



Literacy and Learning Challenges in the Classroom

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Literacy Care and The Child Development Network

Topics

- **Specific Learning Disability – Dyslexia**
 - **Diagnosis and Management**
- **Coexisting Conditions**
- **Neuroplasticity – Working Memory**
- **Special Considerations – Mental Health**
- **Assistive Technology**
- **Myths and Controversies**



Learning Disability

A naturally occurring variation in brain function that predicts an unexpected difficulty learning a skill valued by the culture in which the individual is expected to perform, in this case, the ability to easily learn how to read.




Specific Reading/Spelling Disorder Dyslexia

Dyslexia is a specific learning disability that is neurological in origin. It is characterized by difficulties with accurate and/or fluent word recognition and by poor spelling and decoding abilities. These difficulties typically result from a deficit in the phonological component of language that is often unexpected in relation to other cognitive abilities and the provision of effective classroom instruction. Secondary consequences may include problems in reading comprehension and reduced reading experience that can impede the growth of vocabulary and background knowledge.

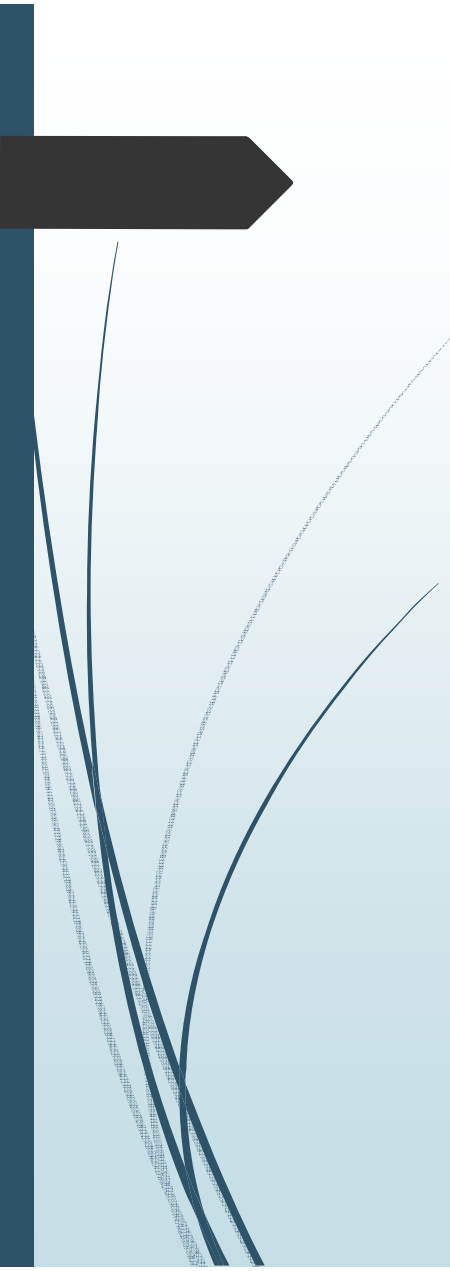
(International Dyslexia Association 2002 - Present)



It is Neurobiological in Origin



The deficit is intrinsic to the individual and occurs at the level of neuronal activity.



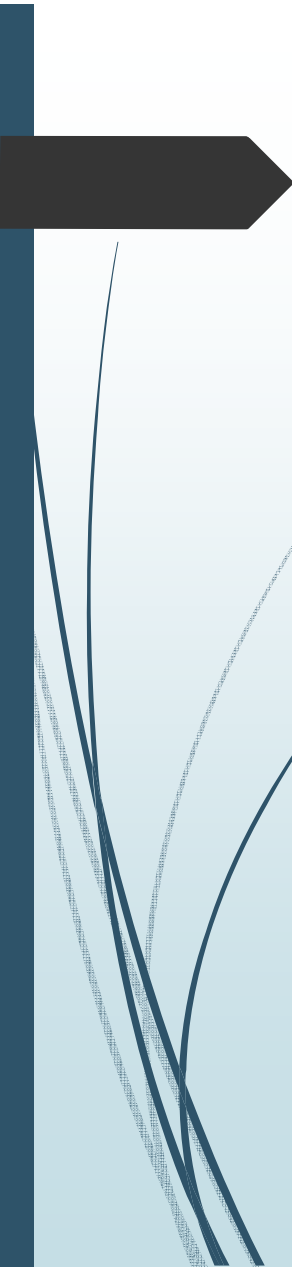
It is characterized by difficulties with accurate and/or fluent word recognition and by poor spelling and decoding abilities

- Fluency, automaticity, decoding and spelling are directly influenced by a deficit in the phonological component of language.



It is unexpected in relation to other cognitive abilities

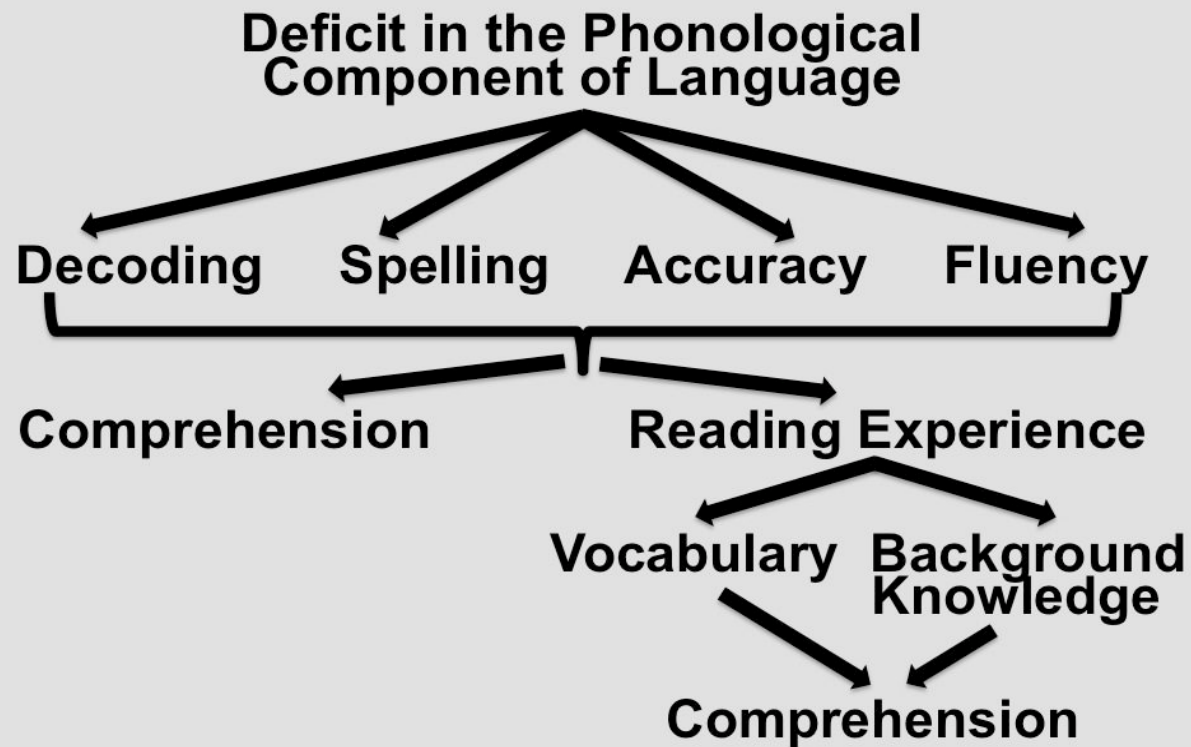
- The deficit involved exists in the presence of persisting strengths and cognitive assets
- There is no truth to the assumption that persons of average or even limited intelligence can't also have dyslexia
- Dyslexia is an equal-opportunity deficit.



Secondary consequences - comprehension, reduced reading experience, impaired vocabulary and background knowledge

The primary goal of reading is to comprehend the meaning of text. The individual with dyslexia can't decode a word. No decoding – no access to meaning—and if you don't read—the vocabulary and background knowledge necessary for efficient comprehension do not develop. Therefore, comprehension is a derivative and indirect casualty of not being able to identify words accurately.

2002 DYSLEXIA DEFINITION



Terminology

| Labels | Dx Areas | Dx Terms | Spectrum Terms |
|---------------------------------|----------------|---------------------------|--------------------|
| Learning Difficulty | Orthography | Orthophonological | Mild |
| Specific Learning Disability | Phonology | Phonologically Dominant | Moderate |
| Specific Reading Disorder | Morphology | Orthographically Dominant | Severe |
| Literacy Disability | Working Memory | Surface Dyslexia | Profound |
| Reading and Spelling Disability | | Deep Dyslexia | Treatment Resistor |
| Learning Differences | | Dyseidetic | |
| | | Dysphonetic | |



Terminology (Cont')

Delay - Mild

Implies a mild problem from which in time the child will recover without organized intervention. Often suggests a differential of about 12 months

$$CA = 800 \quad RA = 700$$

NB: 12 month delay at 7 yrs may be more serious than a 12 month delay at 12 yrs



Terminology (Cont')

Difficulty - Moderate

Implies a moderate problem that may or may not be caused by non constitutional factors and from which the child will recover if tutored or simply applying greater effort or spending more time. May be 18 months behind.



Terminology (Cont')

Disability - Severe

Implies a severe, specific neuro-developmental problem that is constitutional to the child, separate from other difficulties and that will not recover unless treated with a designed and systematic intervention. Could be lifelong. May be over 24 months behind



Terminology (Cont')

Profound

“Overwhelming”

Usually reserved for older students who are several years behind and for who remediation has made little change or is no longer viable



Terminology (Cont')

Treatment Resistor

- Do not respond to any form of intervention no matter how explicit, intense or frequent or for how long the treatment is administered.
- Between 2-4% of the Dyslexic population could be Treatment Resisters (Torgesen 2000, van Kraynaard 2006)
- No Predictive Model



Terminology (Cont')

Other Dys's

- Dysgraphia (Cognitive Dysgraphia)
- Dyscalculia (Maths)
- Dyspraxia (Motor)

Dyslexia is a separate pathology from other learning disabilities including SLI and ADHD



Just a Few Facts

- It is the most common form (80%) of learning disability
- Approximately 20% of the population has a learning problem to some degree
- Approximately 16% of the population has moderate to significant problem with Literacy (LDA Surveys - 2012)
- In the 1990's research suggested 10% of population



Facts (Cont')

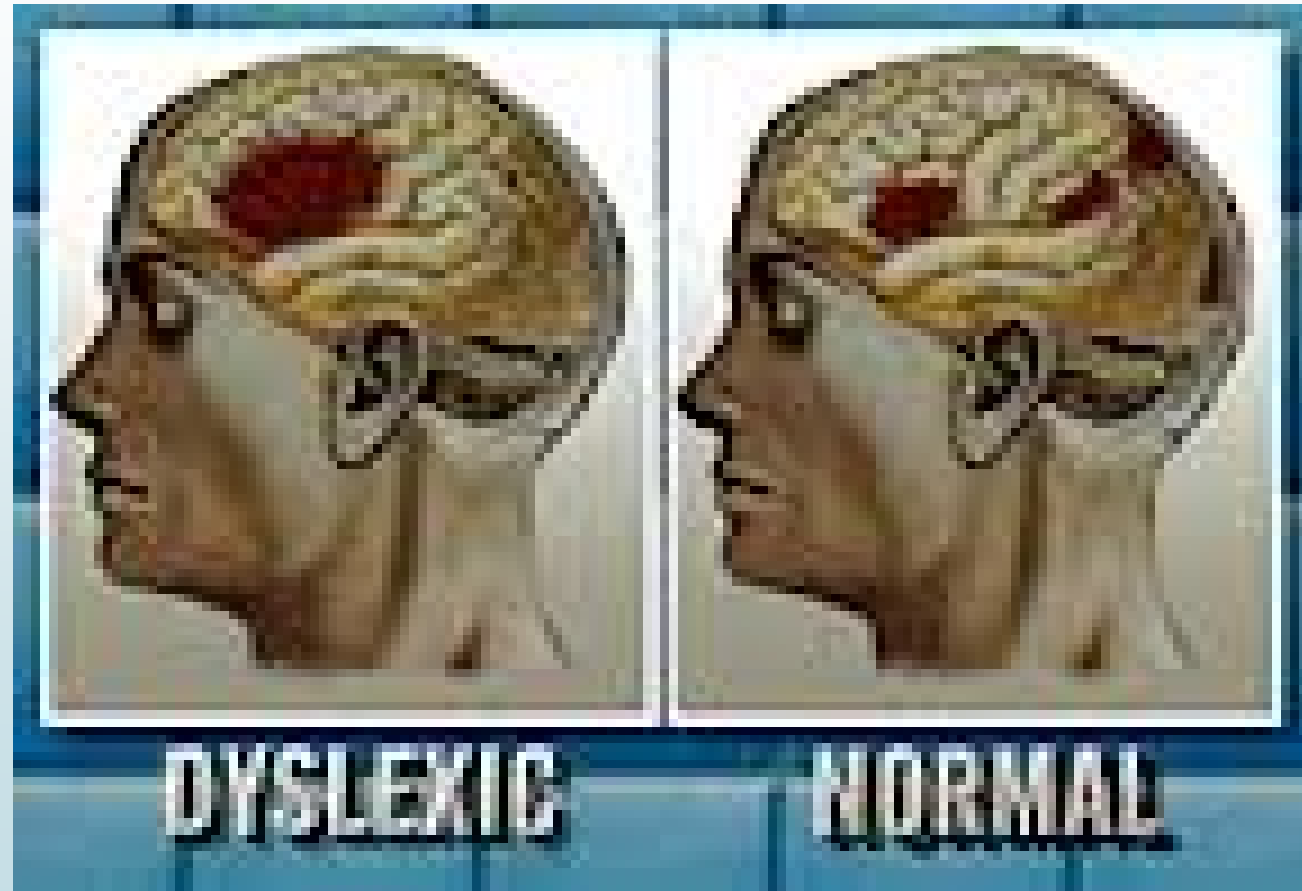
- There are at least 6 Chromosomes identified as causal to Dyslexia. Some studies suggest as many as 10
- There is about 50% chance of a boy having dyslexia if his father has a reading disability and about 40% if his mother has a reading disorder; the chances are lower for girls (Snowling, 2004). It is clear then that a parent with dyslexia will not automatically have a child with dyslexia.



Facts (Cont')

- Dyslexia is not a disorder of the ocular, aural or vestibular systems
- Dyslexia cannot be outgrown
- Dyslexia cannot be diagnosed by any one test or set of tests
- Dyslexia has a **neurological** signature

Neurological Signature

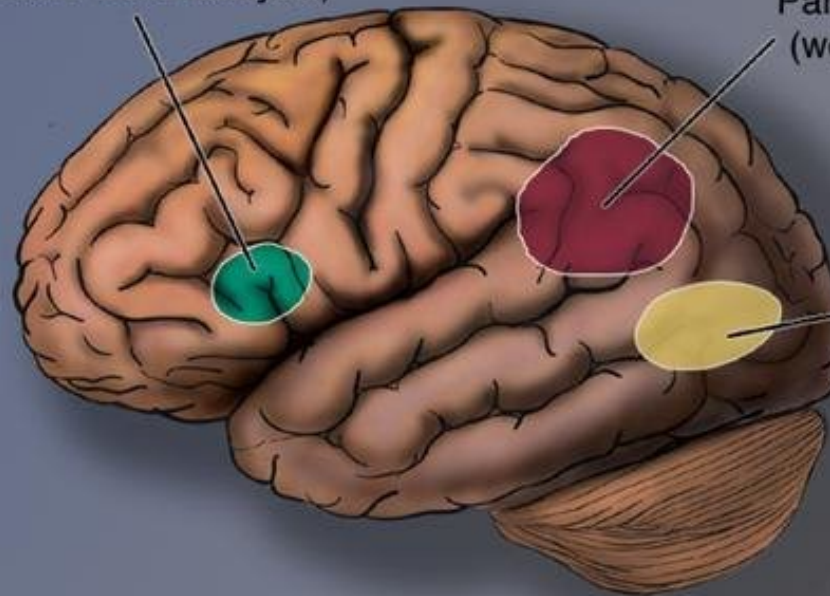


Reading Systems in Brain

Broca's area
Inferior frontal gyrus
(articulation/ word analysis)

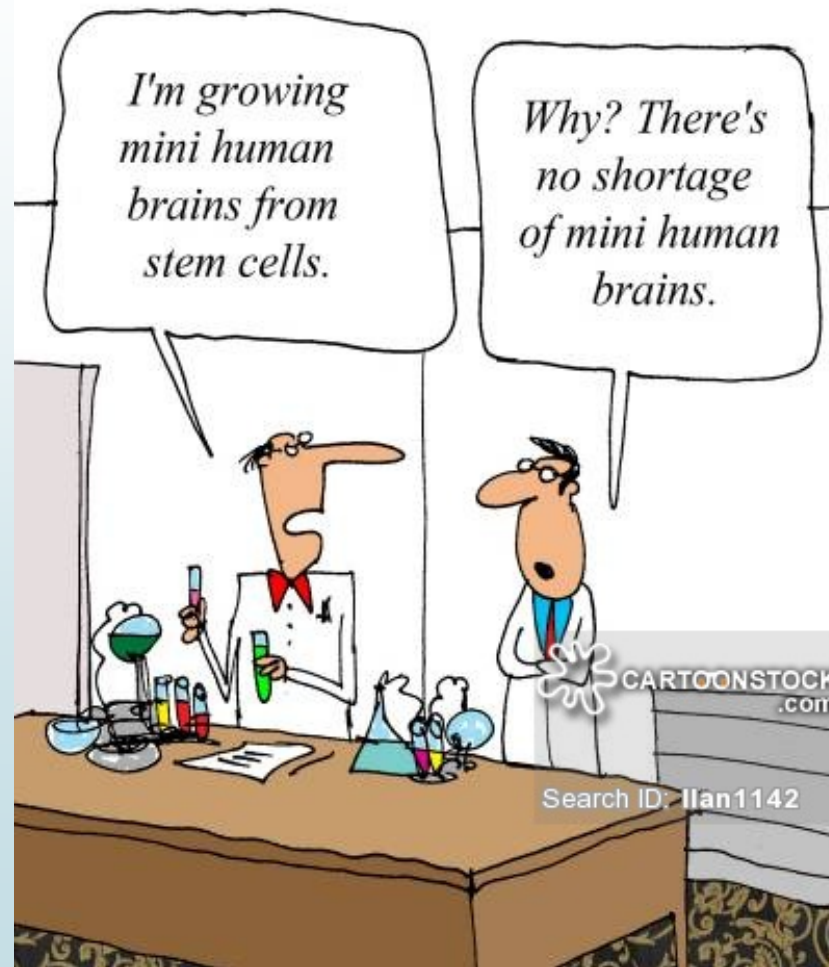
Parieto-temporal
(word analysis)

Occipito-temporal
(word form)

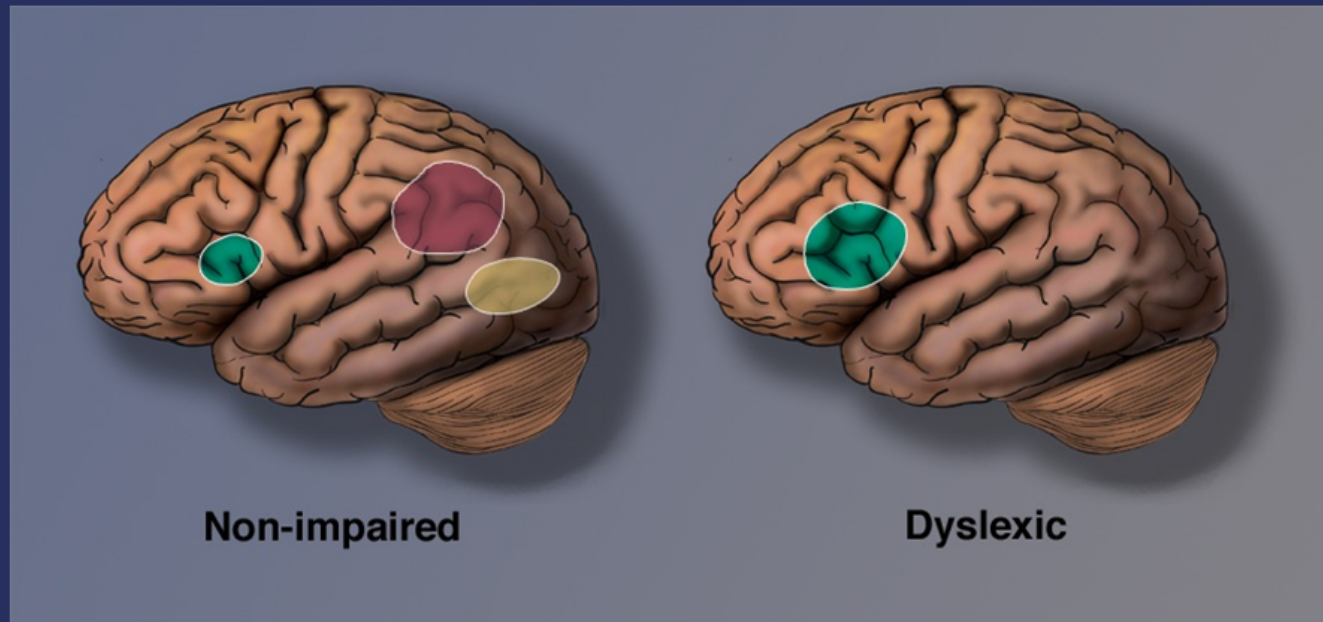


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What are researchers looking for?



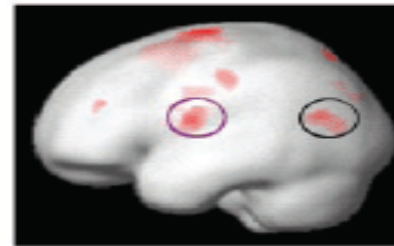
Neural Signature for Dyslexia: Inefficient Posterior Reading Systems



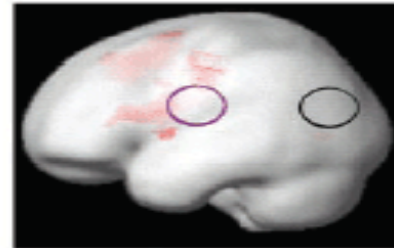
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A Children with no remediation

Normal reading children
while rhyming



Dyslexic reading children
while rhyming
before remediation



B Dyslexic children increases after remediation



Fig. 1. Neural effects of remediation in children with developmental dyslexia. (A) Left hemisphere activations of control children and children with dyslexia are shown during rhyming (as compared with matching) letters ($P < 0.025$, 20-voxel threshold; ref. 12). (B) Brain areas that showed increased activity during phonological processing in the dyslexic group after remediation. Shown at $P < 0.01$, 20-voxel threshold. Black circles highlight left temporo-parietal region, which is disrupted in children with dyslexia and affected by remediation. Purple circles highlight the left frontal region that is active in control children and is affected by remediation in children with dyslexia.



Typical Profile

Child is:

- Bright (Average or better IQ)
- Specific problems with written text
- Persisting Strengths in creative, hands on areas, intuitive, imaginative
- Significant disparity between overall ability (physical/cognitive) and literacy development
- On investigation there are hereditary factors
- On investigation there are no obvious reasons (accident, illness, injury)



Diagnosis

Who Diagnoses and How to Do It

Who?

Diagnosis - Who

| | Diagnosis | |
|---------------------|-----------|--------------------|
| | | |
| Informal | | Formal |
| (Susp. and Concern) | | (Define and Treat) |
| • Teachers | | • Medical (Paeds) |
| • Parents | | • Ed. Psych |
| | | • Neuro. Psych |
| | | • Qual. Sp. Ed |



Diagnosis – Who (Cont')

Teachers - Informal

Based on 'Concern' and 'Suspicion'

- Communicate Concerns Early
- Make Recommendations/Refer



Diagnosis – Who (Cont')

Parents - Informal

Based on 'Concern' and 'Suspicion'

- Confirm Concerns with Teacher and get advice from Secondary Professional Source
- Become an Educated Person



Diagnosis – Who (Cont')

Some Medical Doctors - Formal

Based on 'Evidence, Enquiry and Clinical Judgement'

- Uses IQ/Performance Model but usually does not use tests
- Clinical skills
- Legal Diagnosis
- (f)MRI - Check for Neurological Signature. Only Used for Research (Not in Australia)



Diagnosis - Who (Cont')

Ed. Psych and Neuro Psych / Special Education - Formal

Based on 'Evidence, Enquiry and Clinical Judgement'

- Background and Hereditary Information
- Cognitive Tests
- Academic and Scholastic Tests
- Processing Tests
- Clinical Skills



Diagnosis – Who (Cont')

- In Australia 'Legally' only a medical specialist can Diagnose Learning Disability – For the Law Courts
- Current Industry Practice Prefers Clinical Educational Psychologists (Dx Only)
- Educational Specialists diagnose for the purpose of informing instruction
- Schools DO NOT NEED a Diagnosis in order to support a child – Dangers in doing this
- NAPLAN Rules require a diagnosis to secure special provisions



Diagnosis

Who Diagnoses and How to Do It

How?



Diagnosis - How

Diagnostic Models

1. IQ : Performance Discrepancy Model
2. Phonological Processing and Orthographic Processing Deficit Model
3. “Sea of Strengths” Model
4. Reading Language Spectrum Model



Diagnosis – How Model 1

1. IQ : Performance Discrepancy Model

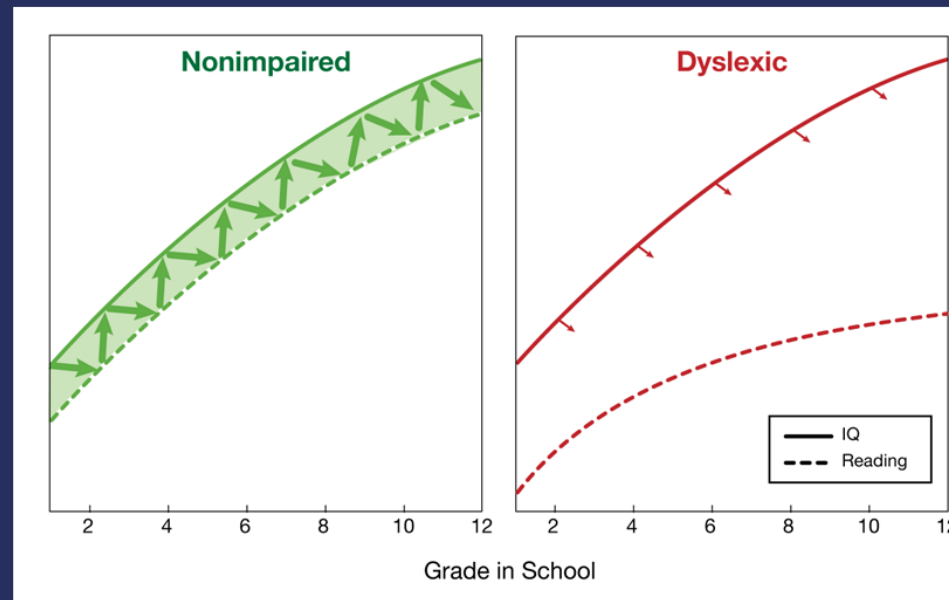
Simply states that there is either a statistically or clinically significant disparity between the child's IQ (overall cognitive ability) and their scholastic performance

Not as “Weighty” as it Use to Be

IQ : Performance Discrepancy Model

Non-impaired:
IQ-Reading Linked

Dyslexia:
IQ-Reading Diverge



Based on Ferrer et al., 2010



Diagnosis – How Model 2

2. Phonological Processing and Orthographic Processing Deficit Model

Phonological Processing

Refers to the use of phonological information, especially the sound structure of one's own oral language, in processing written language (i.e., reading, writing,) and oral language (listening, speaking) (Wagner and Torgesen 1987)



Diagnosis – How (Cont')

Phonological Processing

Three Composite Areas:

- Phonological Awareness
- Phonological Memory
- Automatic Rapid Naming



Diagnosis – How (Cont')

Phonological Processing

Phonological Awareness:

An Intuitive Yet Conscious Awareness of the Smallest Units of Sounds (Phonemes) that Make Up Spoken Words and the Subsequent Ability to Manipulate these Sounds

(McGowan 2003)



Diagnosis – How (Cont')

Phonological Processing

Phonological Memory (WM Component):

Refers to the coding of phonological information for temporary storage in working or short term memory



Diagnosis – How (Cont')

Phonological Processing

Automatic Rapid Naming:

Refers to the rapid and efficient retrieval of phonological code. When reading we retrieve:

1. Phonemes Associated with Letters or Letter Pairs
2. Pronunciations of Common Word Segments
3. Pronunciation of Whole Words



Diagnosis – How (Cont')

Orthographic Processing

This refers to the visual-symbol, visual-spatial and pattern based processing aspect of reading. It does not refer to the eyes or the ocular system. Nor does it refer to Irlen Syndrome (Scotopic Sensitivity Syndrome)



Diagnosis – How (Cont')

Orthographic Processing

Orthographic Errors Fall into Five Categories:

1. Orthographic Choice
2. Semantic Whole Word Substitutions
3. Perceptual Analysis
4. Eidetic Memory
5. Controlling Consonants



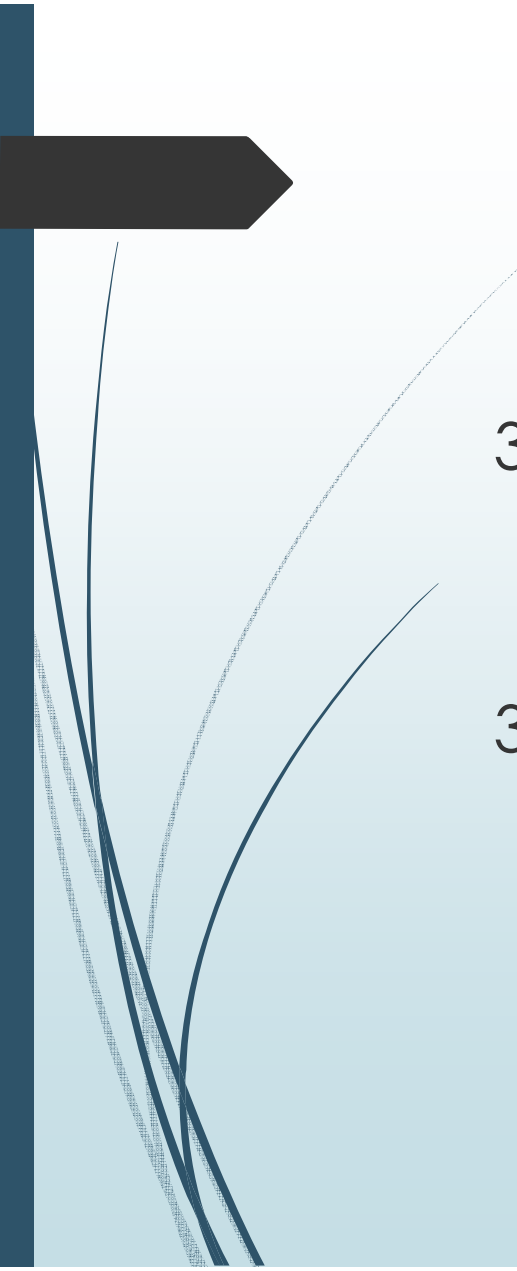
Diagnosis – How (Cont')

Orthographic Processing

Orthographic Choice:

This can be thought of in at least four ways.

1. An incorrect choice between vowel-consonant /e/ pattern and vowel-vowel pattern when both are phonologically acceptable. E.g.; 'bote' or 'boat'.
2. A problem choosing between letter order. E.g.; 'brithg' or 'brihgt' or 'brighth' or even 'Bright'

- 
3. Correctly spelling homonyms, homophones and homographs relative to their meaning
 3. Spelling the sound 'k' on the end of a one syllable word: /ck/, /ke/, /k/



Diagnosis – How (Cont')

Orthographic Processing

Semantic Whole Word Substitutions:

This means that the child reads a word that is visually similar with or without the same meaning, e.g.; 'taking' for 'talking' or a word that is visually dissimilar but may have a similar meaning such as 'eight' for 'nine'. "The boy has *eight* books." The boy has *nine* books.



Diagnosis – How (Cont')

Orthographic Processing

Perceptual Analysis:

- Perceptual Analysis refers to single letter or whole word reversals.

p/b/d/q/ w/m u/n

A competent 4 ½ yr old who does not yet know the letter /u/ may describe it as an 'upside down' /n/

However, a child with orthographic difficulties will maintain confusion around these symbols



Diagnosis – How (Cont')

Orthographic Processing

Eidetic Memory:

Eidetic memory is literally, 'vivid imprint'. It refers to how readily a child can store and recall the correct whole form of a word from long term memory. It is particularly valid for phonologically implausible and or orthographically unique words like, *laugh, said, yacht, tongue* etc.



Diagnosis – How (Cont')

Orthographic Processing

Controlling Consonants:

Came about due to pronunciation changes as phonological history progressed

Graphophonemically it describes a pattern where the controlling consonant follows a vowel letter (a,e,i,o,u) and creates a 'new' sound where the typical sound of the vowel and the consonant can no longer be heard

- R- Controlled (4 main sounds – 21 orthographies)
- W-Controlled (5 sounds – 3 orthographies)
- L – Controlled
- N - Controlled



Diagnosis – How Model 3

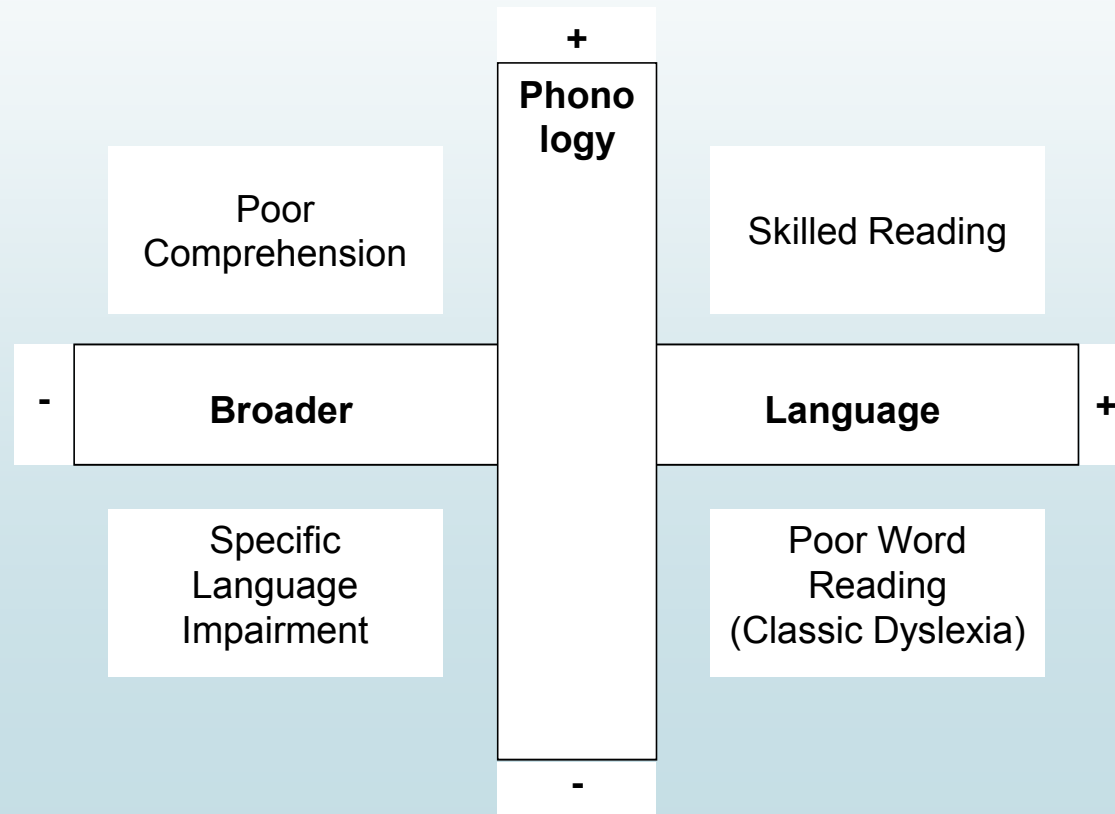
3. “Sea of Strengths” Model

Certain Strengths are Behaviourally Associated with Dyslexia but necessarily ‘gifted’

| Construction | Art |
|--------------|--------------------------|
| Music | I.T |
| Drama | Sport |
| Maths | Drawing |
| Oratory | Perception and Intuition |
| Design | Story Telling |

Diagnosis – How Model 4

4. Reading Language Model (Spectrum)





Diagnosis – How (Cont')

Collecting Evidence and Making Decisions

- Background and History
- Tests Results
- Clinical Decision



Diagnosis – How (Cont')

Collecting Evidence and Making Decisions

Clinical Decision

Standardized numerical data should always be interpreted in the context of the clinical setting in which it was collected and should be generally interpreted only by the person who collected the data. Isolated test scores that are provided to non testing professionals are therefore usually of minimal value



Diagnosis – How (Cont')

Collecting Evidence and Making Decisions

Clinical Decision

Disorders of learning are now considered to be a strictly clinical diagnosis. This means that the child's history, clinical performance and the practitioner's clinical skills are the essential components that contribute to the conclusions drawn. The type of tests used and the standardized information that such tests provide are of less value



Treatment / Management

Who?



Treatment /Management (Cont')

Who?

- Teachers (CRT, LST) – In Class – Teacher Driven Approach
- Whole School Approach (Prefabricated Program)
- Specialist Intervention (Often Private)
- Other Specialists (Medical and Allied Health, A.T)



Treatment /Management - **Teachers**

- Start with the child – get to know them
- Early and repeated success
- Extra attention to motivation
- Be prepared to use various resources and materials that other students don't need or use



Treatment /Management - Teachers

- Look for how teaching points can be presented in a multi-sensory way – No Shaving Cream or Sandpaper
- If the child has difficulty, investigate a 'new level of explicitness'
- Don't assume organization. It is a taught skill
- Don't assume understanding just because you have confidence in your teaching



Treatment /Management - Teachers

- Limit reading demands
- Aim reading material at interest and intellect level but be prepared to deliver differently
- Paired / Buddy system
- Audio reading
- 1:1 or '4 on the floor' (small group teaching)
- Negotiate homework



Treatment /Management - **School**

Intervention: Two Broad Approaches

Prefabricated (On the Market) Programs:

(Barton, Hickey, Wilson, Alpha and Omega, The Sound Way, Reading Horizons, Great Leaps, Cracking The Code
Lindamood (etc)

Eclectic Yet Prescriptive:

Individualised (customized) programs that progress on the principle of Response to Intervention (RTI)



Treatment /Management - School

Prefabricated (On the Market) Programs

**Schools Should Consider Purchasing and Training in an
Evidence Based Program**



Treatment /Management - School

The following points are a guide when considering which program is best

1. **Cost:** This includes cost of resources to be delivered to the school. Cost of ongoing updates. Teacher training costs.
2. **Teacher Training Time**
3. **Lesson Preparation Time**
4. **Accessible Human Support for Technical and Pedagogical Troubleshooting**
5. **Suitability for Students Relative to Age and Degree of Problem**
6. **Suitability to Wider Group**
7. **Potential Use in Future Years**



Treatment /Management - **Specialist**

Eclectic Yet Prescriptive

Individualised (customized) programs that progress on the principle of Response to Intervention (RTI)

RTI as a measuring tool that not only provides feedback on student progress but helps inform instruction on an ongoing basis

Remember we teach children NOT programs



Treatment /Management – **Medical and Allied Health**

Medical professionals do not manage Dyslexia or run interventions

The general position of the Educational authorities in the UK and USA is that the management of Learning Disabilities and the administration of educational remedies is the responsibility of Special Education.

Allied health such as Speech Pathology and Occupational Therapy are not considered 'primary' to the recovery of disorders of learning



Treatment and Management

Who?

How?



Treatment /Management

Eight Important Principles

1. Multisensory
2. Alphabetic and Graphophonemic
3. Direct, Explicit, Repetitive, Drill-like Instruction
4. One on One
5. High Intensity, High Frequency, Moderate Duration
6. Systematic and Cumulative
7. Goal Driven
8. Response to Intervention (RTI)



Treatment/Management

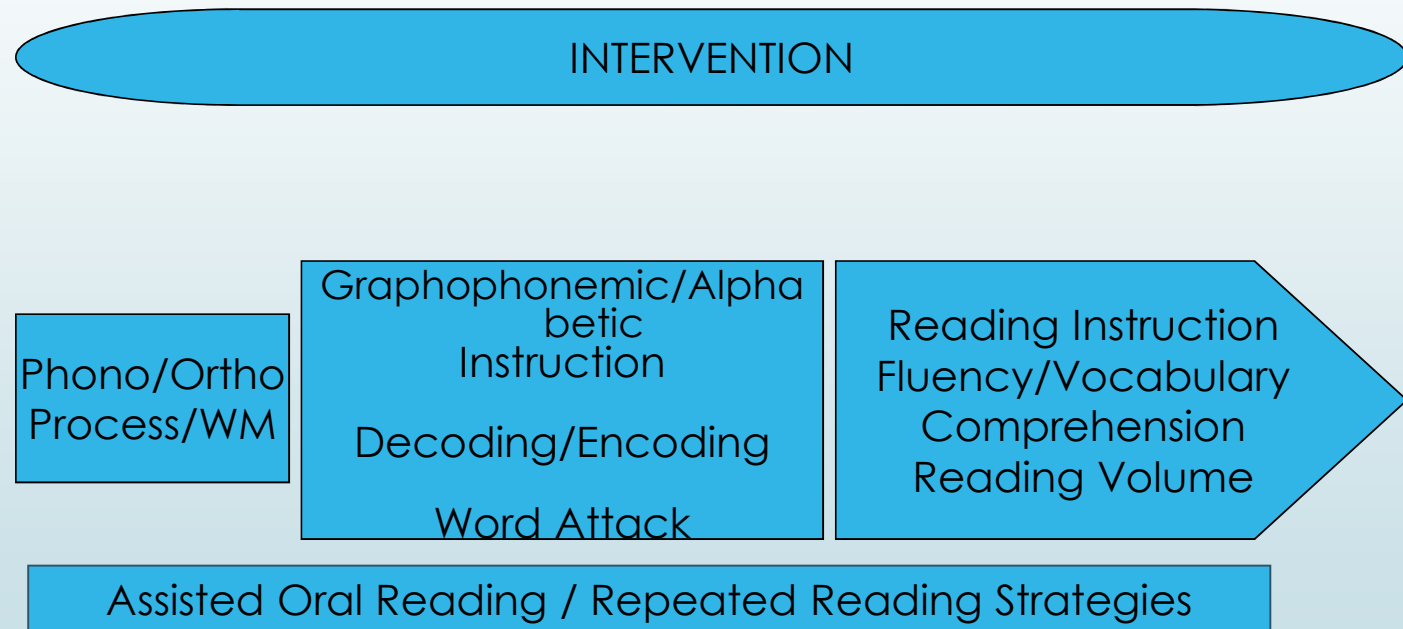
Three Treatment Models

Multi Stage Model

Multi Plan Model

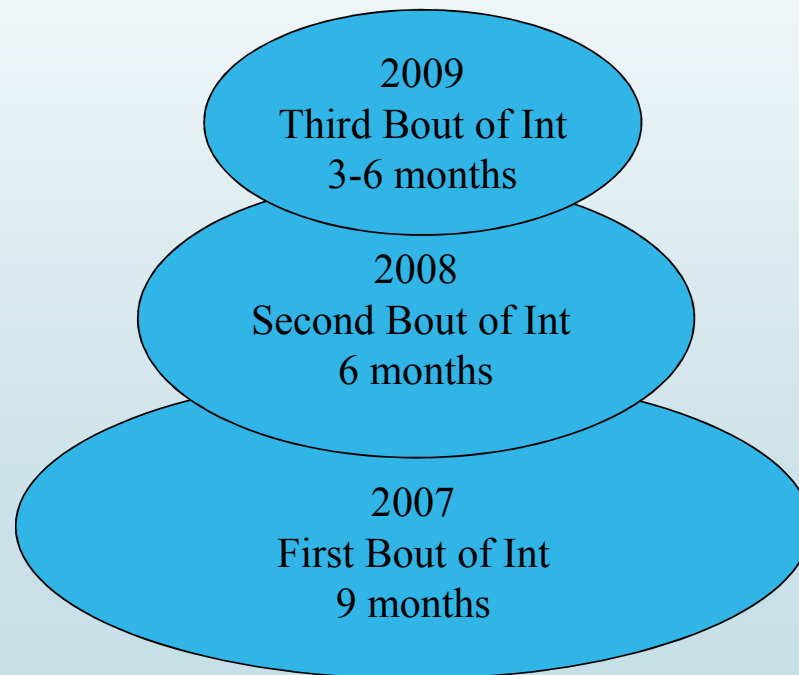
Multi Test Model

Treatment/Management - **Multi-Stage Model**

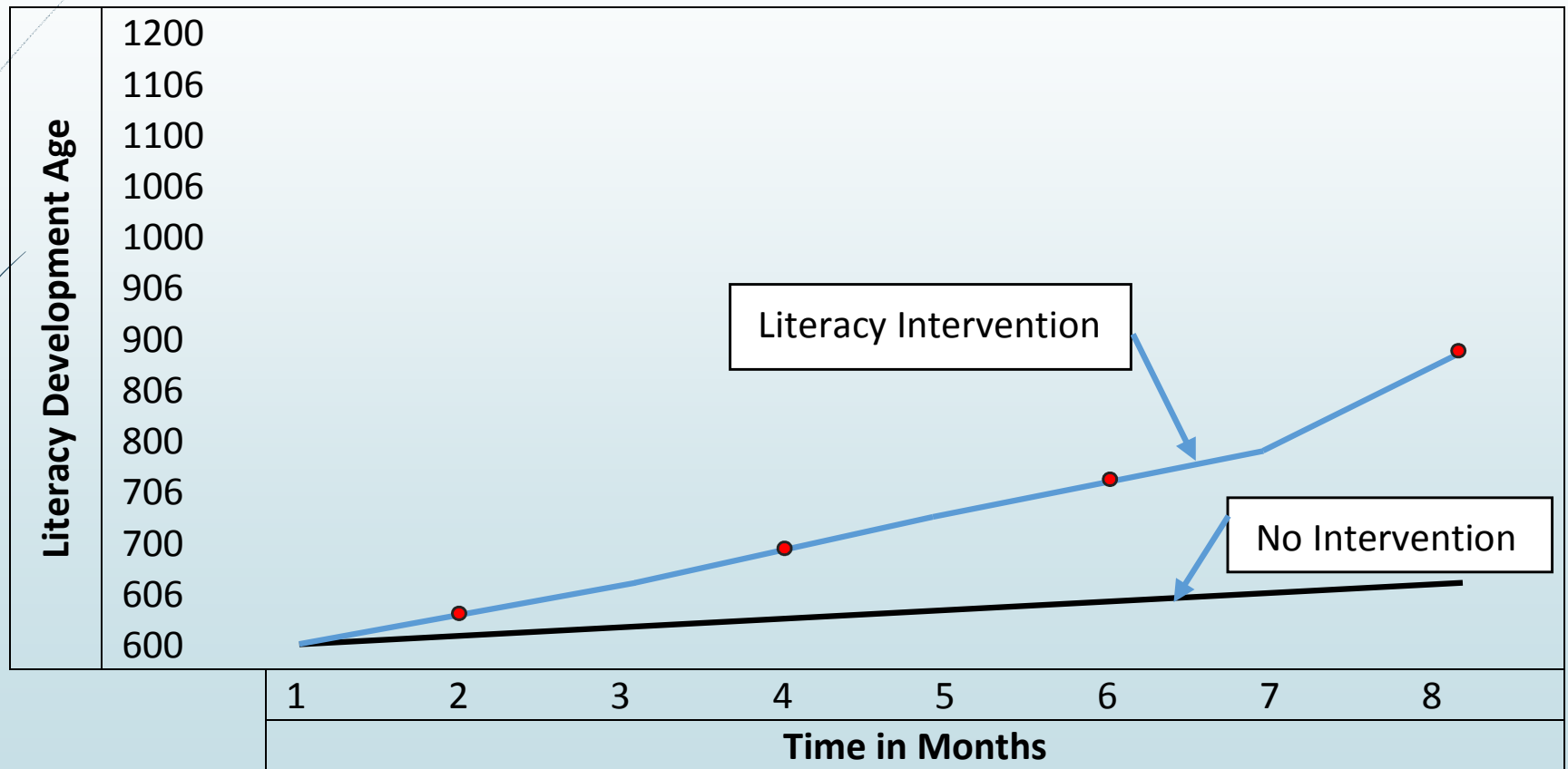


Treatment/Management - **Multi-Plan Model**

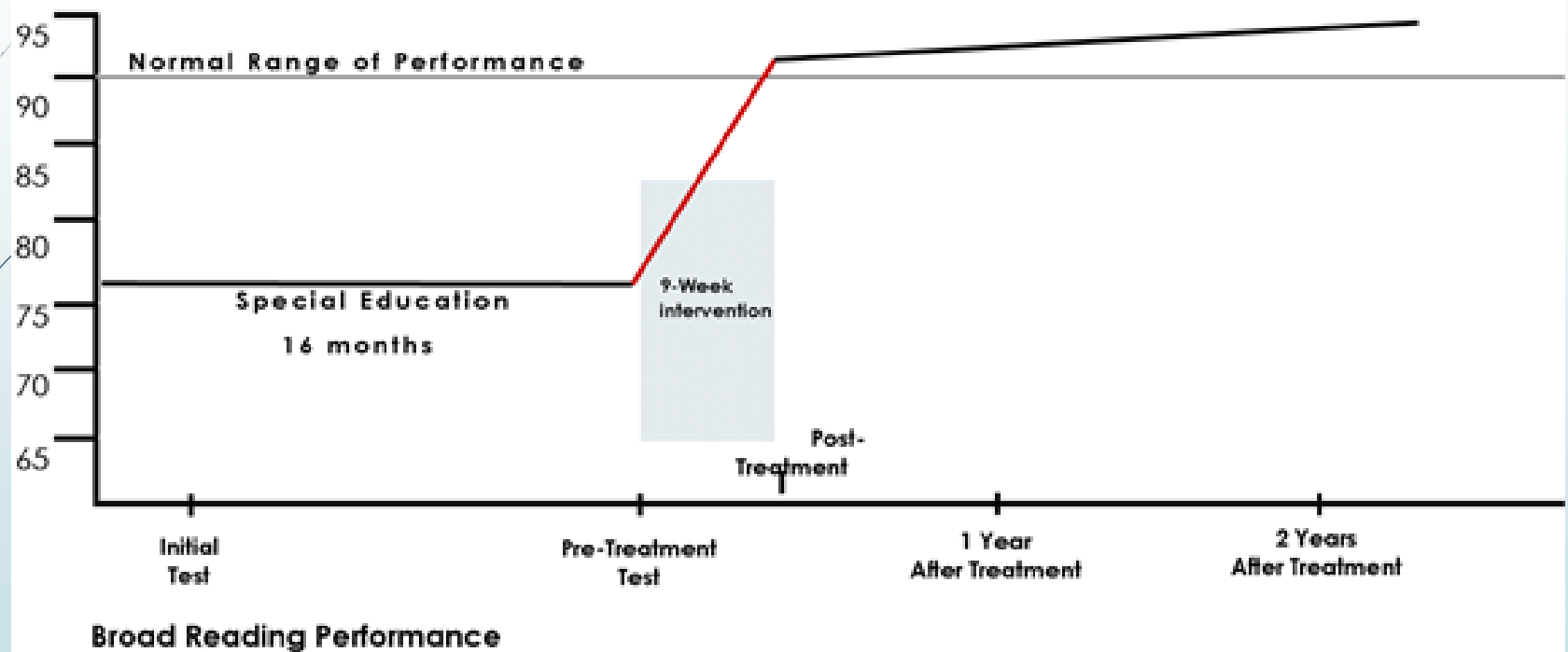
Plans or 'Bouts' of Intervention



Treatment/Management - **Multi-Test Model**



Federally-Funded Research Evidence: Immediate & Lasting Results



Data from NICHD-sponsored research grant by Torgesen, J., Alexander, A., Wagner et al 2001 (Journal of Learning Disabilities 2001; 34: 33-59)

Treatment/Management - **How to Measure Efficacy**





Treatment /Management - Efficacy

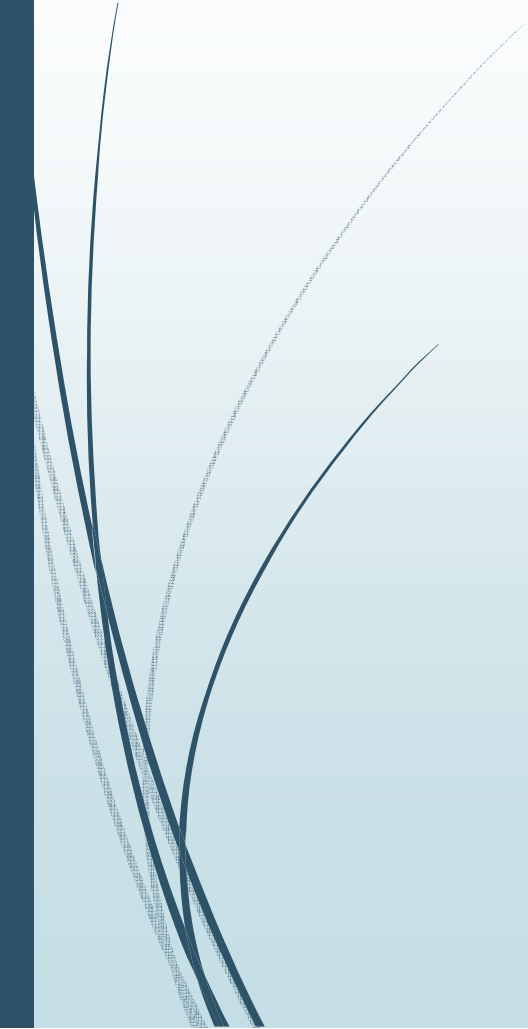
Program Efficacy-Levels

- **Level 1.** Follows current theory and research. Treatment efficacy is supported by randomised control trials (RCTs). Reading Horizons, Great Leaps, Barton, Wilson, Hickey, Rave-O
- **Level 2.** Follows current theory and research but not supported by fully RCTs. Example: Understanding Words



Treatment /Management - Efficacy

- **Level 3.** Generally follows current theory and research but supported by little or no empirical evidence.
Example: THRASS.
- **Level 4.** Makes no conceptual sense in terms of current research but may claim empirical evidence for efficacy. Example: FastforWord, Cellfield, DORE, Reading Recovery
- **Level 5.** Based on assumptions counter to substantial scientific evidence. Any data on efficacy should be viewed with considerable skepticism.
Example: behavioural optometry /vision therapy





Coexisting Conditions

In order of 'threat' to Learning - assuming normal intellect

- Anxiety
- ADHD
- Sleep Disorder
- ASD
- SSS



Coexisting Conditions - **ASD**

- Can be hyperlexic but not fluent
- Almost always struggles with inferential and applied comprehension
- Must explicitly teach connections in text
- Manage as Dyslexic for decoding and encoding problems
- Manage as Dyslexic for fluency development
- Don't rely on language to support textual gains
 - teach language – morphology, semantics, pragmatics

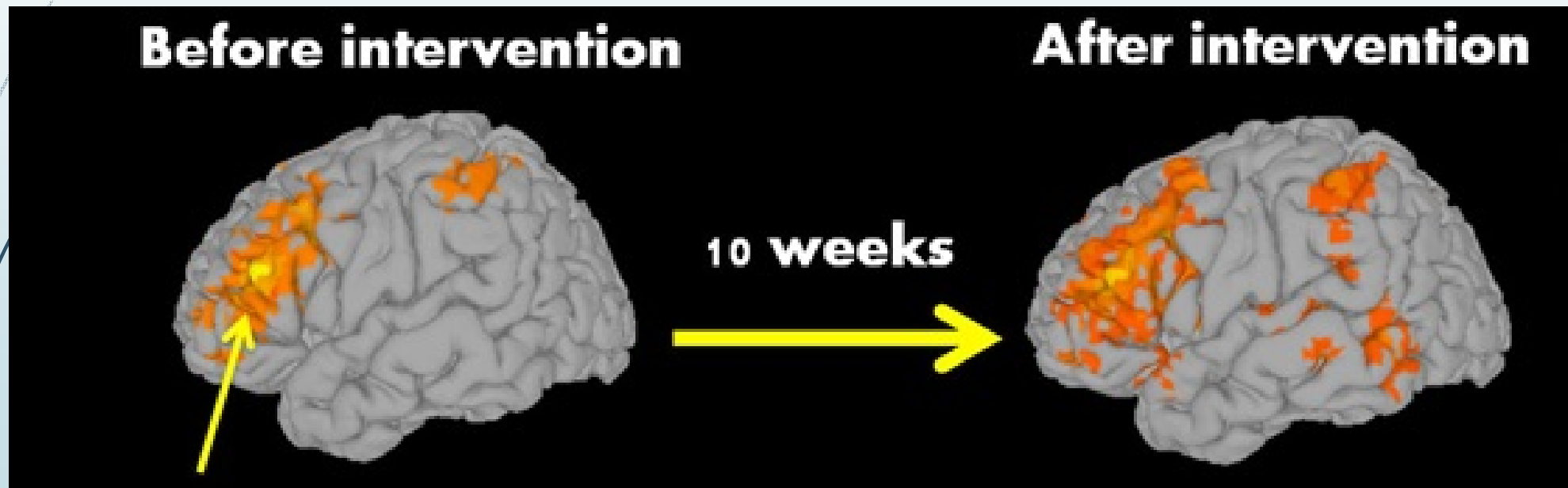


Coexisting Conditions - **ASD**

- Capitalise on strengths – better at visual-spatial processing
- Programs like ‘Visualise Verbalise’ use visual spatial strengths to improve language

Coexisting Conditions – ASD

Results of ‘Visualize Verbalise’ – Patricia Lindamood
and Nanci Bell



Neuroplasticity





Neuroplasticity

Neuroplasticity: The brain's ability to reorganize itself by forming new neural connections throughout life.

Neuroplasticity allows the neurons (nerve cells) in the brain to compensate for injury and disease and to adjust their activities in response to new situations or to changes in their environment.

Explicit teaching changes neuronal activity and structure

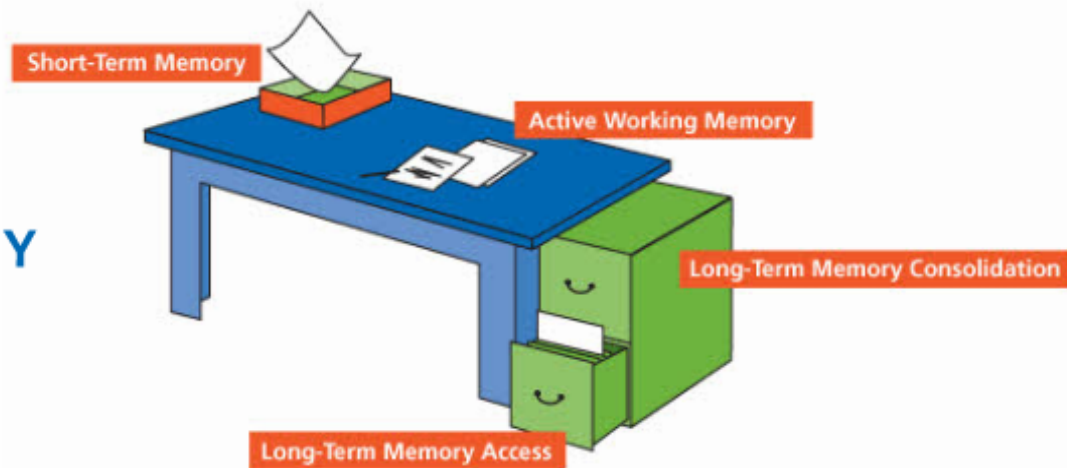
Neuroplasticity – Working Memory



Memory: What is Memory?



MEMORY



MENU

HELP





Working Memory

- Manipulation of Presently Active Information
- Receive and Use or Receive and Lose
(What are my senses telling me?)
- A Form of Multi-Tasking Without Prioritizing
- Holding an Idea in mind while developing, elaborating, clarifying or using it
- Holding the components of a task together in memory while completing the task

Working Memory - Problems

| Behaviours | Academics |
|------------------------------|--|
| Inattention | Holding sounds in order to assist spelling |
| Distractibility | Remembering terminology |
| Impulsiveness | Building gist |
| Immediate Forgetfulness | Comprehending before, during and after reading |
| Excess Movement (stay alert) | Reading speed |
| Fatigue | Fluency: Intonation, Inflection, Expression |
| Sense of Being Overwhelmed | Dictation |
| Frustration | Mental Arithmetic |
| Anxiety | Auditory Instructions |

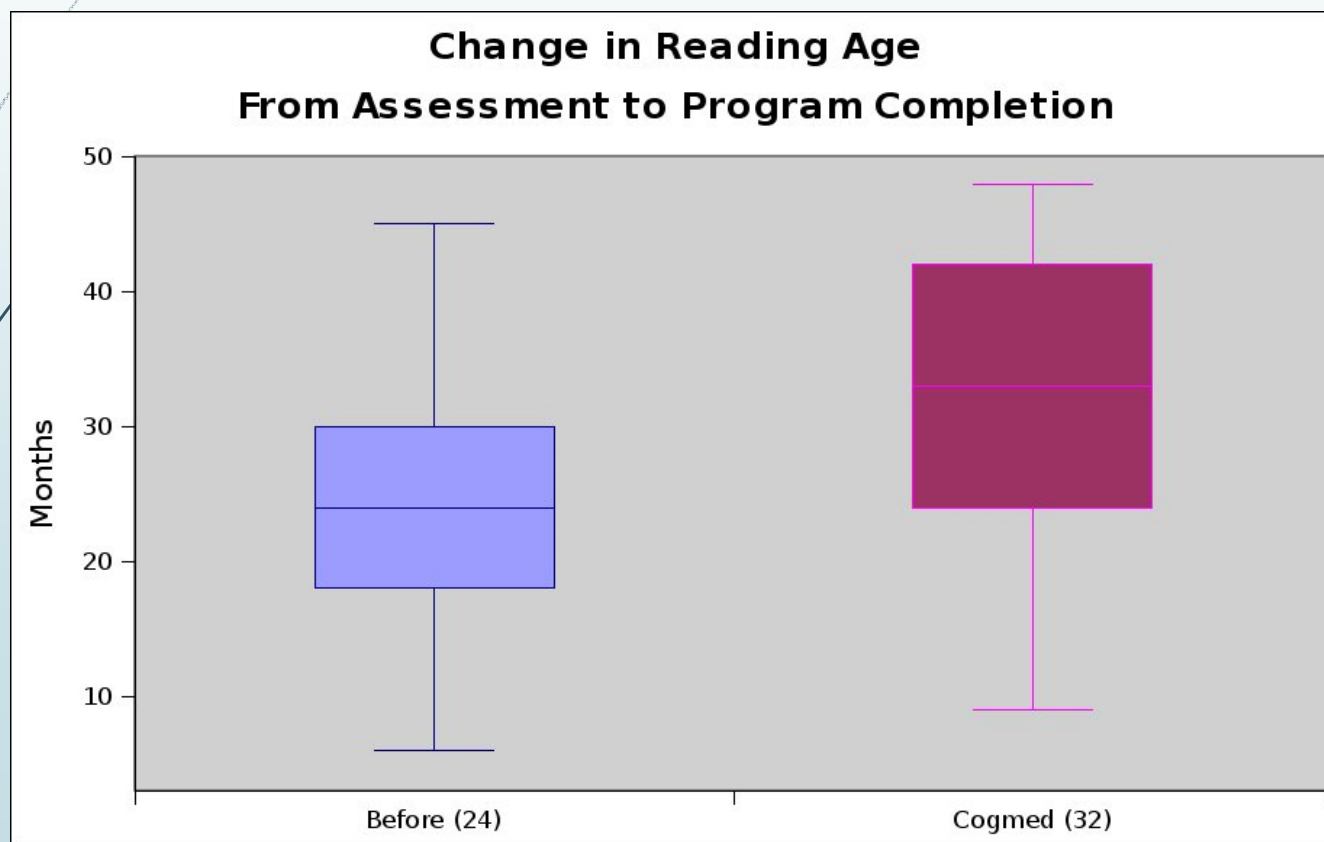


Working Memory – **it can be trained**

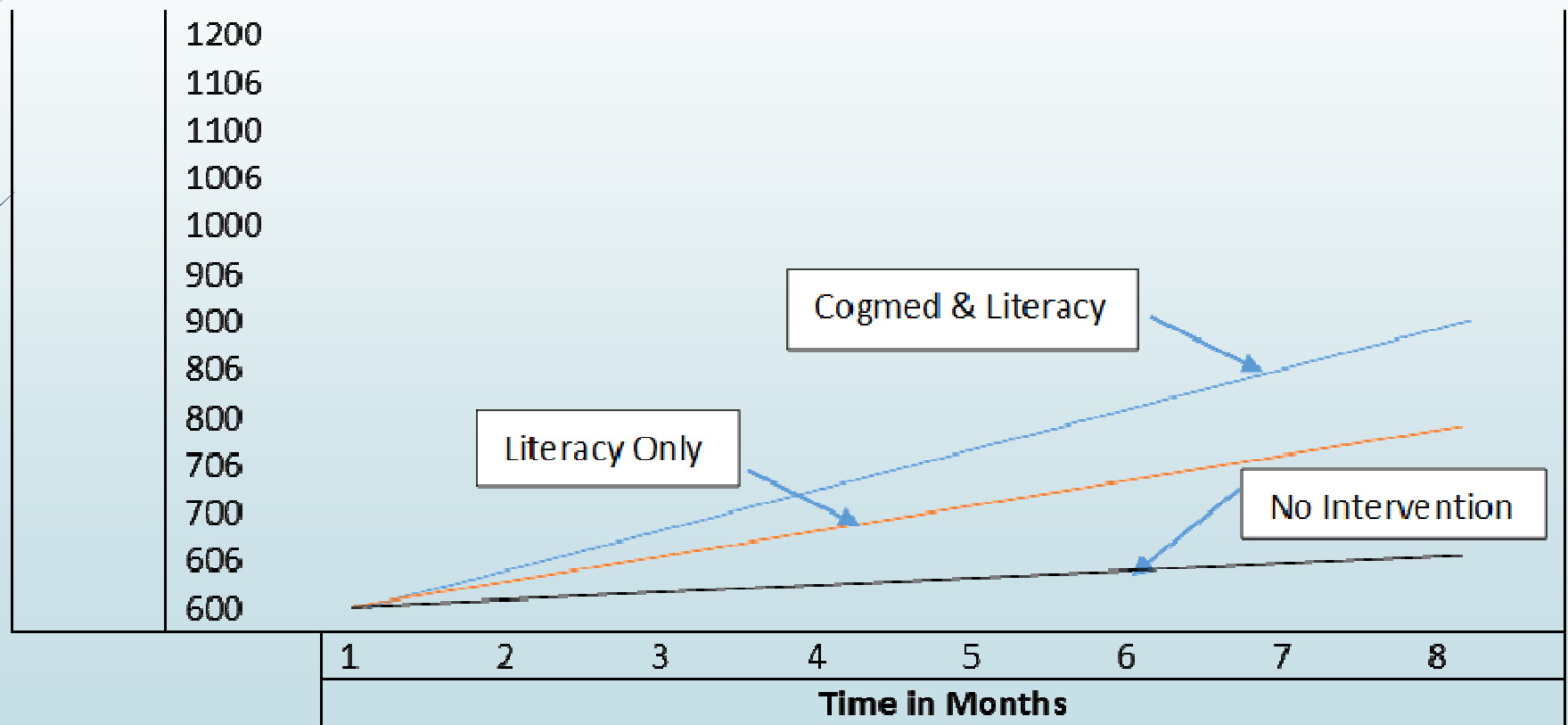
- Large body of research showing the positive effects of training
- A number of WM programs available – usually computer based
- Programs range from next to no research to significant research and evidence
- WM programs alter neurological capacity so as behavioural and scholastic interventions have greater efficacy

Working Memory

| | B | Std. Error | Beta | t | Significance |
|------------|------|------------|------|------|--------------|
| (Constant) | 7.20 | 4.83 | .00 | 1.49 | .14 |
| Cogmed | 8.05 | 1.77 | .34 | 4.55 | .00 |
| Age | .06 | .04 | .12 | 1.60 | .11 |
| Sex | .03 | 1.61 | .00 | .02 | .98 |
| Time | .78 | .20 | .29 | 3.80 | .00 |



Effects of Cogmed on Literacy Outcomes When Used as a Prerequisite to Intervention



Special Considerations – Mental Health





Special Considerations – **Rationale**

The basic and essential premise of Special Consideration is the concept of '**Empathetic Insight**'. The hope is that a proper level of insight into the child's difficulty will lead to an empathetic based policy that governs how the child will be managed in the classroom. It is a way of painting a series of 'do's' and 'don'ts' around the child in order to give him a profitable school day academically and a safe day in relation to mental health.



Special Considerations – Policy Features

Policy

- Not learning support
- Not a written policy
- A policy that governs how to interact with and manage the child in a sensitive and non-discriminatory way relative to his/her disability in the classroom setting on a daily basis
- Essential premise is '**Empathetic Insight**' - Insight equals empathy
- A series of 'do's' and 'don'ts' that provide a successful school day academically and a safe day in relation to mental health.
- Mentally understood behavioural guidelines that the teacher formulates and evokes for herself/himself specifically in relation to the child



Special Considerations - **Modified and Alternative Curriculum**

- **Modified** implies that the child does the same subject matter at the same time as the other students but tasks and expectations have been altered to allow for understanding and success
- **Alternative** implies that a child is completing a curriculum level that may be a grade or more below the default curriculum

Both of these require adjustments to tasks, expectations and reporting



Assistive Technology

- Bypass not Remedial
- Teacher embrace and training
- Remediation gives way to navigation

Myths and Controversial Therapies

"Don't believe
everything you
read!"





Myths and Controversial Therapies - **Two Types of Therapies**

Activity Focused

Performance Focused



Myths and Controversial Therapies

Activity Focused

- **Activity-focused therapies** are based on the theory that what underlies a given learning disorder is a deficit in a simple sensory or motor process. (Eg: If you learn to crawl again balance better etc, you will then read better)
they claim that:
- ... a disorder in some higher aspect of cognition, such as reading is caused by a lower-level deficit in a modality of perception (auditory, tactile, or visual or motor)



Myths and Controversial Therapies

Activity Focused

Activity-focused therapies claim:

- that the lower-level deficit is present in children with the learning disorder
- that the lower-level deficit can be remediated with practice because of brain plasticity
- that fixing the lower-level deficit transfers and thus improves the deficit in higher cognition



Myths and Controversial Therapies Activity Focused

The following groups of therapies are activity focused. They should not be used to treat children for learning problems

- Speed of word processing interventions
- Vision efficiency interventions (Vision Therapy)
- Sound based Activities
- Exercise-based interventions



Myths and Controversial Therapies

Performance Focused

- **Performance-focussed therapies** target symptoms directly and treats them. For example, performance-based therapies for dyslexia would provide direct, explicit instruction and real reading practice in reading itself and have predetermined outcomes and dates of review
- Performance focussed therapies demonstrate 'transference'



Myths and Controversial Therapies

Performance Focused

- Evidence is observable, tangible and measurable
- Directly associated with the learning disorder at the component and whole levels
- The further away the proposed cause is from reading itself, the more sceptical you should be. Problems with the balance system of the brain, is much less plausible than the established theory that dyslexia is caused by a problem in the phonological aspect of language development.



Myths and Controversial Therapies

What To Avoid

- DORE
- Kinesiology
- Behavioural Optometry
- Sensory and Motor Based Programs
- Computer Programs that claim to be remedial
- Physical Exercise Based Programs



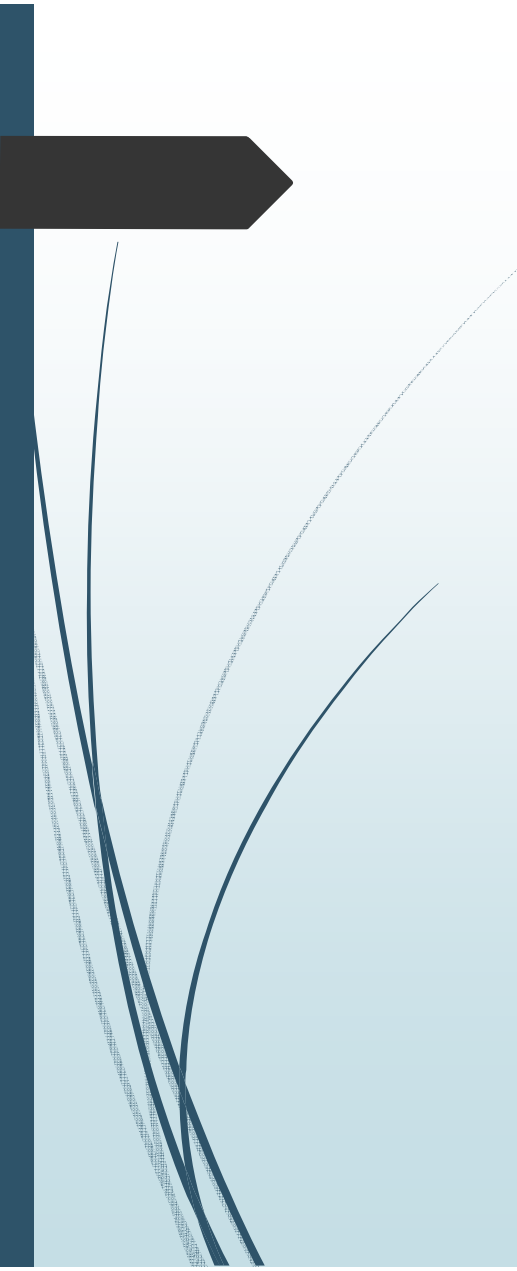
Myths

- It is a myth that dyslexic individuals “read backwards or see letters that are not there.” Spelling can look quite jumbled at times because students have trouble remembering letter symbols for sounds and forming memories for words.
- Dyslexia is not a gift.
- Quick fixes don’t work.



Take Away Messages

- Practice the 'skill' you wish to be better at
- Reading is a taught skill not a biological awakening
- Working Memory Can be trained
- The single greatest factor in the recovery of a child's literacy is the quality of the human instruction
- Teach children NOT programs
- Empathetic insight is as necessary as excellent Instruction
- Mental health remains the priority for all learners



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