Same Classroom; Different Learners
Exploring All Kinds of Minds
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I. Legal Definition of Learning Differences
→Disorder in one or more of the basic psychological processes involved in using language (spoken or written)
Manifests itself in an imperfect ability to listen, speak, read, write, spell or do mathematical calculations
INCLUDES: perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia and developmental aphasia
DOES NOT INCLUDE: disabilities as a result of visual, hearing, motor handicaps or mental retardation, emotional disturbance, environmental, cultural, or economic disadvantage.

II. Risk Factors

- Family History-strong evidence for genetic basis for reading/attention issues
- Birth history
- Health history-ear infections, Lyme disease, allergies
- Emotional issues: depression, loss, peer relations, anxiety
- Family issues: divorce, absent parents, domestic violence
- Socioeconomic status: "affluenza"/poverty

III. Diagnostic Process
Referral lists should include a number of diagnosticians
Neuropsychologists
Psychologists
Psychiatrists
Speech and language specialists
Occupational therapists
Sensory integration
Behavior Management specialists

IV. Psychoeducational Testing

- Wechsler intelligence Scale for children (WISC-IV)
- Woodcock Johnson Test of Achievement
  - Reading, oral language written language, math skills

V. Neuropsychological Testing

- Sensation and Perception
- Motor Functioning
- Attention/Concentration
- Speed of neurocognitive processing
- Mental flexibility
- Speech/language
- Visuospatial abilities\intellectual abilities
- Verbal memory and learning
- Nonverbal memory and learning
- Behavior personality/ functioning
- Academic achievement

VI. Pyramid of Learning

- Sensation: ability to process info through the senses
- Perception: conversion of sensation into electric impulses→meaning.
- Imagery: auditorization/visualization
- Symbolization: ability to represent experience verbally and nonverbally
- Conceptualization: the manner in which experience is classified and categorized

VII. Neurodevelopmental Constructs

1. Attention
2. Memory
3. Language
4. Temporal-Sequential ordering
5. Spatial ordering
6. Neuromotor function
7. Higher order cognition
8. Social cognition

VIII. Three major attention control systems:

1. Mental energy control system
    - Alertness
    - Mental effort\sleep arousal balance
    - Performance consistency

2. Process Control System
    - Saliency determination
    - Processing depth
    - Cognitive activation
    - Focal maintenance
    - Satisfaction level
    - Self monitoring
    - Reinforceability

3. Product Control System:
    - Previewing
    - Facilitation/inhibition
    - Pacing
    - Self monitoring
    - Reinforceability

IX. MEMORY
- Short term memory
- Active working memory
- Long term memory storage
- Long term memory access

X. LANGUAGE
- Phonological process
- Morphological sense
- Semantics
- Sentence comprehension
- Discourse processing

XI. TEMPORAL-SEQUENTIAL
- Sequential awareness/perception
- Sequential memory

- Sequential output
- Time management
- Higher sequential thinking

XII. SPATIAL ORDERING

- Spatial awareness
- Spatial memory
- Spatial output
- Material management
- Higher spatial thinking

XII. NEUROMOTOR FUNCTION

- Gross motor
- Fine motor
- Graphomotor function

XIV. HIGHER ORDER COGNITION

- Critical thinking
- Creativity and brainstorming
- Problem solving
- Rule use
- Reasoning and logical thinking
- Mental representation
- Concept formation
- Verbal conceptualization
- Nonverbal conceptualization
- Process conceptualization

XV. SOCIAL COGNITION

- Verbal pragmatics
- Social behaviors