- Multisensory approach** : An instructional approach in which the teacher uses more than one of the child's senses. It involves the use of all sensory modalities including Visual, Auditory, Kinesthetic and Tactile.
- Obsessions** : These are repetitive images or thoughts that intrude repetitively into a person's mind, which the person tries to resist, and on resisting develops anxiety. Example - after washing the hand, a repetitive thought occurs that the hand is still unclean. (If it is not washed again, the person becomes anxious).
- Phoneme** : A unit of sound that combines with other sounds to form words. It is the smallest unit of language. A phoneme alone does not convey meaning.
- Phonetics** : The study of speech sounds and their production, classification and transcription.
- Phonics** : A method of teaching reading based upon sounds.
- Pointers** : It refers to a clue or indication. There are certain pointers for LD which a classroom teacher can pick up and thus aid in the process of diagnosis.
- Pre-academic skills** : Basic skills that a preschool child has to be equipped with, before starting formal school instruction. These skills are also called 'Readiness skills' for learning.
- Referral** : A formal request for evaluation. For a child experiencing learning or behavioural problems, referral to a professional may be required.
- Remediation** : The process of correcting or strengthening areas of skill deficits. In LD children, it refers to special instruction to help overcome difficulties in learning.
- Resource Room** : A Special Education placement in which children receive intensive individual or small group instruction for less than half the day. The children are usually instructed for the remainder of the day in a regular classroom.
- Scanning** : To examine details. It is a reading strategy which involves careful reading of key sentences, phrases and words to locate specific information rapidly.
- Scholastic Backwardness** : Not being able to perform academically in accordance to age, grade and potential. LD is one of the major reasons for scholastic backwardness.
- Self-esteem** : A concept or opinion one has about oneself. Children with LD generally have poor self-esteem as they are not able to perform well in school.
- Sensory deficits** : Difficulty caused due to malfunctioning of sense organs particularly the ears and eyes. Poor school performance can be caused due to deficits like visual or hearing impairment.
- Sight Vocabulary** : Words the reader recognizes without applying phonetic analysis and are learned as whole words. They include frequently used words, words the reader recognizes instantly from repeated exposure and words that have irregular spellings (of, an, the etc.).
- Skimming** : Reading to gather salient facts. It is a reading strategy where students isolate and rapidly read key sentences, phrases and words to identify the main ideas.
- Social skills** : Children have to possess these skills to learn socially appropriate behaviour. Those who lack these skills are unable to pick up social cues like other children, or predict social consequences of their actions.

Soft Neurological signs : Subtle evidence of difficulties, on neurological examination, in processing sensations and controlling movements. These signs are more common in children with Specific Learning Disorders.

Special Educational Needs (SEN) : Children with Skill Deficits requiring Special Educational Instructions. Children with Learning Disorders require special educational inputs as they may be unable to profit from instruction in the regular classroom.

Strategies : Planning methods for achieving goals. Learning strategies are techniques, principles or rules that enable a student to learn independently. Support strategies are techniques for help and remediation.

Syllabication : It is the process of dividing a word into its component parts. Each syllable contains a vowel sound. There are one syllable, two syllable and multisyllable words.

Therapist : A practitioner who resorts to any particular kind of treatment. Eg: Psychotherapist, Psychologist. A teacher is considered a therapist for children with LD for she is the best person to cater to the special educational needs of the LD child.

Tics : Tics are involuntary, sudden, rapid, recurrent, non-rhythmic, stereotyped motor movements or vocalizations. This is a Neurological Disorder and is amenable to treatment.

Transpose : Change of position in a series. One of the frequently committed errors in maths is transposing the answer when copying it from the working column. Eg: 23156 is copied as 21356.

Under achievers : Students whose academic achievement is below that of the expected standard.

Visuo Spatial Deficit : Deficits in Visuo spatial skills. It is a Neuropsychological function, where a person is able to understand a figure or drawing on any particular background. This skill is required to understand the layout of a figure or written matter.

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