

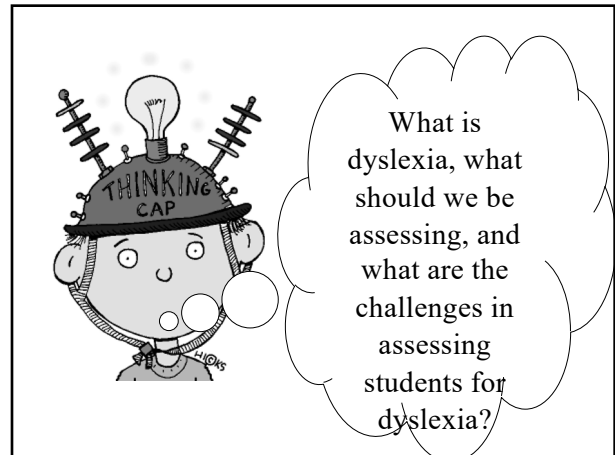
## Assessment of Dyslexia: Constructs and Challenges

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## What is Dyslexia?

- It is a specific problem in the development of word reading, reading rate, and spelling.
- It affects the development of automaticity with sound-symbol connections.
- It has both a neurobiological and genetic basis.
- It is often accompanied by specific weaknesses in cognitive and linguistic factors that predict poor reading and spelling.

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It is the most common specific learning disability.

70 to 80% of the referrals to special education involve concerns about reading development.



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## Dyslexia and Alternate Terms

- Specific Reading Disability
- Specific Learning Disability in Basic Reading Skills
- Specific Reading Fluency/Rate Disability
- Specific reading disorder (ICD-10-F81.00)
- Specific learning disorder with an impairment in reading (DSM-5 315.00)

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**Specific Reading  
Disability = Dyslexia**

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## European Dyslexia Association

**“No Matter Which Country-  
No Matter Which Language-  
Dyslexia is Everywhere.”**



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“We do not understand why the term “dyslexia” is often viewed as if it were a four-letter word, not to be uttered in polite company” (p. 187).

Source: Siegel, L. S., & Mazabel, S. (2013). Basic cognitive processes and reading disabilities. In H. L. Swanson, K. R. Harris, & S. Graham (Eds.), *Handbook of learning disabilities* (2<sup>nd</sup> ed.) (pp. 186-213). New York, NY: Guilford Press.

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## Labels

**“...without a label we have no way of talking about a problem.”**

Source: Johns, B. H., & Kauffman, J. M. (2009). Caution: Response to intervention (RtI). *Learning Disabilities: A Multidisciplinary Journal*, 15, 157-160.

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## The Term Dyslexia

“In the first half of this century the story of dyslexia has been one of decline and fall; in the second half it has culminated in a spectacular rise. From being a rather dubious term, dyslexia has blossomed into a glamorous topic; and rightly so, for with a prevalence of around 5% the condition is remarkably common” (Frith, 1999, p. 192).

Source: Frith, U. (1999). Paradoxes in the definition of dyslexia. *Dyslexia*, 5, 192-214.

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## International Dyslexia Association (2003) defines dyslexia as:

**[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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## Health Council of the Netherlands. *Dyslexia. Definition and treatment. The Hague: Health Council of the Netherlands, 1995.*

Dyslexia is present when the automatization of word identification (reading) and/or word spelling does not develop or does so very incompletely or with great difficulty. The term ‘automatization’ refers to the establishment of an automatic process. A process of this kind is characterized by a high level of speed and accuracy. It is carried out unconsciously, makes minimal demands on attention and is difficult to suppress, ignore or influence...

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...dyslexia is characterized in practice by a severe retardation in reading and spelling which is persistent and resists the usual teaching methods and remedial efforts... it will be accompanied by very slow and/or inaccurate and easily disturbed word identification and/or word spelling.

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“It was as if he were driving in a NASCAR race in first gear while everyone else was cruising along in fifth gear” (Lindstedt & Zaccariello, 2008) (pp 195-196).

Source: Lindstedt, K., & Zaccariello, M. J. (2008). A tale of two assessments: Reading Fluency. In J. N. Apps, R. F. Newby, & L. W. Roberts (Eds.), *Pediatric neuropsychology case studies: From the exceptional to the commonplace* (pp. 191-199). New York: Springer.

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## British Dyslexia Association

- Dyslexia is a learning difficulty that primarily affects the skills involved in accurate and fluent word reading and spelling.
- Characteristic features of dyslexia are difficulties in phonological awareness, verbal memory, and verbal processing speed.
- Dyslexia occurs across the range of intellectual abilities.

(Rose Report, 2009)

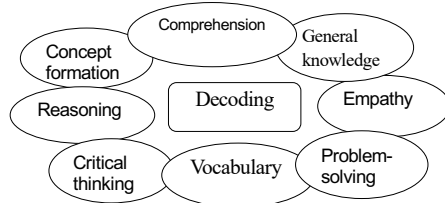
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## The British Dyslexia Association (BDA)

Management Board adopted Sir Jim Rose's definition (2009) with the addition of a further paragraph: “In addition to these characteristics, the BDA acknowledges the visual processing difficulties that some individuals with dyslexia can experience, and points out that dyslexic readers can show a combination of abilities and difficulties that affect the learning process. Some also have strengths in other areas, such as design, problem solving, creative skills, interactive skills and oral skills.”

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## Sea of Strengths Model of Dyslexia



Source: Shaywitz, S. (2020). *Overcoming dyslexia* (2<sup>nd</sup> ed.). Alfred A. Knopf. (p. 56)

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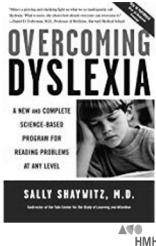
## Consensus on the Definition

- Neurobiological disorder that affects the development of basic reading skills, spelling, and automaticity with sound-symbol connections.
- It is often accompanied by specific weaknesses in cognitive factors that predict poor reading and spelling.
- It is a lifelong condition but effective interventions reduce the impact.
- Many other abilities are often intact and can even be advanced.

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“The diagnosis of dyslexia is as precise and scientifically informed as almost any diagnosis in medicine” (p. 165).

Source: Shaywitz, S. (2003). *Overcoming dyslexia: A new and complete science-based program for overcoming reading problems at any level*. New York: Alfred Knopf.



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“To be effective, remedial instruction in reading must be preceded by careful diagnosis.”



Source: Stanger, M. A., & Donohue, E. K. (1937). *Prediction and prevention of reading difficulties*. New York, NY: Oxford University Press.

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## Reading and Spelling Assessment

- Pseudoword (nonsense word) reading and spelling
- Phonological awareness
- Reading accuracy
- Reading fluency and rate
- Spelling (regular and irregular words)
- Compare to math and oral language abilities

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## Results

**Time:** 1:25

**Rate:** words per minute = 27  
words correct per minute = 13  
19/38 words correct = 50% accuracy

A typical second grade student would be expected to read at about 100 words correct per minute, when reading unpracticed 2<sup>nd</sup> grade text (Hasbrouck & Tindal, 2017).

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COMPILED ORF NORMS					
Hasbrouck & Tindal (2017)					
<small>From Hasbrouck, J. &amp; Tindal, G. (2017). An update to compiled ORF norms [Technical Report No. 1702]. Eugene, OR: Behavioral Research and Teaching, University of Oregon.</small>					
Grade	Percentile	Fall WCPM*	Winter WCPM*	Spring WCPM*	
1	90		97	116	
	75		59	91	
	50		29	60	
	25		16	34	
	10		9	18	
2	90	111	131	148	
	75	84	109	124	
	50	50	84	100	
	25	36	59	72	
	10	23	35	43	
3	90	134	161	166	
	75	104	137	139	
	50	83	97	112	
	25	59	79	91	
	10	40	62	63	
Grade	Percentile	Fall WCPM*	Winter WCPM*	Spring WCPM*	
4	90	153	168	184	
	75	125	143	160	
	50	94	120	133	
	25	75	95	105	
	10	60	71	83	
5	90	179	183	195	
	75	153	160	169	
	50	121	133	146	
	25	87	109	119	
	10	64	84	102	
6	90	185	195	204	
	75	159	166	173	
	50	132	145	146	
	25	112	116	122	
	10	89	91	91	

\*WCPM = Words Correct Per Minute

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## Cognitive and Linguistic Correlates

- Related cognitive and linguistic factors that affect the development of reading and spelling skill
- They predict difficulties with reading and spelling development.
- Some are more trainable than others (e.g., phonological awareness vs. working memory).

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## Cognitive and Linguistic Correlates of Dyslexia

- Phonological Processing
- Orthographic Processing
- Rapid Automatized Naming (RAN)
- Processing Speed
- Working Memory
- Visual-Verbal Paired Associate Learning

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## Examples of Phonological Awareness Tasks

- Rhyming: What words rhyme with dog?
- Blending: What word is this... /sh/ /oe/?
- Phoneme Counting: How many sounds are in the word “ship”?
- Phoneme Segmentation: How many sounds do you hear in the word “bus”?
- Phoneme Deletion: What is left if the /t/ sound were taken from “cart”?

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## Two most important phonological awareness abilities for early reading and spelling:

- Sound blending: provides the basis for learning phonics.
- Segmentation: provides the basis for sequencing sounds when spelling.

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The two most important phonological awareness abilities for older students:

Phonemic Manipulation tasks:

- Deletion
- Substitution

Requires working memory and more detailed analyses of words.

Source: Kilpatrick, D. A. (2015). *Essentials of assessing, preventing, and overcoming reading difficulties*. Hoboken, NJ: John Wiley & Sons.

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## Phoneme Manipulation Tasks

- Deletion: say cart without /t/
- Addition: say at with /c/ at the front
- Substitution:
  - Initial: Change the /s/ in sun to /f/
  - Final: Change the /t/ in cat to /b/
  - Medial: Change the /i/ in hit to /a/
- Reversal: say the sounds in “enough” backward

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## The Major Question

Spence, Grade 5

*Fantastick*  
*Amazing*  
*Colosol*  
*energeAfishint*  
*inpurvus*  
*Hetty*  
*glareus*

**How can this just be a phonological processing problem when the student spells words exactly the way they sound?**

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## Phonology and Orthography

**Phonology:** the sounds of a language

**Orthography:** the marks of a writing system, including the spelling patterns

**Dyslexia can be caused by problems in phonology or orthography or both.**

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## Definitions

**Orthographic:** the visual representations specific to words (not visual-spatial skills)

**Orthographic coding:** Representing a printed word in memory and accessing the whole word, a letter cluster, or a letter

**Orthographic image:** Representation of a specific written word in memory

Source: Berninger, V. W. (1996). *Reading and writing acquisition: A developmental neuropsychological perspective*. Boulder, CO: Westview Press.

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How do you know the correct spelling?

- rain                      • rane
- sope                     • soap

**Phonological processing can occur but it is not sufficient for identifying the correct spelling of the word.**

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ORTHOGRAPHY, n. The science of spelling by the eye instead of the ear.

(Ambrose Bierce)

izquotes.com

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## What is Rapid Automatized Naming (RAN)?

Measures response time or rapid retrieval for a visual stimulus (objects, colors, letters, or numbers or a combination)

6 8 9 6 4 9 3 6 9 4

8 1 3 9 6 8 4 3 1 9

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## What Do Rapid Naming Tests Appear to Measure?

1. Ability to sustain attention to process and name the symbols.
2. Ability to name and discriminate among the symbols.
3. Ability to retrieve verbal labels rapidly.
4. Ability to articulate words rapidly.

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## Research Findings regarding RAN

- (a) RAN letters and then numbers are the strongest predictors of both reading and spelling.
- (b) RAN appears to be distinct from phonological awareness.
- (c) the contribution of RAN is larger for younger readers and readers with more severe disabilities.

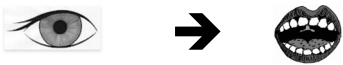
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- (d) pause time is significantly correlated with reading accuracy and fluency, whereas articulation time is not.
- (e) predicts irregular word reading better than nonword reading.
- (f) RAN is more highly related to speeded measures of reading than accuracy.

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Dr. Martha Denckla

## The Visual-Verbal Highway



Slow word perception  
See it....Say it

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During an evaluation for dyslexia:

"I have to read out loud because if I don't, I don't understand anything I'm reading. But then when I try to read out loud, I look at the word - I know the word and I know how to say it, except I can't get it to come out of my mouth."

Ella, Age 9

Source: Dr. Annmarie Urso



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## Processing Speed

Involves the serial scanning of print

Can be related to poor attention,  
slow RAN, poor orthography,  
inefficient visual tracking

Appears related to the development  
of automaticity with basic skills

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## Working Memory

Ability to hold information in  
memory and rearrange it.

Related to attention and executive  
functioning.

Affects many aspects of academic  
performance.

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## Visual-Auditory Paired Associate Learning (PAL)

“...recent research suggests that visual-verbal PAL may be a unique cross-modal associative learning mechanism that is specific to the creation of mappings between visual (orthographic) and phonological stimuli...” (p. 46).

Warmington, M., & Hulme, C. (2012). Phoneme awareness, visual-verbal paired associate learning, and rapid automatized naming as predictors of individual differences in reading ability. *Scientific Studies of Reading*, 16, 45-62.

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## Orthographic mapping:

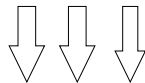
“...the process readers use to store written words for immediate, effortless retrieval. It is the means by which readers turn unfamiliar written words into familiar, instantaneously accessible sight words” (p. 81).

Source: Kilpatrick, D. A. (2015). *Essentials of assessing, preventing, and overcoming reading difficulties*. Hoboken, NJ: John Wiley & Sons.

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**Starting point: forming the connections between the phonemes and the graphemes.**

**Phonemes:** /m/ /a/ /n/



**Graphemes:** m a n

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## Sight words

Typically developing readers only need to see a word 1 to 4 times to retain it.



The sight of the word triggers recognition, sound, and meaning.

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## Summary

*When identifying dyslexia, consider:*

- Weaknesses in phonics, sight word identification, reading fluency and rate, and spelling
- Weaknesses in specific cognitive and linguistic abilities
- Strengths in other areas, such as oral language, reasoning, mathematics, and/or knowledge

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## Comprehensive Evaluations

Ensure that students who struggle with reading get a comprehensive evaluation that explains:

- the reasons why a student is struggling with reading
- where the student is developmentally (e.g., needs phonological awareness instruction, phonics, fluency, vocabulary, reading comprehension)

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Dr. Alan Kaufman

... there is a demand for the comprehensive assessment to drive intervention. This is the way it has always been, and this is the way it will always be because the referral questions for children with SLD have always asked, What is wrong? And how can we help? These questions demand differential diagnosis, a large part of which is determined by the cognitive abilities present in the individual child (p. 211).

Source: Kaufman, A. S., Lichtenberger, E. O., Fletcher-Janzen, E., & Kaufman, N. L. (2005). *Essentials of the K-ABC-II Assessment*. New York: John Wiley & Sons.

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## Dyslexia Profile for Use with WJ IV

- Provides a way to organize data regarding consideration of whether a student has dyslexia.
- May be used with any tests.
- Helps focus the evaluation on the reading and spelling and cognitive and linguistic, abilities most relevant to dyslexia.
- Highlights both strengths and weaknesses.

Developed by: C. Proctor, N. Mather, T. Stephens, and L. E. Jaffe (May, 2017).



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**DYSLEXIA PROFILE**  
(For use with the WJ IV®)

Name \_\_\_\_\_ Date of Birth \_\_\_\_\_ ID \_\_\_\_\_  
School \_\_\_\_\_ Grade \_\_\_\_\_ Testing 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.

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**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 (nonword/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? <input type="checkbox"/> Auditory processing <input type="checkbox"/> Phonemic coding	<input type="checkbox"/> Orthographic awareness? <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
--	---	--

**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	<input type="checkbox"/> Math calculation skills <input type="checkbox"/> Math problem solving	<input type="checkbox"/> General information* <input type="checkbox"/> Academic knowledge*

**D. At-Risk Indicators**  
Check the areas below that are additional at-risk factors.

☐ Family history ☐ Early speech-language concerns

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

Evaluator(s) \_\_\_\_\_ Date: \_\_\_\_\_

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## Dyslexia Assessment

- Primary Areas (word reading, rate, and spelling; Secondary areas (reading comprehension and written expression)
- Cognitive and linguistic correlates
- Ability to learn when reading is not required
- At risk indicators: family history, early speech and language difficulties

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The  
Challenges

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## A Few of the Major Challenges

- Going beyond phonological awareness
- Current SLD Identification Procedures
- Twice Exceptional Students
- Comorbidity
- English Language Learners
- Early Identification
- Late or No Diagnosis
- Implementation of Recommendations



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## Going Beyond Phonological Awareness

A single deficit model suggests that difficulties with reading stem primarily from poor phonological awareness (PA).

- IDA definition emphasizes PA
- State definitions and handbooks emphasize PA

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The phonological deficit view that has dominated the field for years is inadequate for explaining all cases of reading disorder (Peterson & Pennington, 2012; Snowling & Hulme, 2012 and its importance has been overstated (Swanson, Trainin, Necochea, & Hammill, 2003).

Peterson, R. L., & Pennington, B. F. (2012). Developmental dyslexia. *The Lancet*, 379(9830), 1997–2007.

Snowling, M. J., & Hulme, C. (2012). Annual research review: The nature and classification of reading disorders—a commentary for proposals on DSM-5. *Journal of Child Psychology and Psychiatry*, 53, 593–607.

Swanson, H. L., Trainin, G., Necochea, D. M., & Hammill, D. D. (2003). Rapid naming, phonological awareness, and reading. A meta analysis of the correlational evidence. *Review of Educational Research*, 73, 407–444.

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Adherence to a single deficit profile has limited utility; using only poor phonological awareness as a criterion for dyslexia would result in missing about one-half of the cases.

Source: Pennington, B. F., Santerre-Lemmon, L., Rosenberg, J., MacDonald, B., Boada, R., Friend, A., Leopold, D. R., Samuelsson, S., Byrne, B., Willcutt, E. G., & Olson, R. K. (2012). Individual prediction of dyslexia by single versus multiple deficit models. *Journal of Abnormal Psychology*, 121(1), 212–224. <http://doi.org/10.1037/a0025823>

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## Three Procedures that can Contribute Information for SLD Identification in the US (IDEA, 2004)

- Ability-achievement discrepancy
- Response to intervention (RTI)
- Alternative research-based methods (e.g., a pattern of strengths and weaknesses- PSW approach)

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“The problems in using a formula to identify students who have learning disabilities are many, serious, and too often disregarded” (p.32).

Source: Bateman, B. (1992). Learning disabilities: The changing landscape. *Journal of Learning Disabilities*, 25, 29-36.

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## What Response to Intervention (RTI) Can Do

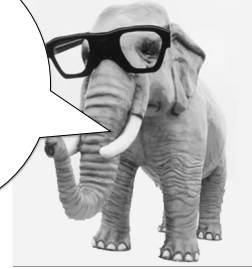
Monitor the progress of all students in the school.

Reduce the number of referrals to special education.

Provide adequate, timely interventions to all students.

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How do you determine when the response is inadequate?



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## Response to Intervention

Inadequate Response to Intervention

Limited Response to Intervention

When provided with good instruction aimed at their needs, students with dyslexia do respond...

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RTI does not tell us  
WHY a student  
does not RTI. RTI  
doesn't classify,  
individualize, or  
diagnose.

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"Knowledgeable practitioners also use clinical judgment to determine which approach is applicable for a given child or in a given school setting. While regulations and policies require school districts to implement a single approach, best practice may reside somewhere in the margins with a hybrid model" (p. 6).

Source: Kovaleski, J. F., Lichtenstein, R., Naglieri, J., Ortiz, S. O., Klotz, M. B., & Rossen, E. (2015). Current perspectives in the identification of specific learning disabilities. *Communique*, 44(4), 4, 6.

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## Solutions

- Don't let an RTI process delay comprehensive evaluations.
- Recognize that all "methods" of SLD identification have both positive and negative aspects and if used without clinical judgment, won't result in valid placement decisions.

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Twice exceptional students can have reading scores in the average range and still have dyslexia.

One has to consider:

- Level of intelligence
- Educational history
- Educational opportunities
- How the student functions on a daily basis

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“There is no one single test score that ensures a diagnosis of dyslexia. It is the overall picture that matters. An extremely bright child who has a reading score in the average range but who struggles and cannot learn to read fluently... has dyslexia.”

Source: Shaywitz, S. (2020). *Overcoming dyslexia* (2<sup>nd</sup> ed.). Alfred A. Knopf. (p. 166)

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“The children of superior mental capacity who fail to learn to read are, of course, spectacular examples of specific reading difficulty since they have such obvious abilities in other fields” (p. 23).

Source: Monroe, M. (1932). *Children who cannot read*. University of Chicago Press.

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**“Individuals identified as intellectually gifted may also have LD. Although twice-exceptional individuals may appear to be functioning adequately in the classroom, their performance may be far below what they are capable of, given their intellectual ability...educators often overlook these students until late in their academic careers” (p. 238).**

Source: Learning disabilities: Implications for policy regarding research and practice: A report by the National Joint Committee on Learning Disabilities March 2011. *Learning Disability Quarterly*, 34, 237-241.

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High comorbidity (two or more disorders in the same person) exists between dyslexia and other learning disorders. 40% of children with dyslexia will have another learning disorder as well.

Source: Moll, Kristina, Snowling, M.J., & Hulme, Charles. (2020). Introduction to the special issue “Comorbidities between reading disorders and other developmental disorders”. *Scientific Studies of Reading*, 24(1), 1–6. doi: 10.1080/10888438.2019.1702045

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## Comorbidity and Confounding Factors

- Mathematics
- ADHD
- Language Impairments
- English Language Learners
- Dysgraphia
- Behavior and Motivation



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## Mathematics

- Working memory
- Storing and retrieving facts
- Processing speed
- Rapid number naming
- ADHD



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## Attention (ADHD)/Reading Disability

- 25 to 40% of individuals with ADHD also meet the criteria for RD
- 15–35% of individuals with RD also meet the criteria for ADHD

Source: Willcutt, E. G., Pennington, B. F., & DeFries, J. C. (2000). Twin study of the etiology of comorbidity between reading disability and Attention-Deficit/ Hyperactivity Disorder. *American Journal of Medical Genetics (Neuropsychiatric Genetics)*, 96, 293–301.

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“...specific language impairment and reading disability are best considered as distinct disorders that are often comorbid” (Ramus et al., 2013) (p. 25)

Source: Elliott, J. G., & Grigorenko, E. L. (2104). *The dyslexia debate*. New York, NY: Cambridge University Press.

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## Reading Comprehension

“Individuals with problems in reading comprehension that are not attributable to poor word recognition have comprehension problems that are general to language comprehension rather than specific to reading.” (p. 3)

Spencer, M., Quinn, J. M., Wagner, R. K. (2014). Specific reading comprehension disability: Major problem, myth, or misnomer? *Learning Disabilities Research & Practice*, 29, 3-9.

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## English Language Learners

Languages differ in regards to their orthography.

- Shallow orthographies have higher regularity between the speech sounds and letters (e.g., Spanish, German, Finnish)
- Deep orthographies have more complex relationships between the phonemes and graphemes (e.g., English, French).

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In languages with a shallow orthography, slow Rapid Automatized Naming (RAN) and a slow reading rate are the best indicators of dyslexia.

In languages with a deep orthography, phonological awareness (at least at the younger ages), poor phonics, and spelling are the best indicators of dyslexia.

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Dan, Grade 6.8

## TABLE OF SCORES

Woodcock-Johnson IV Tests of Achievement Form A and Extended (Norms based on grade 6.8)

CLUSTER/Test	GE	RPI	Proficiency	SS (68% Band)	PR (68% Band)
Spelling	3.9	34/90	Limited	81 (77-84)	10 (6-15)
Oral Reading	6.4	89/90	Average	99 (95-103)	47 (36-58)

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Age: 6 years, 8 months  
Sex: Male  
Date of Testing: 01/03/2019

Grade: 1.4  
ID:  
Examiners:

## TESTS ADMINISTERED

Woodcock-Johnson IV Tests of Achievement Form A and Extended (Norms based on age 6-8)

## TABLE OF SCORES

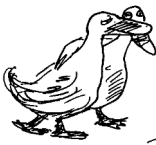
Woodcock-Johnson IV Tests of Achievement Form A and Extended (Norms based on age 6-8)

CLUSTER/Test	GE	RPI	Proficiency	SS (68% Band)	PR (68% Band)
READING	K.8	60/90	Limited	92 (91-94)	31 (27-35)
BASIC READING SKILLS	1.1	84/90	Average	97 (96-99)	43 (38-48)
MATHEMATICS	1.9	98/90	Advanced	112 (109-116)	80 (72-86)
WRITTEN LANGUAGE	K.6	47/90	Limited	89 (85-94)	24 (16-33)
ACADEMIC SKILLS	1.1	85/90	Average	98 (96-99)	44 (39-49)
ACADEMIC APPLICATIONS	K.9	73/90	Limited to Average	94 (90-97)	34 (26-42)
ACADEMIC KNOWLEDGE	2.3	97/90	Average to Advanced	112 (108-115)	78 (70-85)
BRIEF ACHIEVEMENT	1.1	84/90	Average	97 (95-99)	42 (36-48)

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## The Dyslexia Paradox

PARADOX



Dyslexia is typically not identified until second grade when the child has not learned to read as expected. Early intervention is most effective in preK-1 prior to reading failure.

Source: Ozernov-Palchik, O. & Gaab, N. (2016). Tackling the 'dyslexia paradox': Reading brain and behavior for early markers of developmental dyslexia. *WIREs Cognitive Science*, 7, 156-176. doi:10.1002/wcs.1383

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## Late or No Diagnosis

- a history of intense remediation outside of school in order to minimize the stigma of being in special education
- teachers in small, private or charter schools with no special education teacher provide accommodations informally
- limited understanding of LD; teachers believe that a student is just an underachiever; later testing reveals a problem.

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“A definition is relatively worthless unless it results in action” (p. 25).



Source: Cruickshank, W. M. (1983). Learning disabilities: A neurophysiological dysfunction. *Journal of Learning Disabilities*, 1, 24-26.

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## Diagnosis and Instruction

“Diagnosis must take *second* place to instruction, and must be made a *tool of instruction*, not an end in itself.”

Source: Cruickshank, W.M. (1977). Least-restrictive placement: Administrative wishful thinking. *Journal of Learning Disabilities*, 10, 193-194.

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## Major Challenges

1. Getting people to follow your recommendations.
2. Getting testing agencies to approve your recommended accommodations.

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**First grade: Justin requires a systematic phonics approach to learn to read and spell.**

**Third grade: no improvement in reading or spelling.**

**What happened to that recommendation?**

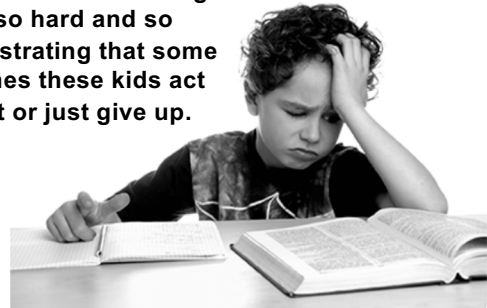
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## Requests for Accommodations

- A clear rationale is presented that documents the need for and the justification of the accommodation.
- Evidence for need of the accommodation is found in educational history (e.g., teacher reports and comments, retentions, tutoring, special education services in school)
- The request for the accommodation is supported by the assessment results, as well as educational history.

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**Behavior and motivation: Reading is so hard and so frustrating that some times these kids act out or just give up.**



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**“My ignorance of my dyslexia only intensified my sense of isolation and hopelessness. Ignorance is perhaps the most painful aspect of a learning disability” (p. 64).**

**Source: Schultz, P. (2011).** *My dyslexia*. New York, NY: W. W. Norton & Company.

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## The Value of Tests

“If these tests will give us a basis from which we can start to understand a child’s difficulties, they will have justified the time spent on them. Anything which helps educators or parents to *understand* any phase of development or lack of development is of immeasurable value” (p. 189).

**Source:** Stanger, M. A., & Donohue, E. K. (1937). *Prediction and prevention of reading difficulties*. Oxford University Press.

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