


Evaluation of Students with Dyslexia & Language-based learning disabilities

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Some Quick Facts about Dyslexia


What it's not:

- A medical problem that educators don't address
- A vision problem
- When people see things backwards

What it is:

- A language-based learning disability
- Problems with phonological processing
- Problems with orthographic processing
- Impaired ability to form sound-symbol connections

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Incidence of Dyslexia in the General Population

- 20% of all people have some form of dyslexia
- Dyslexia is a "spectrum disorder" - you can have mild, moderate or severe problems
- This is an "educational problem" which is diagnosed educationally, not medically.

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Historical Red Flags

- Speech/language skill delays
- A history of reading/spelling problems in relatives
- Ear infections
- Premature birth
- Difficulty learning letters and numbers

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Case Study: 9-year-old third grader

- History of reading/spelling problems father side
- Student struggled with writing his name, identifying letters of the alphabet, and rhyming words.
- Difficulty processing visual symbols on a page
- Pediatric optometrist did not find any significant problems
- Struggled to follow two-step directions

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Wechsler Intelligence Scale for Children-V (WISC-V)

Subtest	SS	%ile	Subtest	SS	%ile
Similarities(S)	13	84	Block Design	9	37
Vocabulary(S)	14	91	Visual Puzzles(S)	12	75
(Information)	(10)	(50)	Visual Spatial	102	55
(Comprehension)	(13)	(84)			
Verbal Comprehension(S)	118	88	Matrix Reasoning	10	50
Verbal (Expanded Crystallized) (114)	(82)		Figure Weights	11	63
			(Picture Concepts)	(10)	(50)
Digit Span	8	25	(Arithmetic)	(9)	(37)
Picture Span(W)	5	5	Fluid Reasoning	103	58
(Letter-Number Sequencing)	(7)	(16)	Expanded Fluid	(100)	(50)
Working Memory(W)	79	8			
			Coding(W)	2	0.4
Quantitative Reasoning	100	50	Symbol Search	7	16
Auditory Working Memory	87	19	(Cancellation)	(8)	(25)
Nonverbal	86	18	Processing Speed(W)	69	2
General Ability	109	73			
Cognitive Proficiency(W)	71	3	Full Scale IQ	97	42

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Information Processing Strength

Receptive & Expressive Language

Comprehensive Receptive & Expressive Vocabulary Test: Third Edition

Subtest	Raw Score	Standard Score	%ile Score	Age Equivalency
Receptive Language	47	111	77	10 yrs.-9 mos.
Expressive Language	16	107	68	10 years
General Vocabulary Index		111	77	

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Information Processing Weakness

Phonological Processing and Rapid Naming Speed

Comprehensive Test of Phonological Processing-Second Edition (CTOPP-2)

Core Subtests	Standard Score	Scale NPR	Age Equivalent	Grade Equivalent	Range
Elision	7	16	7 yrs.-3 mos.	2.2	Below Average
Blending Words	10	50	9 years	4.0	Average
Phoneme Isolation	7	16	7 years	2.0	Below Average
Memory for Digits	10	50	9 years	4.0	Average
Non-word Repetition	10	50	10 years	5.0	Average
Rapid Digit Naming	4	2	5 yrs.-9 mos.	K.7	Poor
Rapid Letter Naming	3	1	5 years	K.0	Very Poor
Phonological Awareness	88	21			Low Average
Phonological Memory	101	53			Average
Rapid Symbolic Naming	52	<1			Very Poor

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Information Processing Weakness

Visual ability to copy from a model & recall of symbols

Bender Gestalt II

	Copy Phase	Recall Phase
Time	10'13"	2'17"
Standard Score	85	65
Percentile	16	1
Range	Low Average	Extremely Low

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Information Processing Weakness

Perception of Symbol Directionality Orthographic Processing

Jordan Left-Right Reversal Test-Third Edition

Score Summary	Standard Score	Percentile	Range
Accuracy	<65	<1	<i>Atypical</i>
Errors	75	5	<i>Atypical</i>

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Academic Strengths

Listening Comprehension & Oral Expression

Wechsler Individual Achievement Test – Fourth Edition (WIAT-IV)

	Standard Score	Scale Rank	Age Equivalent	Grade Equivalent	Descriptive Category
Listening Comprehension	107	68	10 yrs.-6 mos.	5.0	Average
Receptive Vocabulary	106	66	10 yrs.-2 mos.	4.8	Average
Oral Discourse Comprehension	107	68	10 yrs.-10 mos.	5.2	Average
Oral Expression	120	91	14 years	7.9	Very High
Expressive Vocabulary	108	70	10 yrs.-6 mos.	5.1	Average
Oral Word Fluency	125	95	19 yrs.-11+ mos.	12.9+	Very High
Sentence Repetition	110	75	11 yrs.-6 mos.	5.7	High Average
ORAL LANGUAGE	115	84			High Average

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Academic Weakness: Reading

Reading Achievement

	Standard Score	Scale Rank	Age Equivalent	Grade Equivalent	Descriptive Category
BASIC READING SKILLS(W)	82	12			Low Average
Pseudoword Decoding(W)	90	25	7 yrs.-6 mos.	2.3	Average
Word Reading(W)	73	4	6 yrs.-10 mos.	1.3	Very Low
Phonemic Proficiency(W)	90	25	7 yrs.-6 mos.	2.1	Average
DECODING(W)	80	9			Low Average
Oral Reading Fluency(W)	46	<0.1	<6 yrs.-2 mos.	<1.0	Extremely L
Orthographic Fluency(W)	61	0.5	<6 yrs.-2 mos.	<1.0	Extremely L
Decoding Fluency(W)	85	16	<8 yrs.-2 mos.	<3.0	Low Average
READING FLUENCY(W)	62	0.6			Extremely L
Reading Comprehension(W)	72	3	6 yrs.-6 mos.	1.2	Very Low
READING(W)	72	3			Very Low

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Academic Weaknesses: Written Expression

Written Expression Skills

WRITTEN EXPRESSION(W)	76	5			Very Low
Spelling(W)	74	4	6 yrs.-10 mos.	1.2	Very Low
Sentence Composition(W)	83	13	7 yrs.-2 mos.	2.1	Low Average
Sentence Building(W)	77	6	6 yrs.-2 mos.	1.1	Very Low
Sentence Combining(W)	94	34	8 yrs.-2 mos.	3.1	Average
Essay Composition(W)	<65	<1	<6 years	<1.0	Extremely Low
WRITING FLUENCY(W)	69	2			Extremely Low
Alphabet Writing Fluency(W)	77	6	5 yrs.-10 mos.	K.6	Very Low
Sentence Writing Fluency(W)	67	1	<6 yrs.-2 mos.	<1.0	Extremely Low
TOTAL ACHIEVEMENT(W)	75	5			Very Low

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Academic Weakness: Math

WISC-IV Math

MATHEMATICS(W)	87	19			Low Average
Math Problem Solving(W)	79	8	7 yrs.-2 mos.	1.6	Very Low
Numerical Operations	98	45	8 yrs.-10 mos.	3.6	Average
MATHEMATICS FLUENCY(W)	76	5			Very Low
Math Fluency-Addition(W)	80	9	6 yrs.-6 mos.	1.1	Low Average
Math Fluency-Subtraction(W)	85	16	7 yrs.-6 mos.	1.9	Low Average
Math Fluency-Multiplication(W)	74	4	<8 yrs.-2 mos.	<3.0	Very Low

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WIAT-IV Dyslexia Index

Dyslexia Index

WIAT-IV Dyslexia Index

	Standard Score	Scale Rank	Age Equivalent	Grade Equivalent	Descriptive Category
DYSLEXIA INDEX	79	8			Very Low
Word Reading	73	4	6 yrs.-10 mos.	1.3	Very Low
Pseudoword Decoding	90	25	7 yrs.-6 mos.	2.3	Average
Orthographic Fluency	61	0.5	<6 yrs.-2 mos.	<1.0	Extremely Low
PHONOLOGICAL PROCESSING	88	21			Low Average
Pseudoword Decoding	90	25	7 yrs.-6 mos.	2.3	Average
Phonemic Proficiency	90	25	7 yrs.-6 mos.	2.1	Average
ORTHOGRAPHIC PROCESSING	68	2			Extremely Low
Orthographic Fluency	61	0.5	<6 yrs.-2 mos.	<1.0	Extremely Low
Spelling	74	4	6 yrs.-10 mos.	1.2	Very Low


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Data driven Recommendations for Intervention

- This is not "Rocket Science"
- Synthetic-phonetic code-emphasis instruction: Reading
 - Wilson Reading System
 - Orton-Gillingham
- RAVE-O: Reading
 - Orthographic processing problems
- Math - theoretical vs. direct sequential
 - Saxon Math
- Writing
 - Diana Hanbury-King
 - Assistive technologies

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Some Final Thoughts

- Critical window of language development
- Catching dyslexia early
- Problems with the "wait and see" approach
- Rule of thumb: Remediate and accommodate
- Emotional impacts on kids, parents and teachers
- Hurt pride

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