Learning Disabilities (LD)

The NJCLD Definition of LD:

■LD are heterogenous group of disorders

LD result in significant difficulties in the acquisition and use of listening, speaking, reading, writing, reasoning, and/or mathematical skills

■the problem is intrinsic to the individual

■the problem is presumed to be related to a central nervous system dysfunction

LD may occur along with other disabilities or conditions

TASK:

Think of an LD pupil. Write down ways the child acts in a class, its typical problems and behaviour.

Characteristics of LD:

•difficulty reading, writing, spelling, and/or using mathematical concepts in contrast with average to superior skills in other areas.

poor handwriting

•trouble listening to a lecture and taking notes

easily distracted by noise or visual stimulation - unable to pay attention

•trouble understanding and following directions

■confuses/reverses some letters ('b' and 'd', etc.) or words ('was' and 'saw', etc.) and numbers ('41' to '14)

•omits or adds words when reading

repeatedly forgets things, loses things

■appears clumsy and poorly coordinated

confuses left and right, gets lost

■often late for class, cannot sense time

misinterprets subtleties in language - tone of voice - sarcasm

LD at school

■difficulties organizing information

■limited store of background knowledge to academic activities

■ineffective ways of learning

Typology of LD:

reading disability (dyslexia)
written language deficit (dysgraphia)
math underachivement (dyscalculia)
dyspraxia

Prevalence of LD

■ in the USA 47% with SEN have LD ■ 5 in 100 students have LD

READING DIFFICULTIES (DYSLEXIA)

■neurobiological origin

■difficulties with accurate and/or fluent word recognition

■poor spelling and decoding abilities (orthographic representation and specific sound)

■difficulty with spatial orientation (b,d, etc.)

■inability to accurately and fluently decode single words

■difficulty rapidly retrieving and stating names of letters, eventhough they know their names

■COMPREHENSION – goal of reading

Key Principles for Early Reading Instruction

■begin teaching phonemic awareness directly in the kindergarden

■teach each letter-phonemic relationship explicitly

■teach frequent, high regular letter-sound relationships

■show exactly how to sound out words

■decodable text

■use interesting stories to develop language comprehension

WRITTEN LANGUAGE DEFICIT (DYSGRAPHIA)

Example: A loge tine ago they atene a cosnen they head to gatthere on fesee o A long time a go there were ancient cave men. They had to get their own food.

Symptoms:

- ■Generally ilegible writing
- ■Random punctuation
- ■Spelling errors
- ■Syllable omissions
- ■Mixture of print and cursive
- ■Unfinished letters, omitted words
- Cramped, unusual grip

Writing a paper:

- ■P plan your paper
- \blacksquare **O** organize thoughts and ideas
- \blacksquare W write your draft
- $\blacksquare \mathbf{E} \text{edit your work}$

 $\blacksquare \mathbf{R}$ - revise your work, producing a final draft

MATH UNDERACHIEVEMENT (DYSCALCULIA)

- ■major problems with numerical reasoning and calculation
- ■inability to perform operations in math or arithmetic, understand or manipulate numbers
- LD progress about 1 year for every 2 years in school

Ss with dyscalculia at school:

- ■extra time for numerical problems
- ■make sure that the S has understood
- ■learning style of the S (visual kinaestetic, auditory)
- ■plenty of examples, repetition
- ■encourage Ss to visualize the quantities involved

Frequency:

up to 10% of population
= 1 in 30 children in the UK
men 4 times more often than women

DYSPRAXIA

- ■Impairment of the organisation of movement
- ■immaturity in the way brain processes information
- ■accomplanied by problems in perception, language, taught
- ■possible overlaps with: ADD, ADHD, Dyscalculia, Dyslexia, behavioral difficulties

A S with dyspraxia has difficulties with:

- ■planning their movement
- perception
- ■co-ordination of body parts
- ■laterality
- ■manual + practical work, handwriting
- ■concentration, short-time memory
- ■response to external stimulation

Daily Life

- ■avoid tight neck holes
- ■trousers with elastical waist
- ■don't fill cups too full, use straw
- ■damp towels under plates (stop moving), sit down to eat
- ■keys and purses on a chain tight to clothing
- ■keep to daily rutine

Teacher:

- ■No comparison
- ■Praise every effort to raise self-esteem
- ■Allow extra time
- Check a child's understanding

■One to one teaching

LD in general:

Causes of LD

in most cases unknown
central nervous system dysfunction (danger of a built-up excuse for teachers)
heredity
environmental factors (living conditions, instruction, communication)

Educational Approaches

education should include:
 opportunity for Ss to express themselves
 learn problem-solving skills
 meaningful way of learning
 effective, explicit instruction
 learning strategie

Classroom adjustments:

special seating
alternative / modified assignments
modified testing procedures

Equipment and assistant:

- ■ellectronic spellers, dictionaries
- ■calculators
- ■word processor
- ■note takers
- ■readers
- ■proofreaders

Explicit Instruction

- ■carefully designed materials and activities
- ■sufficient range of examples
- ■step-by-step strategies
- ■broad Qs, guidelines to focus attention at deep processing
- ■frequent, positive feedback
- practice opportunities

Content Enhancement

- ■guided notes
- ■graphic organizers
- ■letter strategies
- ■mnemonic strategies
- -keywords
- -pegwords

Education Placement Alternatives

- ■regular classroom ■consultant teacher
- ■resource room
- ■separate class
- ■separate school
- ■residential facility

Student Skill/Behaviour

- follow directions in the class
- ■comes to class perpared with materials
- ■uses class time wisely
- ■makes up assignments and tests
- ■treats Ts and Ss with courtesy
- ■completes homeworks in time
- works cooperatively in student groups