

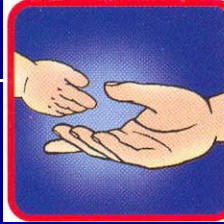
# **A CLASSROOM APPROACH TO POOR SCHOOL PERFORMANCE(PSP)**

# **LEARNING DISORDERS**



**IN COLLABORATION WITH  
WORLD HEALTH ORGANISATION (WHO)**

**PEEJAYS CHILD GUIDANCE CLINICS (CGC)  
COCHIN, S. INDIA.**



# LEARNING DISORDERS (LD)

- **Definition**
- **Causes**
- **Description**



# LEARNING PROBLEMS : PSP – CAUSES: (REFER FLOWCHART).

- Various causes in a given child – one or more.
- Commonest cause : L. D.
- **L. D. – LEARNING DISORDERS**  
(Dyslexia/Learning Disability)
- Surveys : Force of numbers  
About 20 – 25% of all children - PSP  
10% of all school children have LD
- Hence need for awareness as  
a 'Neurological Handicap'

“Disability” or Handicap is a misnomer...



# LEARNING DISORDERS (LD)

- **Inborn Disorder. Onset from Infancy.**
- **Learning Disorders are of Neurological origin.**
- **Genetic – Boys 4 times more than Girls.**
- **Environmental causes (before, during, after birth).**
- **Some children learn with ease, others struggle, depending on the brain cell maturation.**
- **Not Mental Retardation, or a mental illness.**



## LEARNING DISORDERS (LD)

- LD: not a simple difficulty to learn.
- Not a term to be used for any child who fails at school or behaves badly.
- LD children are not 'stupid'/'lazy'/'careless'.
- Da Vinci, Edison, Einstein, Churchill, Tom Cruise.
- A hidden neurological *handicap*.



# LEARNING DISORDERS (LD)

## Definition

- A group of disorders that impair 'Learning'
- Difficulties in the acquisition and use of  
**ACADEMIC SKILLS:**

Reading

Reading Comprehension

Writing

Spelling

Arithmetic

Language etc

**(School skills : Table-top-skills; Paper-Pencil)**



# LEARNING DISORDERS (LD)

## IMAGE OF AN LD CHILD : RECAP

- These children have **normal** intelligence (IQ) and are **smart** in matters not requiring Reading/Writing/Language use.
- LD is the inborn difficulty to use Academic Skills. Therefore, look for **pointers** in their **READING, WRITING, SPELLING, ARITHMETIC, LANGUAGE ETC.**
- LD children may appear to you **first as Behaviour problems** (Attention deficit, Hyperactivity, naughtiness, defiance, aggression, addiction to TV/computer, hiding/forging progress cards, Anxiety, Depression, etc.)



## IMAGES OF AN LD CHILD

*"Dear mother,*

*started store several weeks i have growed coisiderable 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" (19 yrs old)*

### **"EXCELLENT WITH HIS HANDS"**

- Smart, intelligent, excellent with his hands.
- But in exams, "idiot of a son".
- Normal for a child to struggle with Academic skills
  - in the first one or two Standards.
- If the struggle persists, look for LD.





## IMAGE OF AN LD CHILD

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

**(Teacher)**



**LEARNING DISORDERS (LD)**

**(‘DYSLEXIA’)**

**ARE**

**‘DEVELOPMENTAL DISORDERS’**

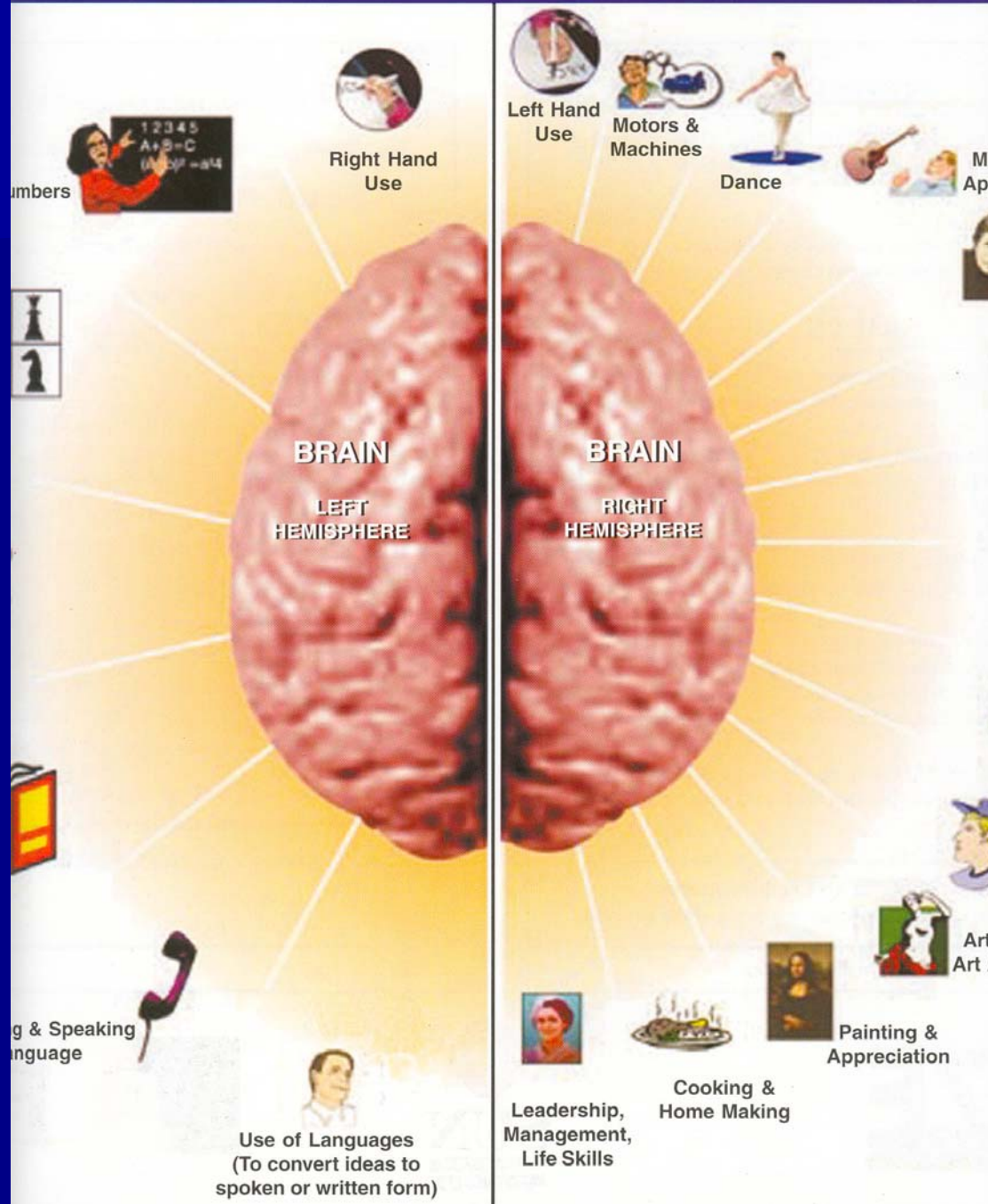
**(INBORN)**

**AND ARE THE COMMONEST CAUSE  
FOR POOR SCHOOL PERFORMANCE (PSP)**

# FOR 'SKILLS' INSTEAD OF 'SKILL-DEF

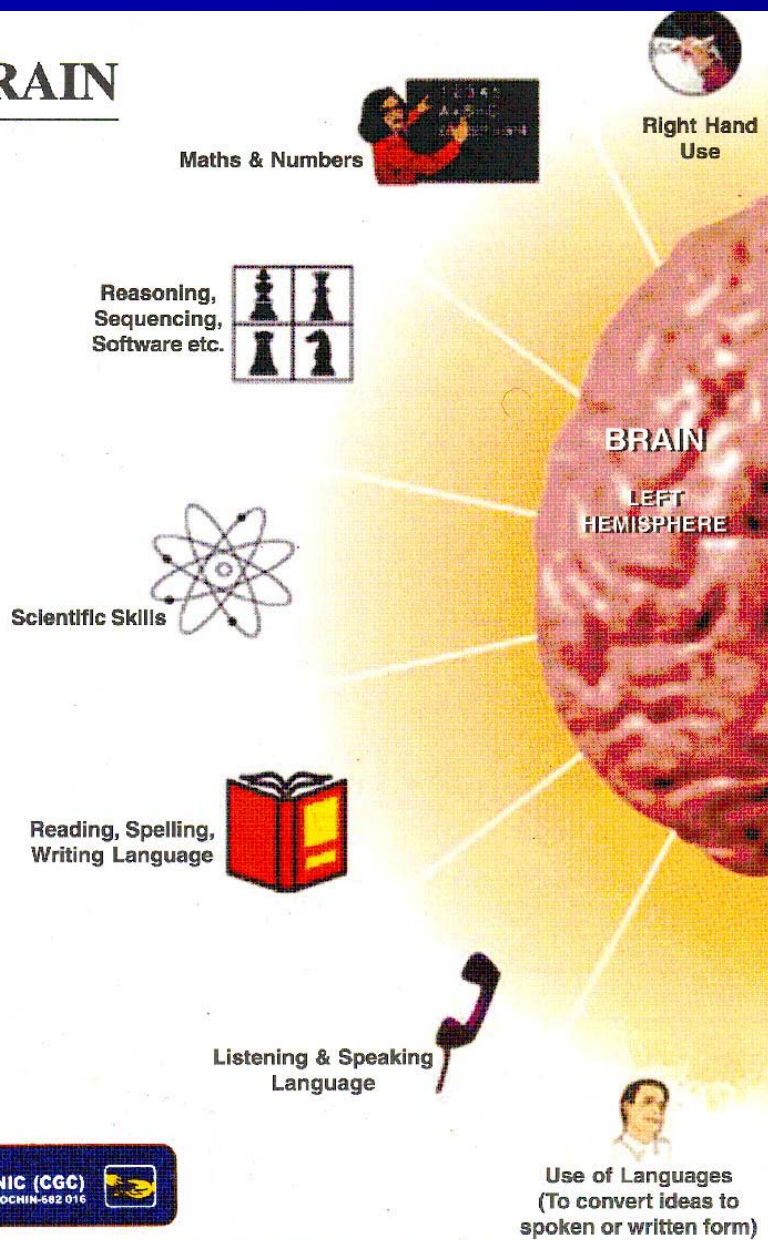
## RIGHT & LEFT BRAINS :

"TWO-IN- ONE"





## LEFT BRAIN



## LEFT BRAIN & ITS SKILLS

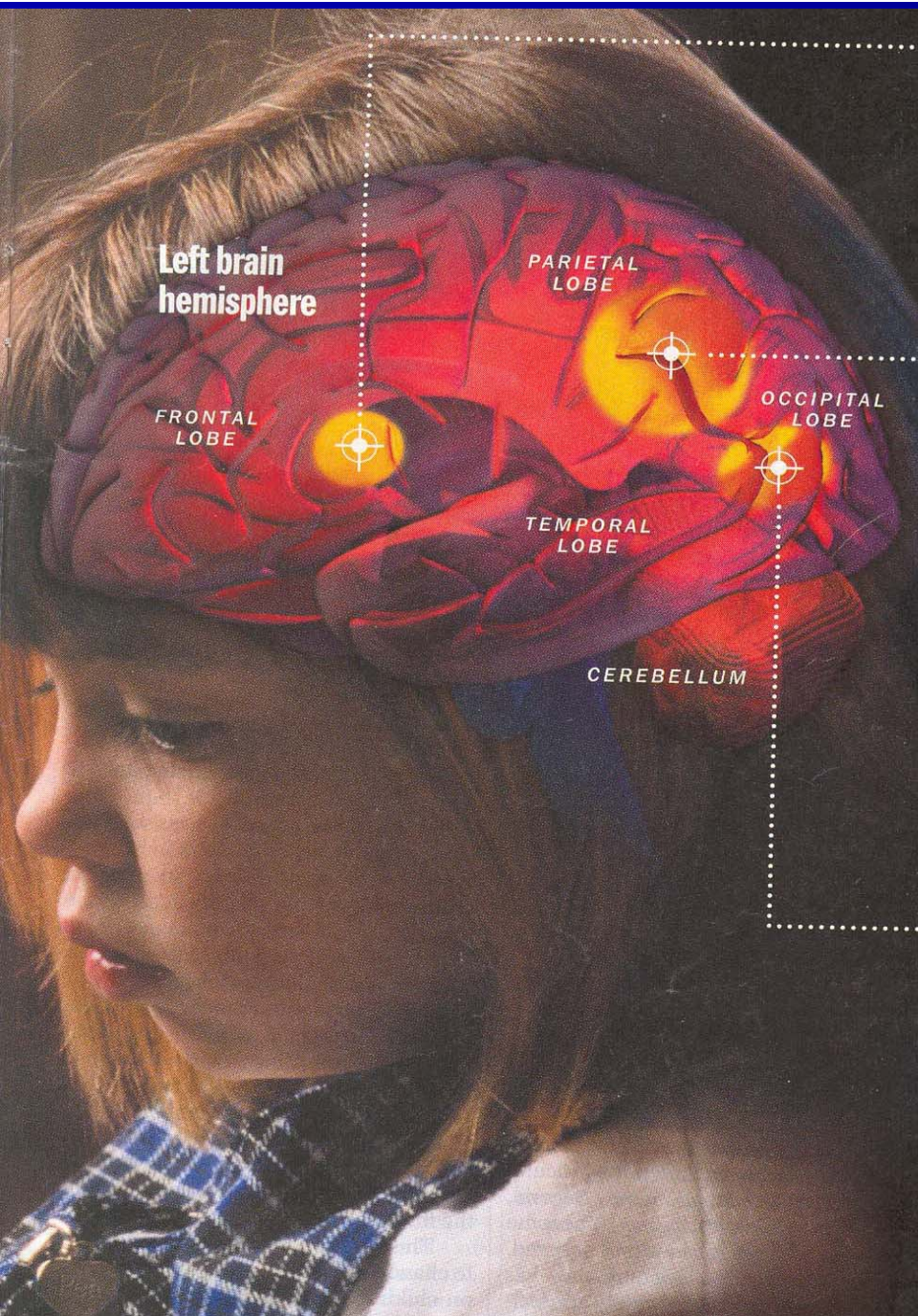
TABLE-TOP  
HEMISPHERE FOR  
SCHOOLING.

**PEEJAY'S CHILD GUIDANCE CLINIC (CGC)**  
VALANJAMBALAM, ERNAKULAM, COCHIN-682 016  
Tel : 0484 - 2357388

IN COLLABORATION WITH W H O :  
PEEJAYS CHILD GUIDANCE CLINIC, COCHIN

# BRAIN AREAS INVOLVED

# READING



## 1 The Phoneme Producer

*Left inferior frontal gyrus*



This section of the brain helps a person **vocalize words**—silently or out loud. It also starts to analyze phonemes, the smallest sounds that make up words. *Cat*, for example, contains three phonemes: /k/, /a/ and /t/. This section is especially active in the brains of beginning readers.

## 2 The Word Analyzer

*Left parieto-temporal area*



This section of the brain does a more complete analysis of written words. Here they are **pulled apart** into their constituent syllables and phonemes, and letters are linked to the appropriate sounds.

## 3 The Automatic Detector

*Left occipito-temporal area*



The job of this part of the brain is to **automate the process** of recognizing words. The more the automatic detector is activated, the better it functions. Skilled readers can breeze through print with assembly-line-like speed.

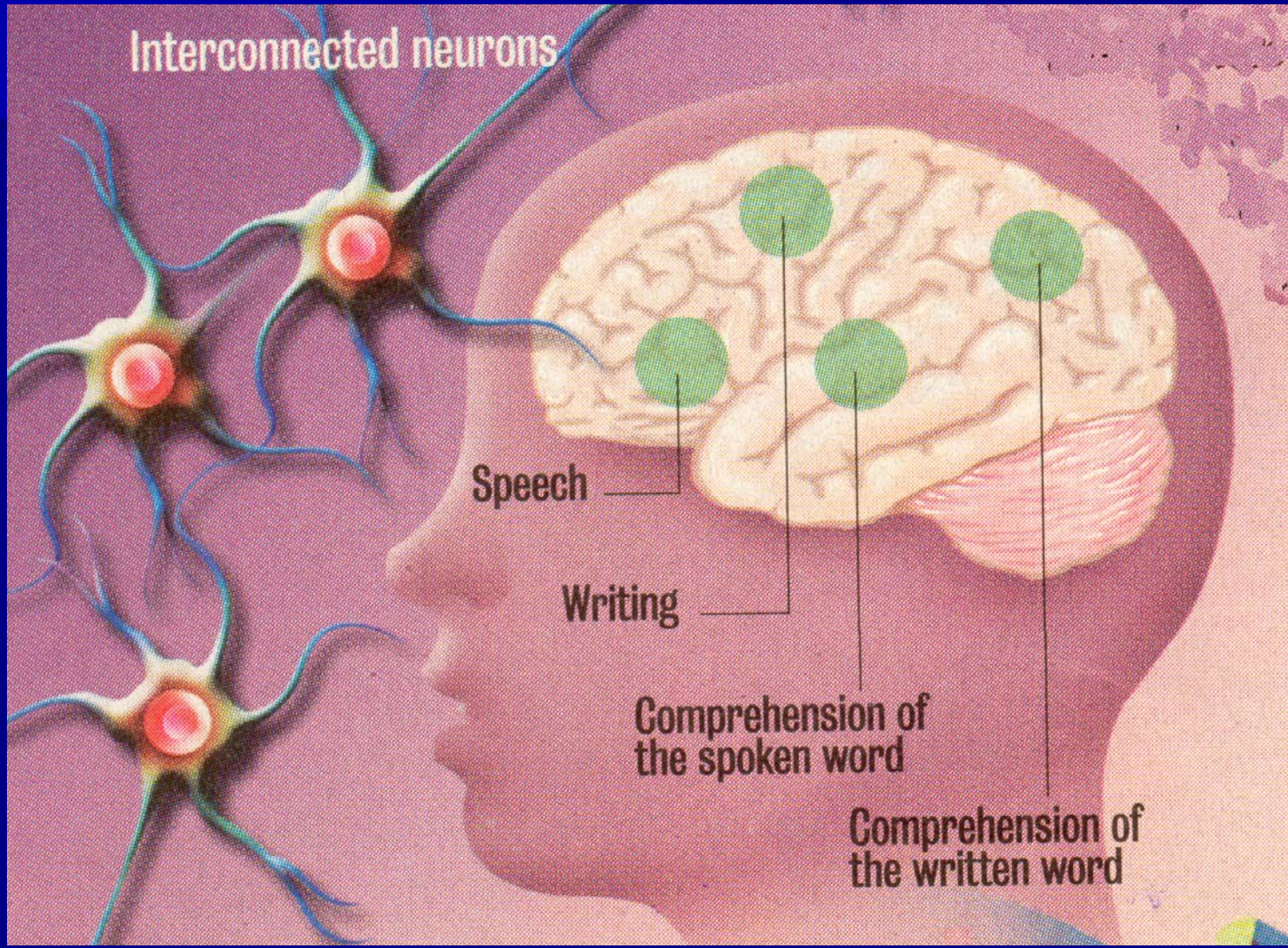
- Left Inferior Frontal Gyrus

- Left Parieto-temporal

- Left Occipito-temporal

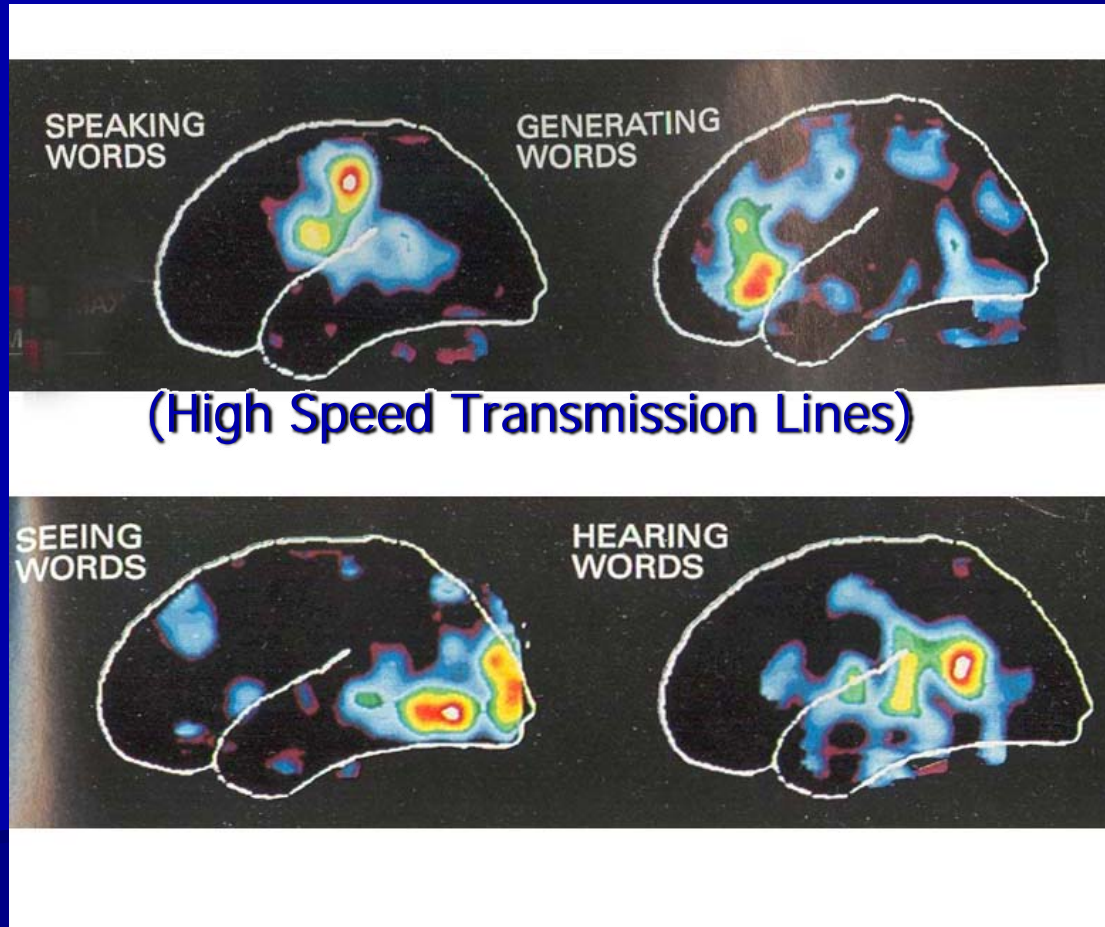


# LEFT BRAIN AND ACADEMIC SKILLS



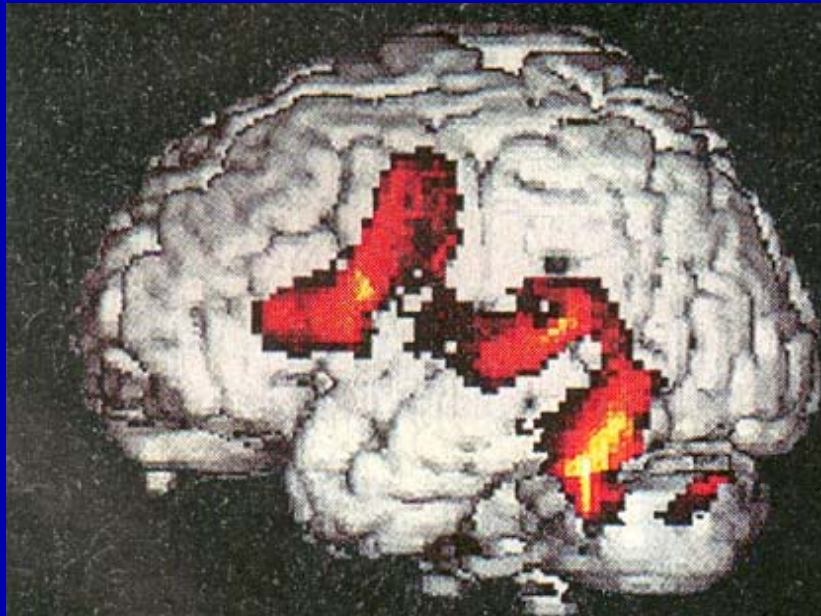


# LD - TARGET AREAS

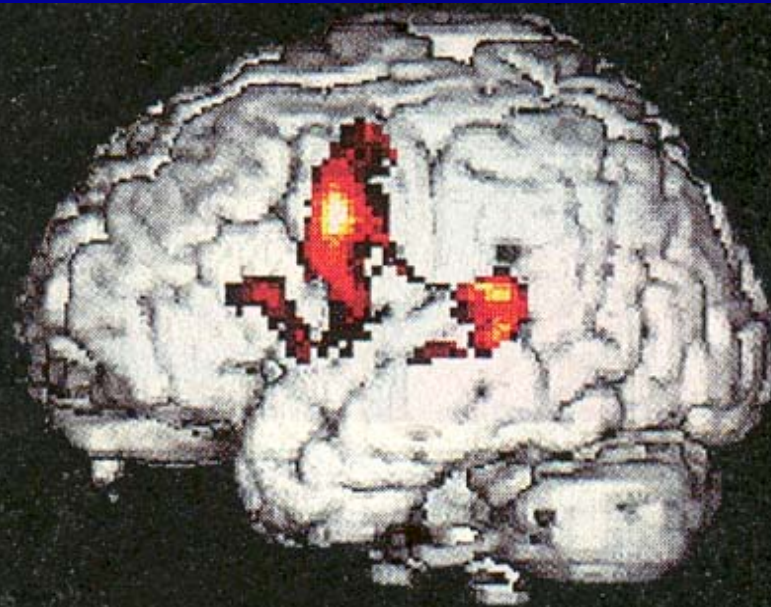


IN COLLABORATION WITH W H O :  
PEEJAYS CHILD GUIDANCE CLINIC, COCHIN

# LEARNING DISORDERS : DYSLEXIA BRAIN



**NORMAL** brain during reading is active in areas linking vision to sound and meaning



**DYSLEXIC** brain shows little activity in areas linking language to visual cues





## SCHOOLING AND THE OTHER SIDE OF L.D. LD CHILD'S OTHER SIDE

- Schools pass a child based on 'sit down' tests (left brain).
- Whereas 'Real World Intelligences' cannot be tested on 'Table-tops' –

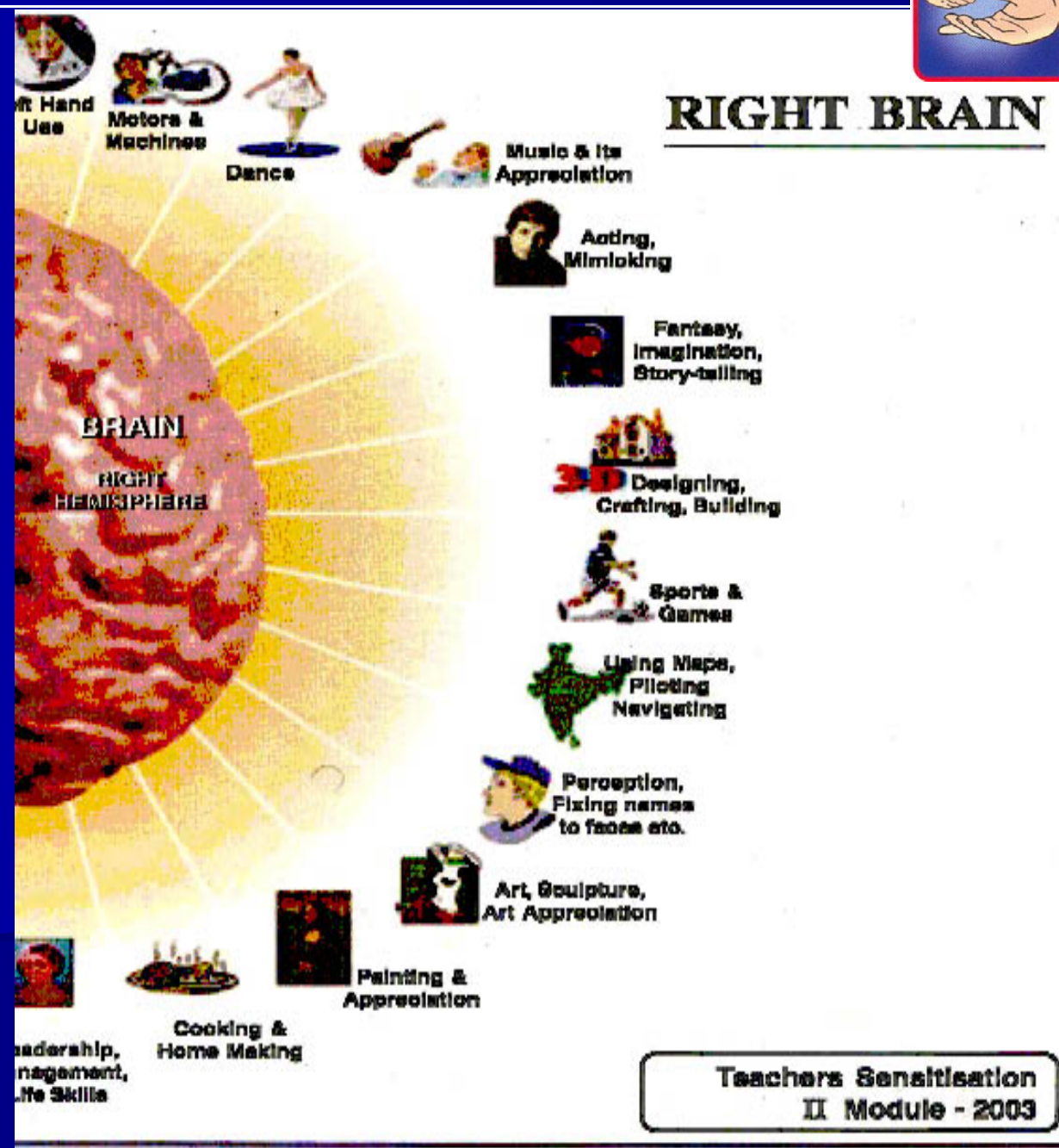
Music or Dance, Acting or  
Mimicking Fantasy or Imagination,  
Crafting or Designing Drawing or  
Painting, Sculpture or Horticulture  
Navigation or Exploration, Cooking or Home-  
making Stitching or Sewing, Sports or  
Games Motors or Machines,  
"Repairs or Mechanisms" Life Skills  
(Imagine how many vocations can be generated out of these !)



THE OTHER SIDE OF LD  
'REAL-WORLD SKILLS'.

LOOK FOR  
'SKILLS'  
INSTEAD OF  
'SKILL DEFICITS'

TRANSFORMING  
EDUCATION





## SCHOOL PERFORMANCE AND FUTURE SUCCESS

**When everyone grows up,  
"the A Grade students work for the B  
students. C students run all the  
businesses.**

**And the D students dedicate buildings and  
bridges to the nation ! "**

- **Poor School Performance (PSP) not parameter of future success or failure.**
- **But, PSP can snuff out dreams at early age.**
- **If dreams are not snuffed out, seemingly hopeless kids can go on to be wildly successful in life, using their *Real-world* (Right-brain**



# SCHOOL MENTAL HEALTH

## THE OTHER SIDE OF POOR SCHOOL PERFORMANCE

- The LD Child can become a good swimmer, though he may stumble with his words.
- He may not understand a riddle or a joke, but may be brilliant in chess or checkers
- Sports or games, Music and Dance, Sketching or Painting may be his forte.
- He may not subtract or divide, but be brilliant with motors and machines.
- Deliberate observation to find such skills and nurturing them must become the **GOAL OF EDUCATION.**



# COMPREHENSIVE SCHOOL MENTAL HEALTH

- **Enhancing Skills, Remediating Skill-deficits, Detecting Disorders, Intervening Early.....**
- **These interventions for the Holistic Development of the Child are the Role and Responsibility of 'Educational Diagnosticians' – SENSITISED TEACHERS & SCHOOL COUNSELORS.**
- **This Role and Responsibility by school can bridge Mark Twain's famous gap between Schooling and Education.**
- **THIS IS OUR TAKE-HOME MESSAGE.**



# **A CLASSROOM APPROACH TO POOR SCHOOL PERFORMANCE (PSP) AND STRESS DISORDERS**



**IN COLLABORATION WITH  
WORLD HEALTH ORGANISATION (WHO)**

**PEEJAYS CHILD GUIDANCE CLINICS (CGC)  
COCHIN, S. INDIA.**



# HOW TO IDENTIFY LEARNING DISORDERS –

# 'POINTERS' TO DYSLEXIA





# LEARNING DISORDERS (LD)

## DEFINITION

- LD : A group of disorders impairing 'learning'.
- 'Learning' uses Academic Skills.
- LD defined as Difficulties in the Acquisition & Use of Academic Skills :
  - Reading:
  - Reading Comprehension
  - Writing
  - Spelling
  - Arithmetic



# LD – CHILDREN BELOW 6 YEARS

- Delayed development in Speech and Language.
- Clumsy; excessive tripping and bumping.
- Difficulty with buttoning, shoe lacing, handedness.
- Difficulty picking up rhymes, names of colours, shapes.
- Difficulty narrating stories in sequence.
- Reversing alphabets and numbers ( b / d, 12 / 21 ).
- Mirror writing.
- Confusion with left and right.



# LD – CHILDREN BELOW 6 YEARS

Std I  
(Eng Medium)

o b c d e f g h i j k l m n o p q r s t u v w  
x y z

A B C D E F G H I J K L M N O P Q R S  
T U V W X Y Z



# LD – CHILDREN ABOVE 6 YEARS

*“Dear mother,*

*started store several weeks **i** have growed  
coisiderable 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” (19 yrs old)*  
**(Thomas Alva Edison)**



# POINTERS TO LD IN EARLY SCHOOLERS

## READING

- Tires the LD child. Curious, but lazy to read.
- Prefers being read to.
- Does not understand what he himself reads, but comprehends when you read out to him.
- Reads slowly, hesitantly – letter by letter, word by word.
- May follow the text/line with his finger.

.....



# POINTERS TO LD IN EARLY SCHOOLERS

## READING (contd)

- May miss lines, or read the same line again.
- Reads aloud monotonously without intonation.
- Difficulty with lengthier words/sentences.
- Omits/adds letters, or words/sentences.
- Fails to look carefully at the word ("word-blind").
- Guesses seeing a main letter -  
eg. ('portion' for proportion').



# POINTERS TO LD IN EARLY SCHOOLERS

## WRITING

- Answers orally, unable to WRITE the same correctly. ( 'Discrepancy Factor' – between what he knows, and what you see on his answer sheet).
- Slow with writing; incomplete notes / exam papers
- Spellings : hallmark of Dyslexia. (Better in English !)
- ★
- ★
- ★ 'b' for 'd', 'p' for 'q'                      3 for E    or 6 for 9
- ★ 'saw' for 'was', 'no' for 'on' etc...
- Unable to see patterns for spellings (eg. "tion" of



## **WRITING** (contd)

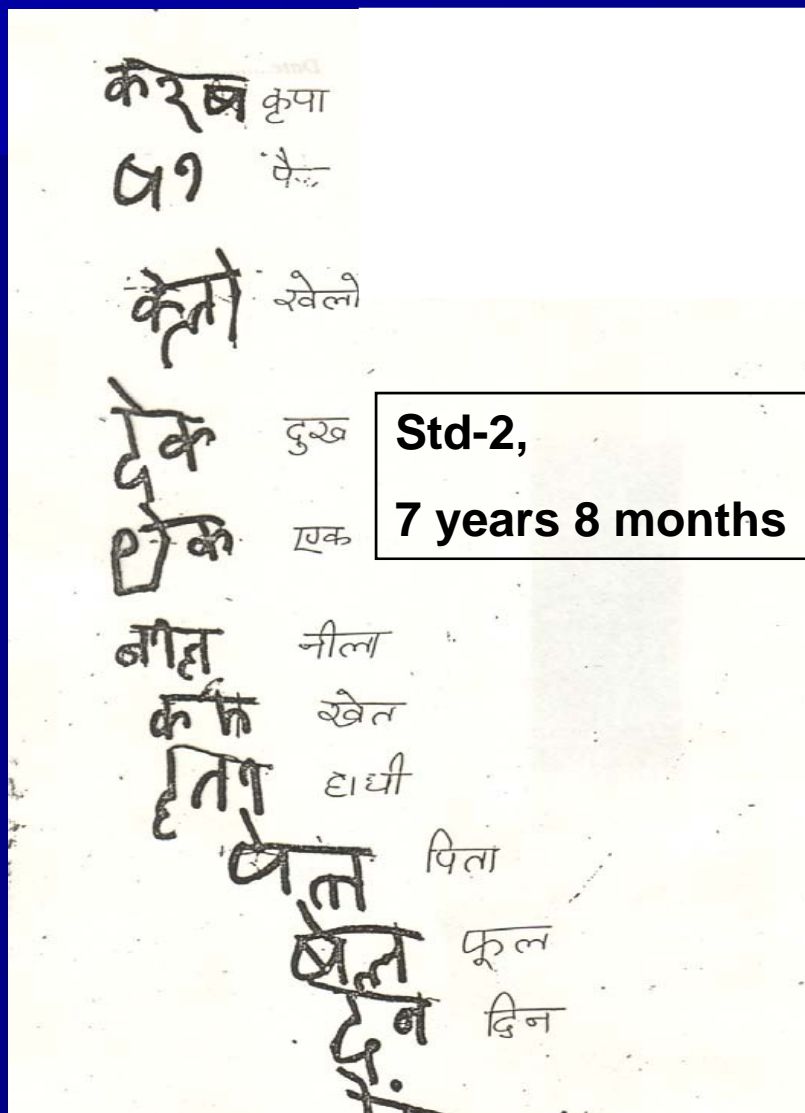
- Omits capitals, punctuation marks.
- Poor handwriting, odd pencil grip (handedness).
- Dreadful about 'Dictation'.
- Oriental languages more difficult - (alphabets sound and look same!).





# POINTERS TO LD IN EARLY SCHOOLERS

## WRITING



Std-2,

7 years 8 months



# POINTERS TO LD IN EARLY SCHOOLERS

My School

Std: IV  
9 yrs. 2 mths  
CBSE

In my scool there is teachers sis and all.

there is a beautiful garden in my shook.

In my school there is my sisters

one is in 7<sup>th</sup> and other is in 1<sup>th</sup>

my class teacher's name is jiviga. ~~to~~

my sister's ~~no~~ class teachers name is prea



# POINTERS TO LD IN EARLY SCHOOLERS

## MATHS

- Difficulty with basic operations (+, -, x, :-).
- May use fingers for calculations even after 8 yrs.
- Confusions with signs (x or +).
- Difficulty to decide the correct operation.
- Operation may be right, but calculation wrong.
- Many work out answers correctly in the working column, but transpose the digits producing "careless" mistakes (eg.23568



# POINTERS TO LD IN EARLY SCHOOLERS

## MATHS

HALEEMA: (Left Hander) Std. II

abcbe 7 2 4 1, k | p q s w y

20	21	22	23	24	25	26	27
28	29	30	31	32	33	34	35
36	37	38	39	40	41	42	43
44	45	46	47	48	49	50	51
52	53	54	55	56	57	58	59
60	61	62	63	64	65	66	67
68	69	70	71	72	73	74	75
76	77	78	79	80	81	82	83
84	85	86	87	88	89	90	91
92	93	94	95	96	97	98	99
100							



# POINTERS TO LD IN EARLY SCHOOLERS

Std. IV

9 yrs. 3 mths

Std IV

Age: 9yr 3mths

$$\begin{array}{r} 268 \\ - 141 \\ \hline 129 \end{array} \quad (8+1)$$

$$\begin{array}{r} 329 \\ + 568 \\ \hline 887 \end{array} \quad \textcircled{1} \text{ did not carry 1}$$

Std. II & III

Std II

Age 7yrs 1mth

$$\begin{array}{r} 25 \\ - 18 \\ \hline 13 \end{array} \quad \begin{array}{l} \uparrow \\ \text{wrong} \\ \text{direction of} \\ \text{operation} \end{array}$$

Std III

Age: 8yrs 2mths

$$\begin{array}{r} \textcircled{2} 14 \\ - 16 \\ \hline 18 \end{array} \quad \begin{array}{l} \text{did not} \\ \text{regroup} \end{array}$$



## POINTERS TO LD IN EARLY SCHOOLERS

### LANGUAGE

- Language skills generally difficult.
- Difficulty to convert ideas (answers) into clear language.
- Hard, finding the right word for the idea.
- Grammar and sentence construction difficult.
- 'Comprehension', 'Summarizing', etc. are



# POINTERS TO LD IN EARLY SCHOOLERS

## CONCEPTS

- Concept of TIME, SPACE, DISTANCE etc. difficult for some LD children.
- Telling 'time' from the face of clock tough.
- 'Yesterday', 'next week' etc. are difficult.
- Trouble with Maps, Graphs, Puzzle etc.



# POINTERS TO LD IN EARLY SCHOOLERS

## **SOCIAL SKILLS**

- Poor at making friends, maintaining relationships
- May not understand jokes / humour





# POINTERS TO LD IN SCHOOLERS

## CAVEATS

- Many many normal children display these symptoms.
- Not all LD children display all Pointers.
- A few Pointers do not mean the child has LD.
- Severe academic struggle needs Multi-disciplinary Assessment.
- Every LD child needs Remedial Teaching Strategies.

**EARLY IDENTIFICATION IS THE KEY TO REMEDY**

