

Demystifying Dyslexia/Reading Disabilities: Best Practices for Assessment and Intervention in Public Educational Settings

Jarice Butterfield, Ph. D., CBIS and
Stacy Tolkin, MA LEP



SBCSELPA Website: www.sbcselpa.org



Agenda

- **Introduction to Reading Disabilities/Dyslexia**
- **Assessment of Reading Disabilities/Dyslexia**
- **How Assessment Informs Intervention**



Introduction to Reading Disabilities/ Dyslexia

What is dyslexia in
the context of a
reading disability?

Overview of the
regulations

By Jarice Butterfield

Why is the Word “Dyslexia” the Elephant in the Room???



What We Know about Struggling Readers?

Why should we care about struggling readers?

12.5 million children struggle with some aspect of reading, nearly 20% of all school age children (NCES, 2011).

With regular instruction, children do not outgrow reading difficulties

A child who is a poor reader at the end of first grade has an almost 90% chance of remaining a poor reader at the end of Grade 4 (Juel, 2008) and at least a 75% chance of being a poor reader as long as they are in school (Francis et al., 1995).

Early Intervention is Important



According to the National Institute of Child Health and Human Development (NICHD), it takes 4 times as long to intervene in the 4th grade as it does to intervene in late kindergarten or first grade.

Prevention studies in reading commonly show that 70- 90% of at risk children (bottom 20%) in K- 2 can learn to decode in average range (Fletcher, Lyon, et al., 2007).

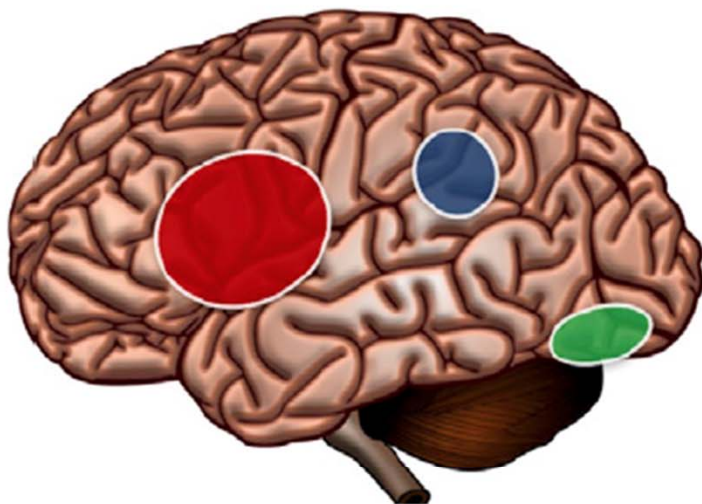
What We Know About Dyslexia

- Is neurobiological in origin
- Is characterized by accurate or fluent word recognition; poor spelling and decoding
- Is frequently caused by or associated with a deficit on **phonological processing** and/or **orthographic processing**
- Is unexpected in relations to cognitive levels of functioning

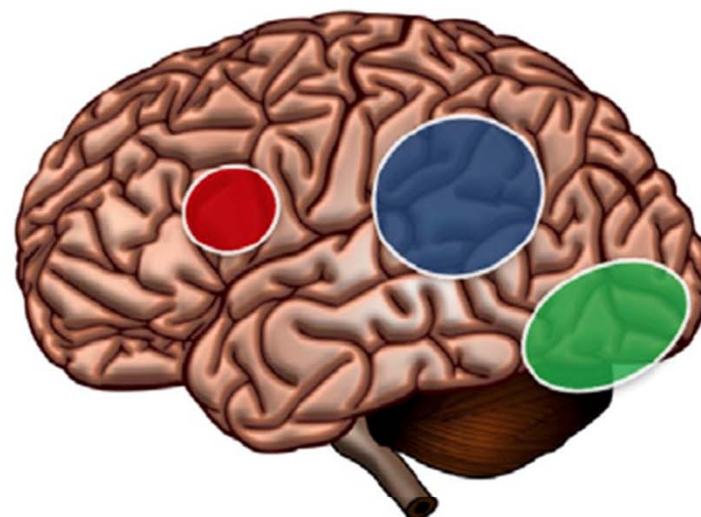


Neuroscience of Dyslexia Continued

BRAIN PATTERNS THAT DYSLEXIC STUDENTS MAY SHOW



BRAIN PATTERNS THAT NON-DYSLEXIC STUDENTS MAY SHOW



- LEFT FRONTAL REGION:** Important for compensation
- LEFT TEMPORO-PARIETAL REGION:** Important for phonological processing and grapheme-phoneme association
- LEFT OCCIPITO-TEMPORAL REGION:** Important for orthographic processing



Characteristics of Dyslexia

- Inability to sound out words
- Limited sight-word vocabulary
- Listening comprehension exceeds reading Comprehension
- Limited response to instruction and intervention



Code of Federal Regulations (CFR §300.8 (10)(i))

“(i) General. Specific learning disability means a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, that may manifest itself in the imperfect ability to listen, think, speak, read, write, spell, or to do mathematical calculations, including conditions such as perceptual disabilities, brain injury, minimal brain dysfunction, **dyslexia**, and developmental aphasia.”



California Education Code 56025.5

"Dyslexia" means a specific learning disability that **is neurological in origin and characterized by difficulties with accurate 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. Other characteristics include, but are not limited to, difficulty in acquiring language skills;



California Education Code 56025.5

(Continued)

inability to comprehend oral or written language; difficulty in rhyming words; difficulty in **naming letters, recognizing letters, matching letters to sounds, and blending sounds when speaking and reading words; difficulty recognizing and remembering sight words; consistent transposition of number sequences, and letter reversals, inversions, and substitutions;** and difficulty in replication of content.



California Education Code 56031.5

"Specific learning disability" includes dyslexia, dyscalculia, dysgraphia, auditory and visual processing disabilities, and related disorders.



California AB 1369

California Department of Education (CDE) to develop ***Program Guidelines*** by 2017-18 for dyslexia to be used to assist regular education and special education teachers and parents *to identify and assess pupils with dyslexia and to plan, provide, and evaluate and improve educational services, as defined with pupils with dyslexia*

Include *“phonological processing”* in the description of basic psychological processes.

The Revised Guidelines are now available at:

<http://www.cde.ca.gov/sp/se/ac/documents/cadyslexiaguidelines.pdf>

California 5 CCR § 3030 (b) (10) Eligibility Criteria

“Specific learning disability means a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, that may have manifested itself in the imperfect ability to listen, think, speak, read, write, spell, or do mathematical calculations, including conditions such as perceptual disabilities, brain injury, minimal brain dysfunction, **dyslexia**, and developmental aphasia. The basic psychological processes include attention, visual processing, auditory processing, phonological processing, sensory-motor skills, cognitive abilities including association, conceptualization and expression.”




California Education Code 56337.5

- a) A pupil who is assessed as being **dyslexic** and meets eligibility criteria specified in Section 56337 and subdivision (j) of Section 3030 of Title 5 of the California Code of Regulations for the federal Individuals with Disabilities Education Act (20 U.S.C. Sec. 1400 and following) category of specific learning disabilities is entitled to special education and related services.

- b) If a pupil who exhibits the characteristics of **dyslexia** or another related reading dysfunction is not found to be eligible for special education and related services pursuant to subdivision (a), the pupil's instructional program shall be provided in the regular education program.



Taken From CDE Dyslexia Guidelines




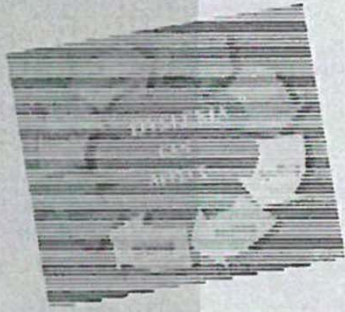
TOM TORLAKSON
State Superintendent
of Public Instruction

International Dyslexia Association

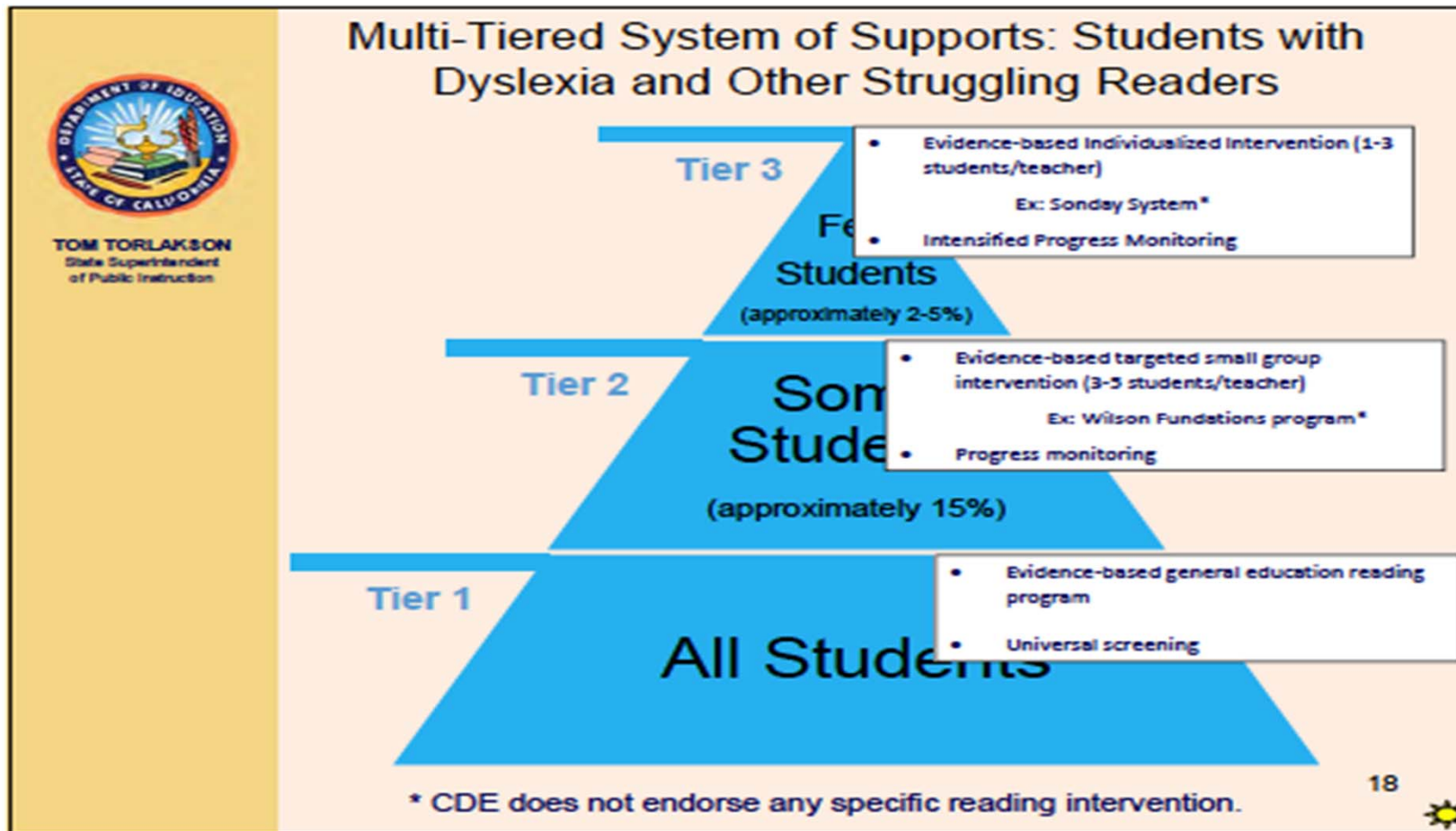
Dyslexia is a

- Specific learning disability that is **neurobiological** 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 growth of vocabulary and background knowledge.

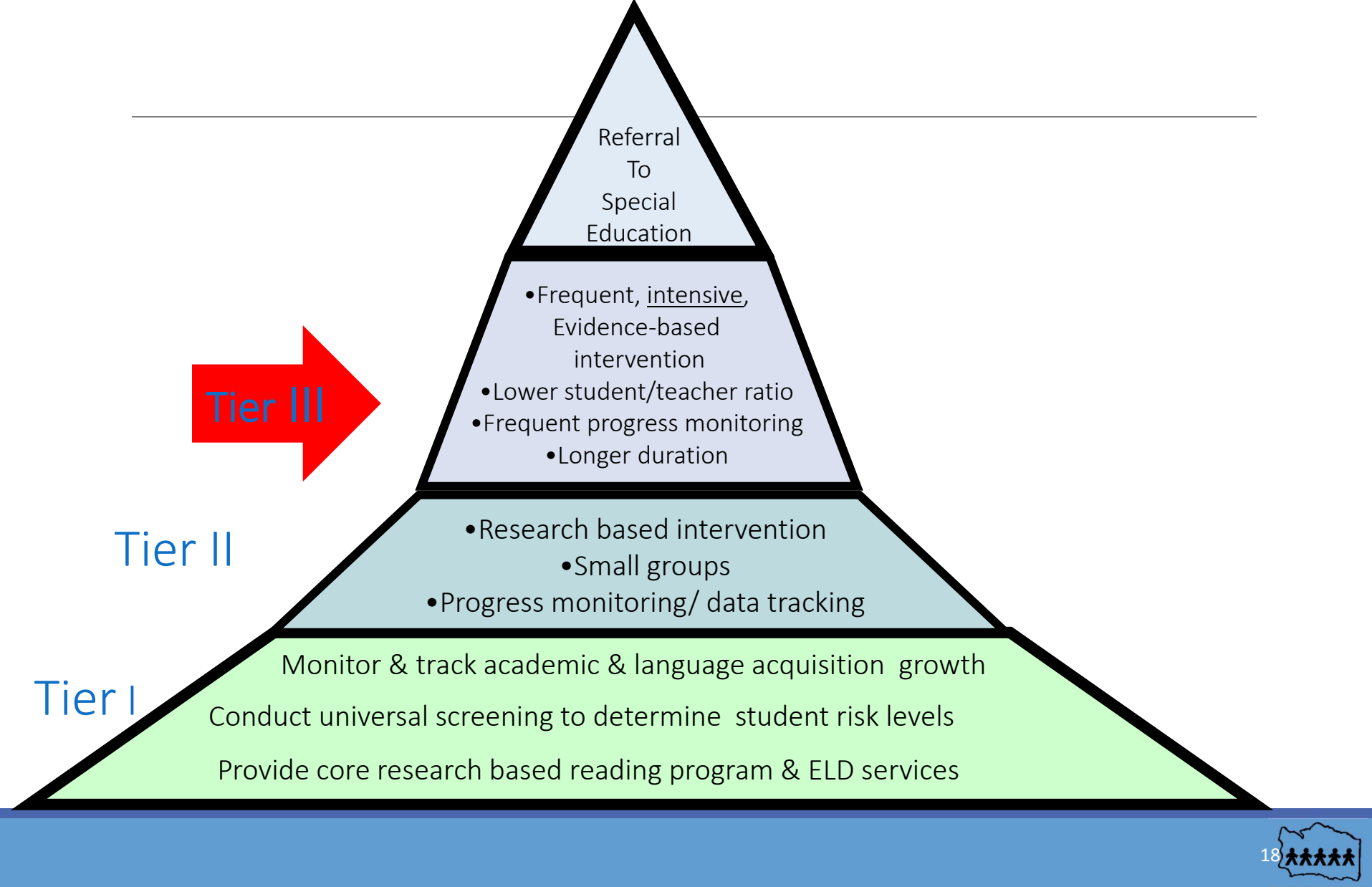
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Dyslexia in the Context of Gen Ed per California Department of Education



Reading Intervention Research



How Is “INTENSIVE” Defined?

Intensive Defined by:

- Frequency of intervention -Daily
- Duration (45-90 minutes depending on length of time intervention is provided)
- Adult to pupil ratio – 1:3 or 4 in elementary

Vaughn, et. al., 2010 “Why Intensive Interventions are Necessary For Students With Severe Reading Difficulties”

#1 factor found to impact successful Rtl outcomes was EXPERIENCE OF TEACHER

Tilly & Van Der Heyden; LRP 2011



Distinguishing a Disability from a Language Difference

- Are error linguistic error patterns typical of the student's native language
- Compare patterns of errors to “like peers”
- Compare patterns of linguistic errors to other students with learning disabilities
- Compare rate of progress in targeted intervention to that of “like peers”



Examples of Common Reading and Spelling Mistakes **Not Due to Dyslexia** in English Learners (ELs)

Spanish L1

- Pronunciation error example not due to “dyslexia”: “drogstore” for “drugstore”
- Spelling error example not due to “dyslexia”: “rack” for “rock”, “mekin” for “making”
- Errors due to limited English knowledge: “botle” for “bottle”



Assessment of Reading Disabilities/ Dyslexia

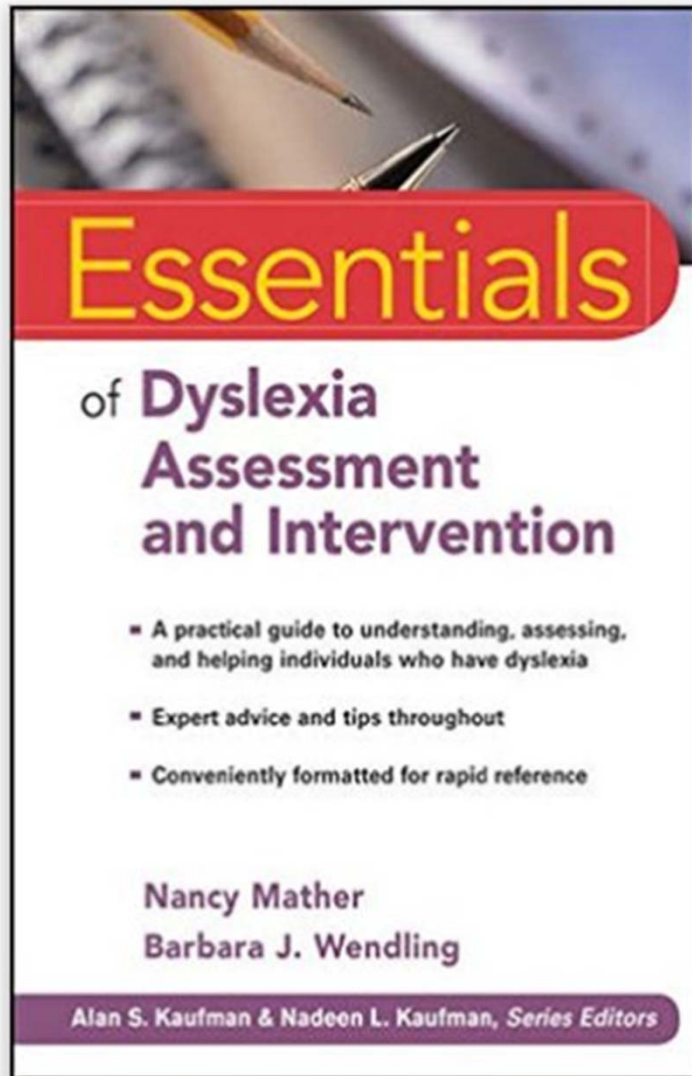
By Stacy Tolkin



Purposes for Reading/Dyslexia Assessment

Purpose of Assessment	Type of Assessment
Universal screening to determine if student needs intervention	Informal
Targeted screening to determine intervention needs	Informal
Ongoing Progress Monitoring	Informal
Eligibility for special education	Formal and Informal
Ongoing IEP goal development and monitoring	Formal and / or informal



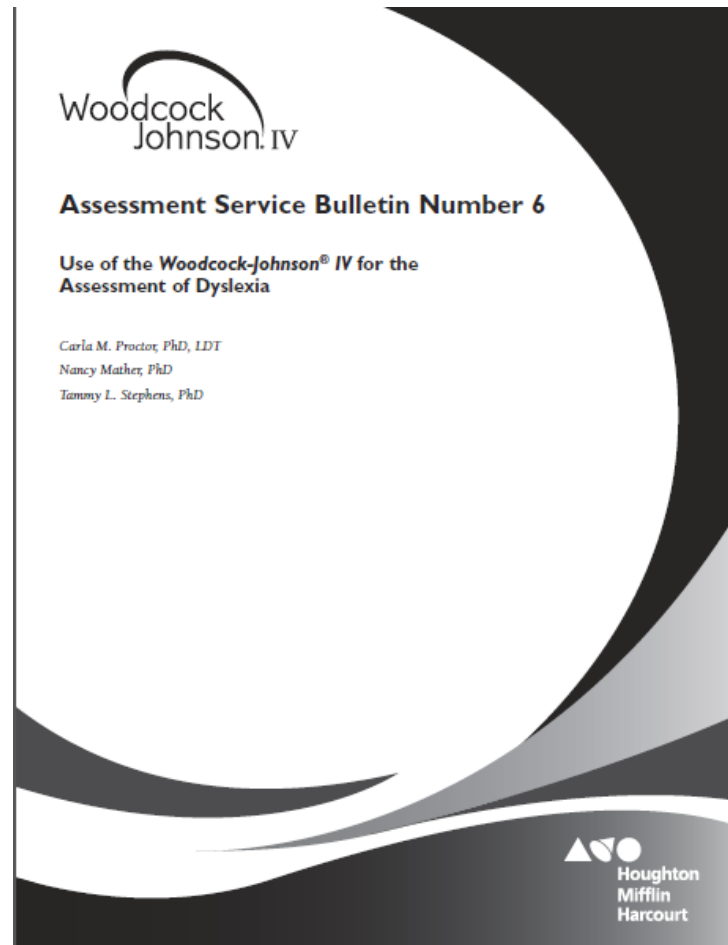


Essentials of Dyslexia Assessment and Intervention

By Nancy Mather and
Barbara J. Wendling

WJ IV Assessment Services Bulletin Number 6

<https://goo.gl/UdN3Hf>



WJ-IV Dyslexia Profile

WOODCOCK-JOHNSON IV DYSLEXIA PROFILE

Name _____ Date of Birth _____ ID _____
 School _____ Grade _____ Date _____

The [name of state] Education Code [§ statute number] [or country] defines dyslexia in the following way:

International Dyslexia Association Definition (2002)
 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.

Authors' note: Dyslexia affects reading at the single word level, reading fluency and rate, and spelling. In turn, these deficits cause difficulties with reading comprehension and written expression. According to research, the major cognitive correlates of dyslexia include weaknesses in one or more of the following abilities: phonological awareness, orthographic awareness, memory, rapid naming, and processing speed. Other abilities, such as general intelligence, reasoning, oral language, mathematics, and knowledge, that do not require reading, are often unimpaired. In other words, the reading and spelling difficulties are often unexpected in relation to the student's other abilities.

Section I: Summary

A. Primary and Secondary Reading, Spelling, and Writing Difficulties
 Check the areas of concern.

Primary Reading and Spelling Difficulties	Secondary Reading and Writing Difficulties
<input type="checkbox"/> Letter-sound associations <input type="checkbox"/> Letter names <input type="checkbox"/> Letter sounds <input type="checkbox"/> Basic reading skills <input type="checkbox"/> Sight word identification <input type="checkbox"/> Phonics (spelling/word decoding) <input type="checkbox"/> Reading fluency and rate <input type="checkbox"/> Spelling <input type="checkbox"/> in isolation <input type="checkbox"/> in context	<input type="checkbox"/> Reading comprehension <input type="checkbox"/> Written expression

B. Cognitive and Linguistic Abilities: Possible Contributing Factors
 Check the areas that are possible contributing factors.

<input type="checkbox"/> Phonological awareness ¹ <input type="checkbox"/> Auditory processing <input type="checkbox"/> Phonetic coding	<input type="checkbox"/> Orthographic awareness ²	<input type="checkbox"/> Memory <input type="checkbox"/> Auditory memory span <input type="checkbox"/> Short-term working memory <input type="checkbox"/> Associative memory	<input type="checkbox"/> Rapid naming <input type="checkbox"/> Processing speed
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C. Ability to Learn When Reading is Not Required
 Check the areas that are significantly higher than the individual's reading and spelling skills.

Cognitive Abilities	Oral Language	Mathematics	Knowledge
<input type="checkbox"/> General intelligence <input type="checkbox"/> Reasoning	<input type="checkbox"/> Oral expression <input type="checkbox"/> Listening comprehension <input type="checkbox"/> Vocabulary ³	<input type="checkbox"/> Math calculation skills <input type="checkbox"/> Math problem solving	<input type="checkbox"/> General information ⁴ <input type="checkbox"/> Academic knowledge ⁴

D. At-Risk Indicators
 Check the areas below that are additional at-risk factors.
 Family history Early speech-language issues

Committee Consideration
 Data demonstrate characteristics of dyslexia. Data demonstrate characteristics of dyslexia; however, these characteristics would not be consistent with [State] guidelines for the identification of dyslexia.
 Data do not demonstrate characteristics of dyslexia.

Evaluator(s) _____ Date: _____

Section II: Scores

Area Tested	Battery	Test Date	Cluster/Test	Low/Below Average SS <40-89 PR <1-24	Average SS 90-110 PR 25-75	High/Above Average SS 111+ PR 76+	RPI ⁵	
Primary Reading and Spelling Difficulties	Letter-Sound Associations	Informal	Letter names: <input type="checkbox"/> Poor <input type="checkbox"/> Typical <input type="checkbox"/> Advanced					
			Case: Lower ___/26 Upper ___/26					
	Basic Reading Skills	WJ IV ACH	Letter sounds: <input type="checkbox"/> Poor <input type="checkbox"/> Typical <input type="checkbox"/> Advanced					
			Consonants ___ Vowels ___					
	Reading Fluency/Rate	WJ IV ACH	Test 1: Letter-Word Identification					___/90
			Test 7: Word Attack					___/90
			Reading Fluency					___/90
			Test 8: Oral Reading					___/90
			Test 9: Sentence Reading Fluency					___/90
	Spelling	WJ IV ACH	Reading Rate					___/90
Test 9: Sentence Reading Fluency							___/90	
Test 15: Word Reading Fluency							___/90	
Test 3: Spelling							___/90	
Test 16: Spelling of Sounds							___/90	
Phoneme - Grapheme Knowledge	WJ IV ACH	Spelling in Context: <input type="checkbox"/> Poor <input type="checkbox"/> Typical <input type="checkbox"/> Adv. (Test 6: Writing Samples)					___/90	
		Phoneme-Grapheme Knowledge					___/90	
		Test 7: Word Attack					___/90	
Secondary Reading and Writing Difficulties	Reading Comprehension	WJ IV ACH	Test 16: Spelling of Sounds				___/90	
			Reading Comprehension				___/90	
			Test 4: Passage Comprehension				___/90	
	Written Expression	WJ IV ACH	Test 12: Reading Recall				___/90	
			Test 17: Reading Vocabulary (Ext.)				___/90	
			Written Expression				___/90	
			Test 6: Writing Samples				___/90	
			Test 11: Sentence Writing Fluency				___/90	

Primary and Secondary Reading and Writing Difficulties/Comments



Comparison of Three Commonly Used Assessment Tools

Assessment Tools Used for the Assessment of Reading Disability/Dyslexia

Tested	WJ-IV Cluster/Test	WIAT-III Cluster/Test	KTEA-3 Cluster/Test	
Primary Reading and Writing Difficulties	Letter-Sound (Informal)	Letter Identification: Case: Lower ___/26 Upper ___/26 Letter Sounds: C ___/21 V ___/5 (short)	Letter Identification: Case: Lower ___/26 Upper ___/26 Letter Sounds: C ___/21 V ___/5 (short)	Letter Identification: Case: Lower ___/26 Upper ___/26 Letter Sounds: C ___/21 V ___/5 (short)
		Basic Reading Skills	Test 1: Letter-Word Identification	Word Reading (Grades 1-12)
	Test 7: Word Attack		Pseudoword Decoding (Grades 1-12)	Letter Naming Facility Nonsense Word Decoding
	Reading Fluency (rate & accuracy)	Reading Fluency Test 8: Oral Reading	Oral Reading Fluency (Grades 1-12)	Silent Reading Fluency
		Test 9: Sentence Reading Fluency	Oral Word Fluency	Word Recognition Fluency
		Reading Rate Test 9: Sentence Reading Fluency		Decoding Fluency
		Test 15: Word Reading Fluency		
	Spelling	Test 3: Spelling	Spelling (Grades K-12)	Spelling
		Test 16: Spelling of Sounds		
	Phoneme-Grapheme Knowledge	Test 7: Word Attack	Early Reading Skills (Grades PK-3)	Nonsense Word Decoding
Test 16: Spelling of Sounds		Pseudoword Decoding (Grades 1-12)	Phonological Processing Associational Fluency	
Secondary Reading and Writing Difficulties	Reading Comprehension	Test 4: Passage Comprehension	Reading Comprehension (Grades 1-12)	Reading Comprehension
		Test 12: Reading Recall		Reading Vocabulary
		Test 17: Reading Vocabulary (Extended)		
	Written Expression	Test 6: Writing Samples	Sentence Composition (Grades 1-12)	Writing Fluency
Test 11: Sentence Writing Fluency		Essay Composition (Grades 3-12)	Written Expression	

Assessment Tools Used for the Assessment of Reading Disability/Dyslexia

Area Tested	WJ-IV COG, OL, & ACH Cluster/Test	WISC-V/WIAT-III Cluster/Test	KABC-II/KTEA-3 Cluster/Test	
Phonological Awareness (PA)	Auditory Processing COG	WIAT-III Early Reading Skills (Grades PK-3)	KTEA-3 Phonological Processing	
	Test 5: Phonological Processing Test 12: Nonword Repetition			
	Phonetic Coding OL	Pseudoword Decoding		
	Test 3: Segmentation Test 7: Sound Blending Test 9: Sound Awareness			
	Orthographic Awareness (OA)	COG Test 4: Letter-Pattern Matching Test 11: Number-Pattern Matching	WISC-V Naming Speed Literacy	KTEA-3 Spelling Letter Naming Facility
ACH Test 1: Letter-Word Identification Test 3: Spelling		WIAT-III Spelling	Word Recognition Fluency	
ACH Test 7: Word Attack* Test 16: Spelling of Sounds*		WIAT-III Word Reading* Pseudoword Decoding*		
Memory (Gf and Gsm)	Associative Memory (Glr:MA)	Associative Memory	Associative Memory	
	COG Test 13: Visual-Auditory Learning	WISC-V Delayed Symbol Translation Immediate Symbol Translation	KABC-II Atlantis & Atlantis Delayed Rebus & Rebus Delayed	
	Memory Span (Gsm:MS)	Memory Span	Memory Span	
	OL Test 5: Sentence Repetition	WISC-V Picture Span	KABC-II Number Recall	
	COG Test 18: Memory for Words	Integrated Spatial Span	Word Order	
	Short-Term Working Memory (Gsm:MW)	Digit Span Forward		
	COG Test 3: Verbal Attention Test 10: Numbers Reversed Test 16: Object-Number Sequencing (Extended)	Short-Term Working Memory (Gsm:MW) WISC-V Digit Span Backwards Letter-Number Sequencing Integrated Sentence Recall	Short-Term Working Memory KABC-II Word Order	
	Rapid Naming (RAN) (LA)	OL: Speed of Lexical Access Test 4: Rapid Picture Naming Test 8: Retrieval Fluency	WISC-V: Naming Speed Naming Speed Literacy Naming Speed Quantity	KTEA-3: Object Naming Facility Associational Fluency
	Processing Speed (Gs)	COG: Test 4: Letter-Pattern Matching Test 17: Pair Cancellation Test 11: Number-Pattern Matching	WISC-V: Coding Symbol Search Cancellation	

Primary Reading and Writing Difficulties

LETTER SOUND

BASIC READING SKILLS

READING FLUENCY

SPELLING

PHONEME-GRAPHEME KNOWLEDGE

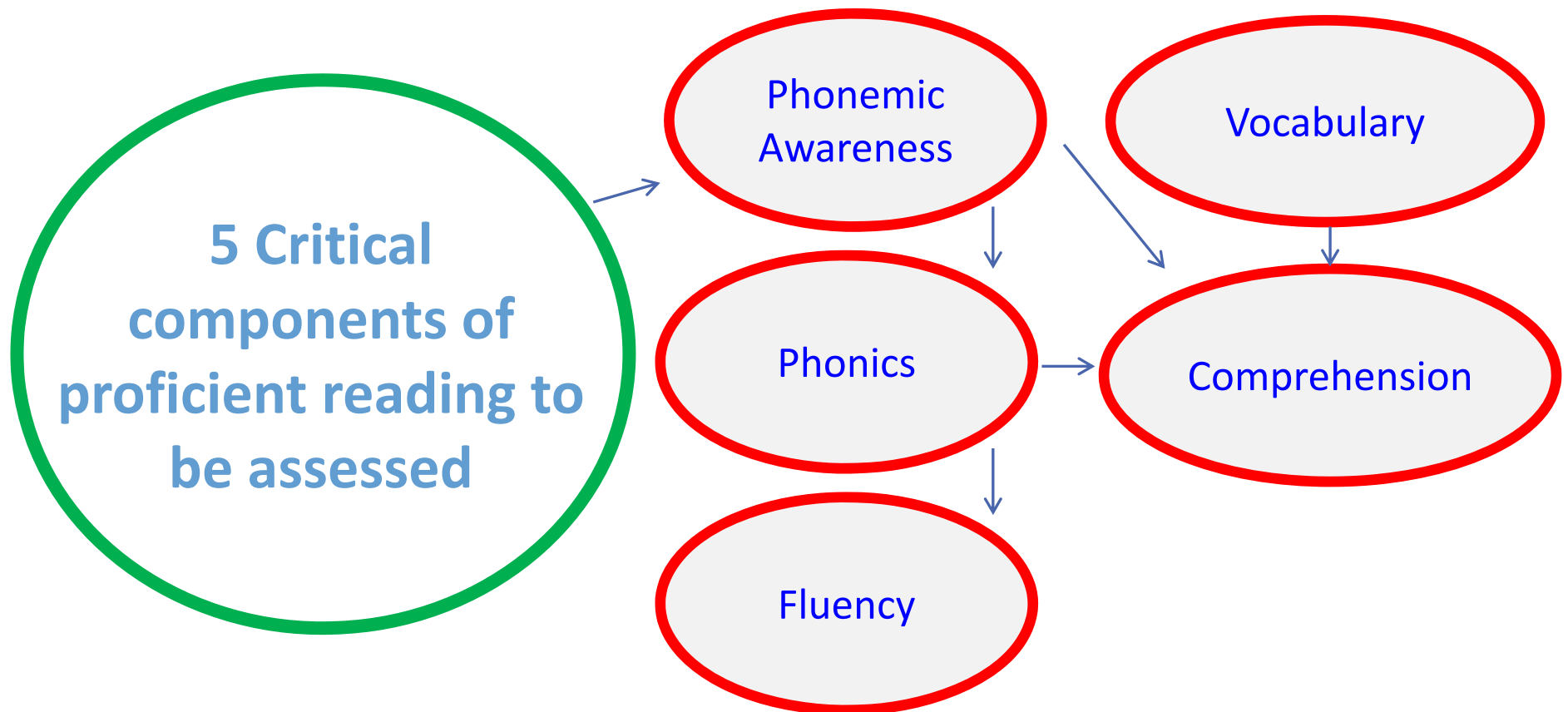


Secondary Reading and Writing Difficulties

**READING COMPREHENSION
(NOT DUE TO A LANGUAGE PROCESSING DEFICIT)
WRITTEN EXPRESSION**



5 Critical Components of Proficient Reading



Cognitive Abilities: Contributing Factors to Reading Disabilities/Dyslexia

Phonological Awareness

Orthographic Awareness

Memory

Rapid Naming

Processing Speed



Phonological v Orthographic

PHONOLOGICAL AWARENESS

The ability to recognize that words are made up of a variety of sound units. The term encompasses a number of sound related skills necessary for a person to develop as a reader.

ORTHOGRAPHIC AWARENESS

The system to form, store, and recall words from memory. Readers look at letters and words on the page and use their knowledge of sound/symbol relationships to sound out tricky words. Eventually the visual memory of this word makes it a solid memory in the brain to be called on later. A word memorized in its entirety is called a sight word. Otherwise, every word we read or write would have to be sounded out, meaning that reading and writing would take a lot longer.



Phonological or Orthographic?!?!

PC and OP	<i>ACH</i> Test 7: Word Attack*	<i>WIAT-III</i> Word Reading*	
	Test 16: Spelling of Sounds*	Pseudoword Decoding*	

Phonological

Phoneme Blending

Convert the phonemes into a single, unified form

Orthography

Grapheme Parsing

Convert a letter or letter group into a grapheme string

Phoneme Assignment

Determine what phoneme corresponds to each of the graphemes

Source: Coltheart, M. (1996). Phonological dyslexia: Past and future. Cognitive Neuropsychology, 12, 749-762.



Phonological Awareness

(Ga:PC)

Phonological Awareness (PC)	Auditory Processing COG	WIAT III	KTEA-3
	Test 5: Phonological Processing		
	Test 12: Nonword Repetition	Pseudoword Decoding	
	Phonetic Coding QL		
	Test 3: Segmentation		
	Test 7: Sound Blending		
Test 9: Sound Awareness			



Phonological Awareness *(Continued)*

Comprehensive Test of Phonological Processing (CTOPP-2)

- Phonological Awareness Composite
 - Elision, Blending Words, and Sound Matching
(Ages 4 – 6)
 - Elision, Blending Words, and Phoneme Isolation
(Ages 7 – 24)
- Alternate Phonological Awareness Composite
(Ages 7 – 24)
 - Blending Nonwords and Segmenting Nonwords



Phonological Awareness *(Continued)*

Lindamood Auditory Conceptualization Test Third Edition (LAC-3)

The Phonological Awareness Test 2 (PAT 2)

Test of Auditory Processing (TAPS-3)

- Word Discrimination
- Phonological Segmentation
- Phonological Blending



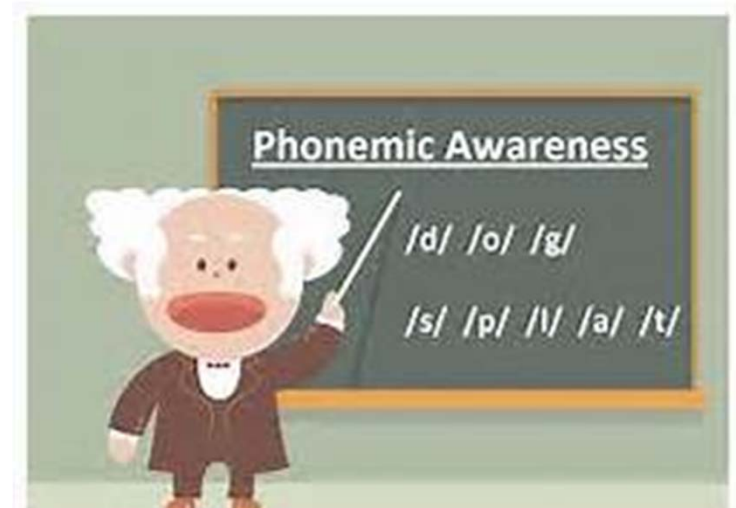
Phonological Awareness *(Continued)*

Differential Ability Scales II (DAS-II)

- Phonological Processing

Feifer Assessment of Reading (FAR)

- Phonological Index
 - Phonemic Awareness*
 - Nonsenseword Decoding
 - Isolated Word Reading Fluency
 - Oral Reading Fluency
 - Positioning Sounds*



Phonological Awareness *(Continued)*

Clinical Evaluation of Language Fundamentals-Preschool-2 (CELF-Pre2)

- Phonological Awareness

Tests for Auditory Processing Disorders for Children (SCAN-3:C)

- Filtered Words

NEPSY II

- Phonological Processing



Orthographic Awareness

(OP)

MUST have letters or words, not shapes, designs or pictures, otherwise more of a Processing Speed task.

Orthographic Awareness (OP)	COG Test 4: Letter-Pattern Matching	WISC-V Naming Speed Literacy	KTEA-3 Spelling
	Test 11: Number-Pattern Matching		Letter Naming Facility
	ACH Test 1: Letter-Word Identification	WIAT-III Spelling	Word Recognition Fluency
	Test 3: Spelling		



Orthographic Awareness *(Continued)*

Jordan Left Right Reversal Test 3 (Jordan-3)

Dynamic Indicators of Basic Early Literacy Skills (DIBELS-6)

FAR

- Orthographical Processing



Informal Measures of Academic Assessment Related to Dyslexia/Reading Disabilities

By Jarice Butterfield



How and When to Use Informal Measures of Academic Assessment

- Use for universal screening to determine targeted areas of need in reading
- Use for pre referral screening to determine if a student may need formal testing to determine the presence of a learning disability
- Use for ongoing bench mark tracking to determine progress made
- Use in conjunction with formal measures of reading / dyslexia to validate areas of weakness
- Use for annual assessment for IEP benchmark reporting and progress towards meeting reading goals



Phonological Awareness Informal Measures Commonly Used

- CORE Phoneme Deletion Test (grades K-3)
- CORE Phonological Segmentation Test (grades K-1)
- CORE Phoneme Segmentation Test (grades 2-12)
- Literacy Resources Inc. (LRI) - <http://www.literacyresourcesinc.com/resources/assessments/>
- QPAS – available at www.hpedsb.on.ca/ec/services/cst/elementary/literacy/documents/November2013QPASwithFAQ.pdf
- Phonological Awareness Skills Screener (PASS) - <http://www.senia.asia/wp-content/uploads/2011/02/PASS-directions.pdf>



Decoding and Word Attack Informal Measures Commonly Used

- CORE Phonics Surveys
- CORE Graded High-Frequency Word Survey
- Phonics Assessment Based on Orton Gillingham by Jarice Butterfield
- San Diego Quick Assessment (both phonics and sight word recognition)
- DIBELS 6th Edition
- Read Naturally Quick Phonics Screener
- Reading A-Z Phonics Assessment
- Basic Phonics Skills Test (BPST)



Decoding and Word Attack Informal Measures Commonly Used *(Continued)*

- Texas Primary Reading Inventory (TPRI)
- Ekwall/Shanker Reading Inventory
- Dynamic Indicators of Beginning Early Literacy (DIBELS)
- Predictive Assessment of Reading (PAR)



High Frequency Word / Word Attack Informal Measures Commonly Used

- Project Read Red Word (irregular word lists compiled by Jarice Butterfield)
- CORE High-Frequency Word Survey
- San Diego Quick Assessment
- DIBELS
- Fry Sight Word Lists
- Dolch Sight Word Lists
- Reading A-Z High Frequency Words Assessment



Suspected Area of Difficulty	Recommended Tools
Phonological awareness	LMB LAC Test; LRI Phonemic Awareness Assessment; Cool Tools Reading Assessment https://www.literacyresourcesin.com/resources/assessments/ ; Q-Pass Phonemic Awareness Test; CORE Phonemic Awareness
Phonetic Coding (Phonics)	OG Phonics Assessment Tool; CORE Phonics Survey; BPST Phonics Screener, Dibels; Cools Tools Reading Assessment
Orthographic Processing (automaticity of reading words – high frequency word recognition weaknesses)	Project Read Red Word List CORE High Frequency Word Lists San Diego Quick Assessment (CORE) WJIV Word Attack; WIAT Psuedo Word
Reading Fluency	CORE Graded Reading Assessments Read Naturally Bench Mark Assessor or Fluency Progress Monitor; Dibels Fluency Assessing Reading Fluency by Rasinski http://education.ucf.edu/mirc/Research/PR_EL_assessing-fluency.pdf

How Assessment Informs Intervention

By Jarice Butterfield



Taken from the CDE Dyslexia Guidelines



TOM TORLAKSON
State Superintendent
of Public Instruction

Effective Approaches for Teaching Students with Dyslexia

California Education Code Section 56335(a) defines educational services for students with dyslexia as follows:

“ ‘educational services’ means an

- ✓ **evidence-based,**
- ✓ **multisensory,**
- ✓ **direct,**
- ✓ **explicit,**
- ✓ **structured,**
- ✓ **and sequential** approach to instructing pupils who have dyslexia.”

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Association of Processing Deficits to Academic Considerations

PROCESSING DEFICIT	ACADEMIC WEAKNESS	SUGGESTED REMEDIATION
<p>Phonological Awareness</p> <ul style="list-style-type: none"> ▪ Auditory processing ▪ Phonetic coding 	<ul style="list-style-type: none"> ▪ Phonemic awareness ▪ Letter-sound association ▪ Letter-sound blending into words ▪ Multi-syllabic word decoding 	<ul style="list-style-type: none"> ▪ Multi-sensory, systematic, part to-whole instruction with emphasis on matching auditory input with tactile and visual input ▪ Early Primary years: OG based programs - LMB Lips, Project Read Phonology, Wilson Reading ▪ 3rd Grade on: OG based programs - Sonday, Barton or non OGLMB program Seeing Stars



Association of Processing Deficits to Academic Considerations (Continued)

PROCESSING DEFICIT	ACADEMIC WEAKNESS	SUGGESTED REMEDIATION
<p>Visual Processing</p> <ul style="list-style-type: none"> ▪ Visual discrimination ▪ Orthographic Awareness 	<ul style="list-style-type: none"> ▪ Letter reversals in spelling and/or reading ▪ High frequency word reading ▪ Labored nonsense or unfamiliar word reading due to inability to recognize word parts or linguistic patterns 	<ul style="list-style-type: none"> ▪ Multi-sensory, systematic, part to-whole instruction with emphasis on matching visual input to auditory and tactile input ▪ Use of Orton Gillingham based programs such as Project Read Phonics or LMB Lips if there are letter reversals due to visual discrimination issues ▪ Sonday, Barton or other OG based programs that are strong in visual areas – 1st choice in LMB Seeing Stars



Association of Processing Deficits to Academic Considerations

(Continued)

PROCESSING DEFICIT	ACADEMIC WEAKNESS	SUGGESTED REMEDIATION
<p>Memory</p> <ul style="list-style-type: none"> ▪ Auditory memory ▪ Short term memory ▪ Associative memory 	<ul style="list-style-type: none"> ▪ Memory of high frequency words ▪ Memory of letter-word patterns such as “igh” “ink” “able” 	<ul style="list-style-type: none"> ▪ Daily Visual to auditory frequent review of high frequency sight words using Apps such as Dolch Word drills, etc. ▪ Multi-sensory, systematic, part to-whole instruction with emphasis on matching visual input with tactile and auditory input ▪ Fast Forward or Earobics or other computer based programs with emphasis on strengthening auditory processing



Association of Processing Deficits to Academic Considerations

(Continued)

PROCESSING DEFICIT	ACADEMIC WEAKNESS	SUGGESTED REMEDIATION
Processing Speed <ul style="list-style-type: none"> ▪ Cognitive speed ▪ Perceptual speed 	<ul style="list-style-type: none"> ▪ Letter naming ▪ Letter-sound blending is labored and slow ▪ Slow High frequency word recall ▪ Reading fluency is poor which can impact reading comprehension 	<ul style="list-style-type: none"> ▪ Repeated drills using programs such as Fast Forward, or other brain training apps or programs ▪ Repeated, daily practice of reading out loud at the student's readability level
Rapid Naming (RAN)	<ul style="list-style-type: none"> ▪ High frequency words (slow to remember) ▪ Decoding is labored and slow 	<ul style="list-style-type: none"> ▪ Repeated drills using programs such as Fast Forward, or other brain training apps or programs ▪ Daily Visual to auditory frequent review of high frequency sight words using Apps and reading aloud daily



Thank You!

Contact Us...

Jarice Butterfield, Ph. D.

bjarice@aol.com

jariceb@sbceo.org

Stacy Tolkin, M.A., LEP

stolkin@sbceo.org

