

Dyslexia: Going from law to practice

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States with a Dyslexia Law



For Parents & Families

For Schools & Districts

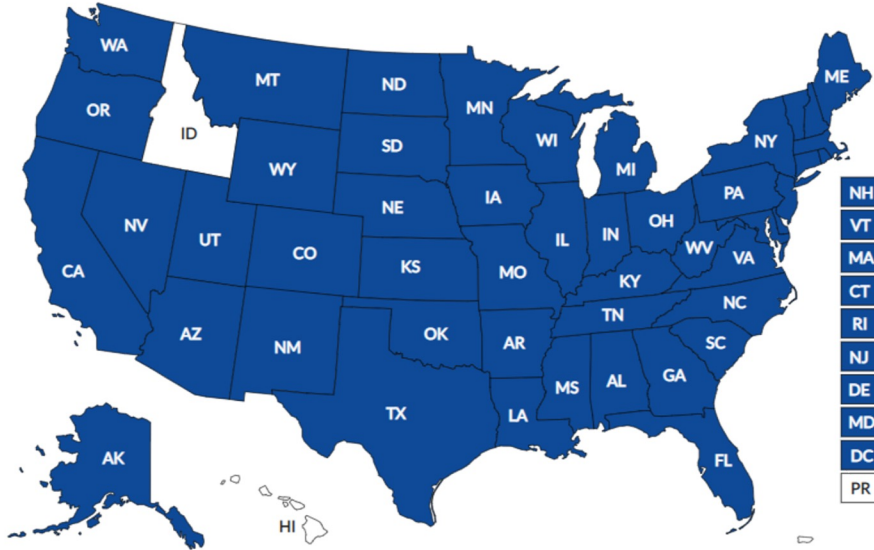
For State Agencies

Tools & Resources

News About Contact

This map provides an overview of states' dyslexia requirements, policies, and SIMR status.

- SEAs Has Dyslexia Legislation
- Screening Required
- Pre-service Required
- In-service Required
- Intervention Required
- All Policies Required
- SEAs Has Literacy SIMR



Pictures of the State of Missouri



The Federal Regs.

- **§300.307 Specific learning disabilities.**
- the criteria adopted by the State—
- (1) **May prohibit the use of a severe discrepancy** between intellectual ability and achievement for determining whether a child has a specific learning disability as defined in §300.8;
- (2) **May not require the use of a severe discrepancy** between intellectual ability and achievement for determining whether a child has a specific learning disability as defined in §300.8;
- (3) **Must permit the use of a process that determines if the child responds to scientific, research-based intervention** as part of the evaluation procedures described in §300.304; and
- 4) **May permit the use of other alternative research-based procedures** for determining whether a child has a specific learning disability as defined in §300.8.

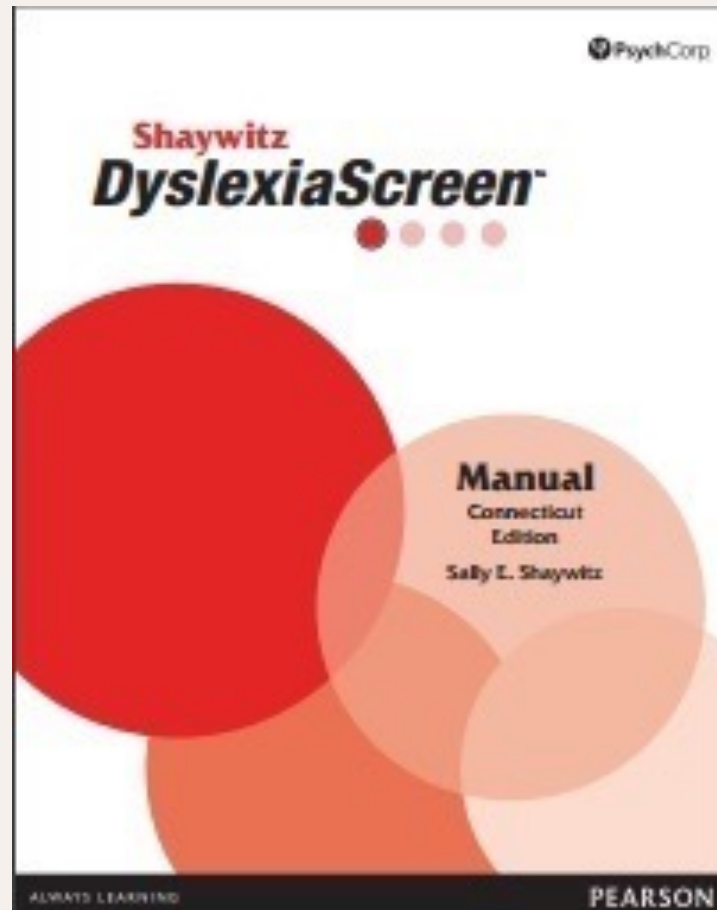
DSM – 5 (APA)

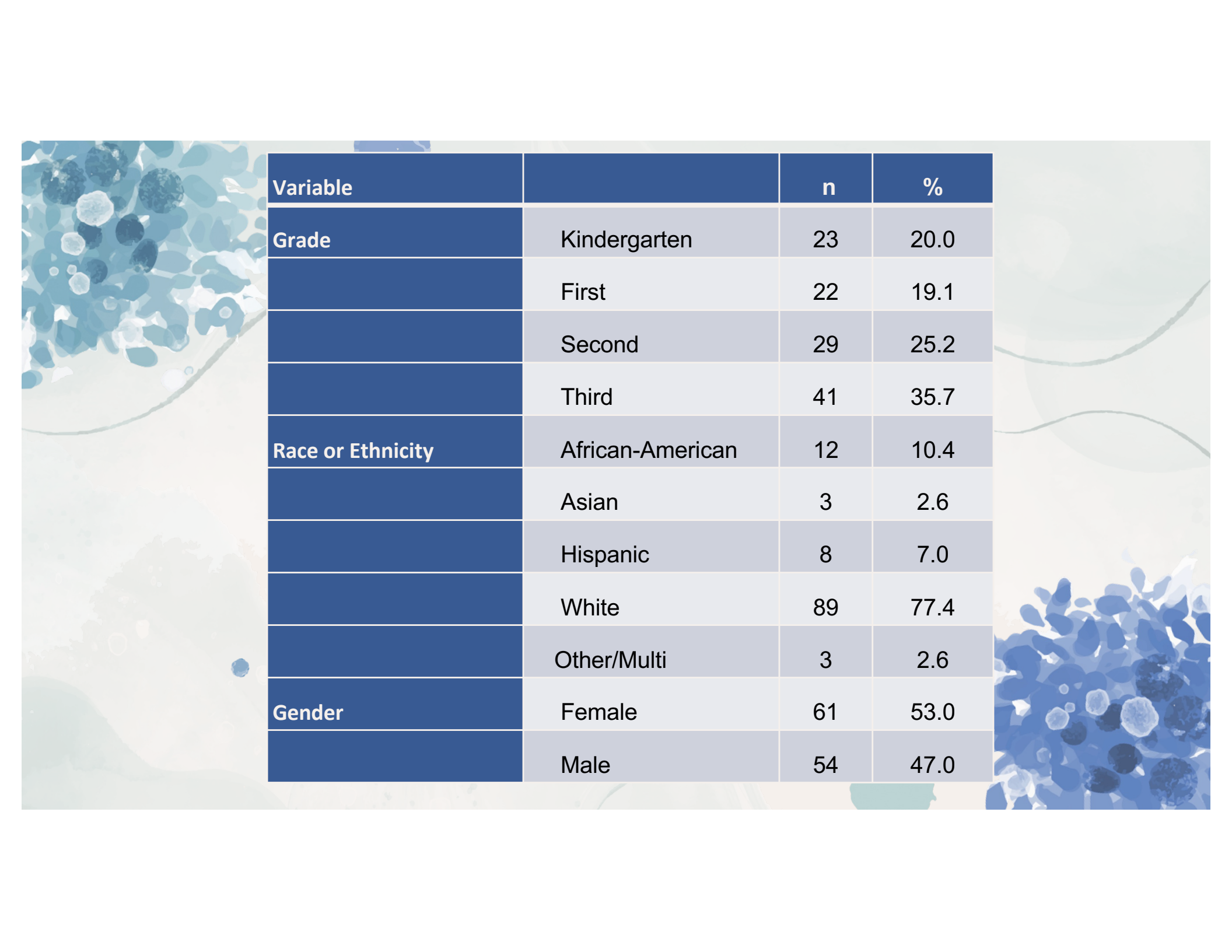
- Specific Learning Disorder – Reading, not dyslexia.
 - a. Difficulty in at least one of the following areas that has persisted for at least 6 months despite the provision of extra help or targeted instruction – (a) inaccurate and slow reading, (b) understanding meaning of what is read, (c) spelling, (d) written expression (grammar, punctuation or organization), (e) understanding number concepts, facts, or calculation, and (f) mathematical reasoning.
 - b. The affected academic skills are substantially and quantifiably below those expected for age and cause impairment in academic, occupational, or everyday activities
 - c. Onset during the school-age years, although may not fully manifest until young adulthood in some individuals
 - d. Intellectual Disabilities, uncorrected auditory or visual acuity problems, other mental or neurological disorders or adverse conditions (psychosocial adversity, lack of proficiency in the language of instruction, inadequate instruction) must be ruled out before a diagnosis of SLD can be confirmed.

Dyslexia Screening and Intervention Laws

- 3(b) - A school district shall utilize a screening instrument aimed at identifying students at risk of not meeting grade-level reading benchmarks. The screening instrument must:
 - (i) be administered to: (A) a child in the first year that the child is admitted to a school of the district up to grade 2; and (B) a child who has not been previously screened by the district and who fails to meet grade-level reading benchmarks in any grade;
- - If a screening under subsection (3)(b) suggests that a child may have dyslexia or a medical professional diagnoses a child with dyslexia, the child's school district shall take steps to identify the **specific needs** of the child and implement **best practice interventions to address those needs**.

Shaywitz DyslexiaScreen





Variable		n	%
Grade	Kindergarten	23	20.0
	First	22	19.1
	Second	29	25.2
	Third	41	35.7
Race or Ethnicity	African-American	12	10.4
	Asian	3	2.6
	Hispanic	8	7.0
	White	89	77.4
	Other/Multi	3	2.6
Gender	Female	61	53.0
	Male	54	47.0

Diagnostic Accuracy of Shaywitz DyslexiaScreen to Predict Low Phonological Awareness

		Phonological Awareness*	
		At-Risk	Not At-Risk
Shaywitz DyslexiaScreen	At-Risk	18 a	21 b
	Not At-Risk	33 c	27 d

* As measured by the Comprehensive Test of Phonological Processing (2nd ed.).

Note. Sensitivity = $a / (a + c) = .35$, Specificity = $d / (b + d) = .44$, Positive Predictive Power = $a / (a + b) = .46$, Negative Predictive Power = $d / (c + d) = .55$, Overall Correct Classification = $(a + d) / n = .45$.

Diagnostic Accuracy of DIBELS Next Composite to Predict Low Phonological Awareness

		<u>Phonological Awareness*</u>	
		At-Risk	Not At-Risk
DIBELS Composite	At-Risk	46 a	17 b
	Not At-Risk	5 c	33 d

* As measured by the Comprehensive Test of Phonological Processing (2nd ed.).

Note. Sensitivity = $a / (a + c) = .90$, Specificity = $d / (b + d) = .66$, Positive Predictive Power = $a / (a + b) = .73$, Negative Predictive Power = $d / (c + d) = .87$, Overall Correct Classification = $(a + d) / n = .78$.

A Word About RAN

Variable	<i>K</i>	<i>n</i>	<i>r</i>
Outcome			
Reading Accuracy	79	12,239	.42
Reading Fluency	55	15,710	.49
Stimulus			
Letters	55	13,124	.51
Numbers	60	12,622	.48
Pictures	32	8,409	.35
Colors	25	2,402	.33

Araújo, S., Reis, A., Petersson, K. M., & Faísca, L. (2015). Rapid automatized naming and reading performance: A meta-analysis. *Journal of Educational Psychology, 107*(3), 868–883. <https://doi.org/10.1037/edu0000006>

Dyslexia Guidelines

Skill

- Phonological awareness
- RAN
- Nonsense Word
- Letter-Sound/Sound Symbol
- Fluency

Measure

- Initial (First) Sound Fluency
- Phoneme Segmentation Fluency
- LNF
- NWF (Word Attack), LSF
- Letter Sound Fluency
- Oral reading fluency

Screening Process

- Screen with PA for kindergarten (FSF, PSF, QPA)
- Screen with decoding for first grade (NWF)
- Screen with CBM-R for 2nd – 5th
 - Low accuracy (93% 1st – 3rd, 95% 4th and 5th) = low decoding
 - Assess NWF or WA for kids who score low
- Screen with comprehension for MS and HS (use CBM-R or decoding if low)

What About Spelling?

- Spelling = decoding
- Terrible screener
 - Kids with low decoding are poor spellers, BUT
 - Bunch of kids who are poor spellers who decode fine
- Good diagnostic
- WTW (already have it then use it)



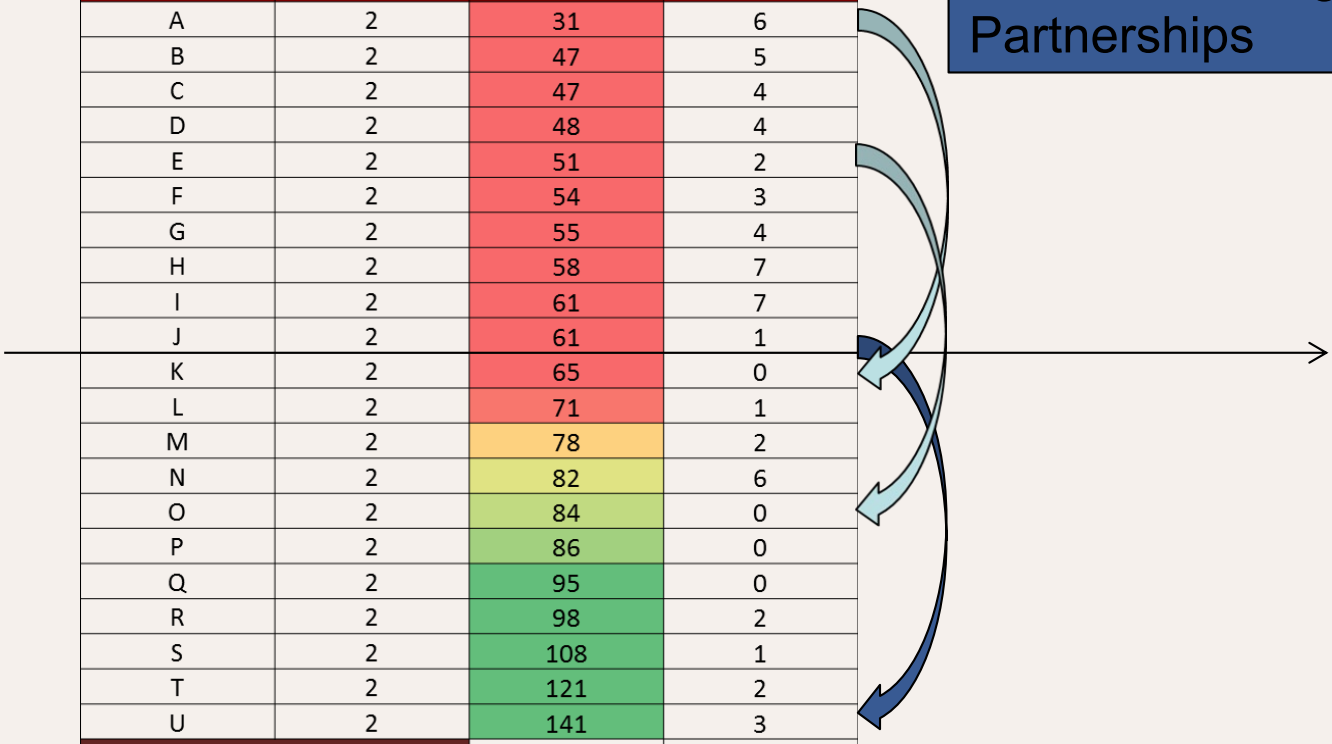
Intervention as Screener

Fall	70
Winter	91
Spring	109

	WRC
Student 1	48
Student 2	122
Student 3	126
Student 4	82
Student 5	102
Student 6	77
Student 7	51
Student 8	84
Student 9	80
Student 10	102
Student 11	83
Student 12	38
Student 13	104
Student 14	152
Student 15	143
Student 16	115
Student 17	142
Student 18	114
Student 19	13
Student 20	75
Student 21	141
Student 22	87
Student 23	49
Median	87

Spring Benchmark			90	
Student	Grade	ORF		
		WRC	Errors	
A	2	31	6	
B	2	47	5	
C	2	47	4	
D	2	48	4	
E	2	51	2	
F	2	54	3	
G	2	55	4	
H	2	58	7	
I	2	61	7	
J	2	61	1	
K	2	65	0	
L	2	71	1	
M	2	78	2	
N	2	82	6	
O	2	84	0	
P	2	86	0	
Q	2	95	0	
R	2	98	2	
S	2	108	1	
T	2	121	2	
U	2	141	3	
Class Median				

Partner Reading Partnerships



Procedure

Partner Reading	Paragraph Shrinking
<ol style="list-style-type: none"><li data-bbox="331 669 1024 760">1. Stronger reader reads aloud for 5 minutes<li data-bbox="331 831 1024 922">2. The weaker reader reads aloud the SAME text for 5 minutes	<ol style="list-style-type: none"><li data-bbox="1064 669 1782 870">1. For 5 minutes the stronger read continues reading new text in the story, stopping after each paragraph to summarize<li data-bbox="1064 883 1717 1084">2. For 5 minutes the weaker reader continues with the new text, stopping after each paragraph to summarize



<https://www.youtube.com/watch?v=6glm9W8M36Y&t=699s>

What we found: 3rd grade Partner Reading data

Third Grade			
Third Grade Benchmark	91 Words Read Correctly (WRC)		
	Pre Intervention Class Median (WRC)	Post Intervention Class Median (WRC)	Slope (WRC)
Class 1	81	104	11.5
Class 2	87	115	14

What we found: 3rd grade Partner Reading data

	Students Below Benchmark Pre Intervention	Students Below Benchmark Post Intervention	Total Students in Class
Third Grade Class 1	10	5	20
Third Grade Class 2	13	5	23

Maki et al. (2020)

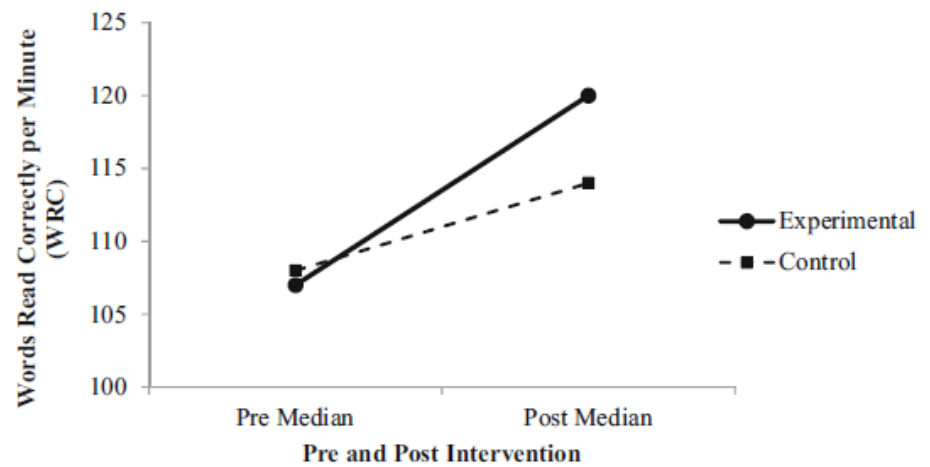


Fig. 1 Curriculum-based measure for reading median scores for treatment and control classrooms

← Tweet

You Retweeted



Lindsay Kemeny
@LindsayKemeny



Two weeks ago our class median for words correct per minute was 50 (2nd grade) . -Now our class median is 66! This is thanks to a class wide intervention I implemented after learning from [@burnsmk1](#). I love doing mini-research in my classroom!



8:17 PM · Oct 12, 2021 · Twitter Web App

15 Retweets 8 Quote Tweets 144 Likes



Agreement

Pre CBM-R score and
MAP-R score = 69.6%

Post CBM-R score and
MAP-R score = 91.3%

	CBM-R Pre	CBM-R Post	MAP-Reading Score
Student 1	48	92	189
Student 2	122	142	194
Student 3	126	147	196
Student 4	82	113	190
Student 5	102	117	188
Student 6	77	97	190
Student 7	51	70	161
Student 8	84	95	192
Student 9	80	82	174
Student 10	102	127	188
Student 11	83	106	189
Student 12	38	47	149
Student 13	104	115	196
Student 14	152	161	211
Student 15	143	158	205
Student 16	115	125	195
Student 17	142	160	224
Student 18	114	127	196
Student 19	13	40	138
Student 20	75	92	185
Student 21	141	136	205
Student 22	87	105	189
Student 23	49	47	145

Intervention

- The child's school district shall take steps to identify the specific needs of the child and implement best practice interventions to address those needs. This process may lead to consideration of the child's qualification as a child with a disability under the Individuals With Disabilities Education Act.

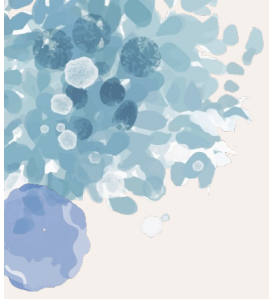
Interventions for Children with LD

Reading comprehension	1.13
Direct instruction	0.84
Psycholinguistic training	0.39
Modality instruction	0.15
Diet	0.12
Perceptual training	0.08

Kavale & Forness, 2000



Does One Size Fit All?







Intervention?





EXPLORE
FP Literacy

EXTEND
Your Expertise

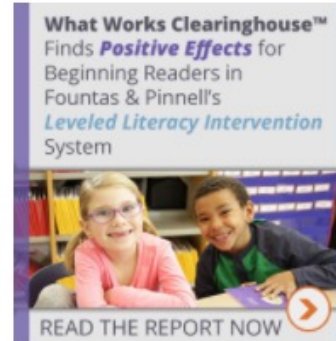
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Leveled Literacy Intervention (LLI)

The *Fountas & Pinnell Leveled Literacy Intervention* is a powerful, short-term intervention, that provides daily, intensive, small-group instruction, which supplements classroom literacy teaching. *LLI* turns struggling readers into successful readers with engaging leveled books and fast-paced, systematically designed lessons.



What is it?

Who is it for?

What is inside?

How is it implemented?

The *LLI* systems are designed to be used with small groups of students who need intensive support to achieve grade-level competencies in grades K through 12. It also provides strong support for students who are acquiring English as an additional language and are receiving classroom reading instruction in English. You may also decide to include students who are identified as having special needs if the content of *LLI* meets the educational program specifications for the student.



Assess 4 NRP Areas

- Phonemic Awareness
 - Phoneme segmentation fluency (QPA, PAST, CTOPP)
- Phonics
 - Nonsense word fluency (WJ Pseudoword)
- Fluency
 - CBM-R (TOSCRF)
- Vocabulary/Comprehension
 - Measures of Academic Progress or STAR Reading

Assess 4 NRP Areas

Vocabulary/Comprehension

- MAP
- Star Reading

Fluency

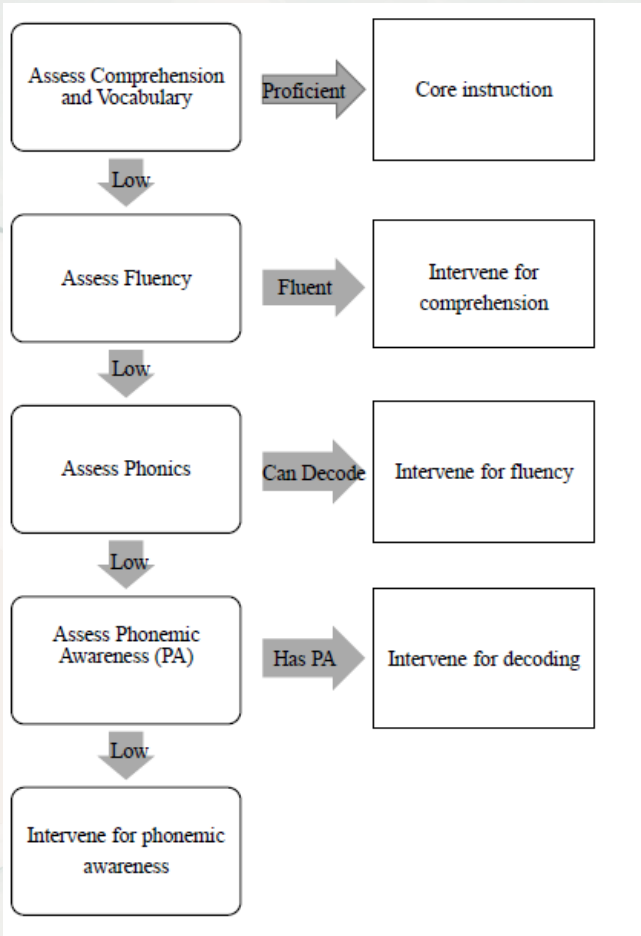
- Oral reading fluency

Phonics

- NWF
- Word attack - WJ
- Spelling

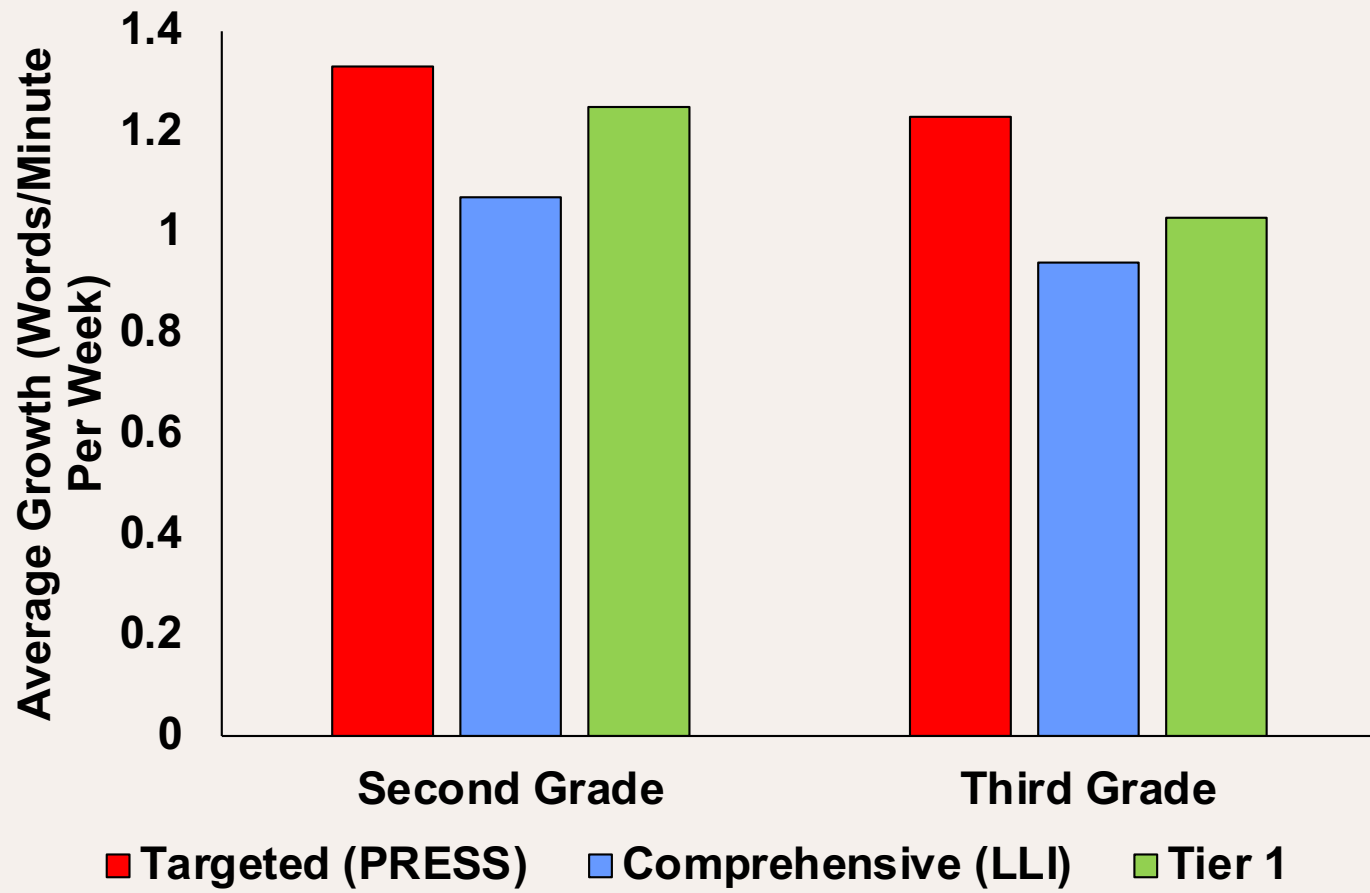
Phonemic Awareness

- Phonemic Awareness Inventory
- PSF or FSF



Student	MAP RIT	RIT %ile	ORF	Accuracy
2	144	1	2	20%
36	146	1	7	41%
33	148	1	11	52%
34	160	6	22	82%
10	158	3	23	77%
27	158	3	27	87%
7	154	1	30	77%
11	160	6	31	82%
6	160	6	36	86%
5	152	1	38	91%
4	169	24	42	91%
32	166	17	44	90%
37	161	8	50	96%
17	174	37	54	95%
9	162	9	57	88%
30	155	1	57	93%
26	166	17	58	92%
3	177	45	68	96%
19	180	53	68	94%
22	190	78	72	99%
13	172	32	74	96%
1	175	39	75	95%
8	187	71	76	96%
14	182	58	78	99%
31	172	32	81	96%

Grade	Phonemic Awareness	Phonics	Fluency	Comprehension
Kindergarten	Road to the Code	Sound Partners	NA	NA
First Grade	Road to the Code	Sound Partners	NA	NA
Second Grade	Intervention for All: PA	Sound Partners	Read Naturally	Learning Strategies Curriculum: Inferencing (LSC:I)
Third Grade	NA	Phonics for Reading	Read Naturally	LSC:I
Fourth Grade	NA	REWARDS	Read Naturally	LSC:I
Fifth through Eighth Grades	NA	REWARDS	Read Naturally	LSC:I



Meta- Analysis

- 24 studies of K-8 small-group reading interventions
 - 27 effects
 - Median $g = 0.54$
 - Targeted (comprehension, fluency, vocabulary, decoding, phonemic awareness)
 - 14 effects, $g = 0.65$
 - Comprehensive
 - 13 effects $g = 0.33$
- Hall & Burns (2018)




**“Sometimes the questions are complicated
and the answers are simple.”**

— Dr. Seuss

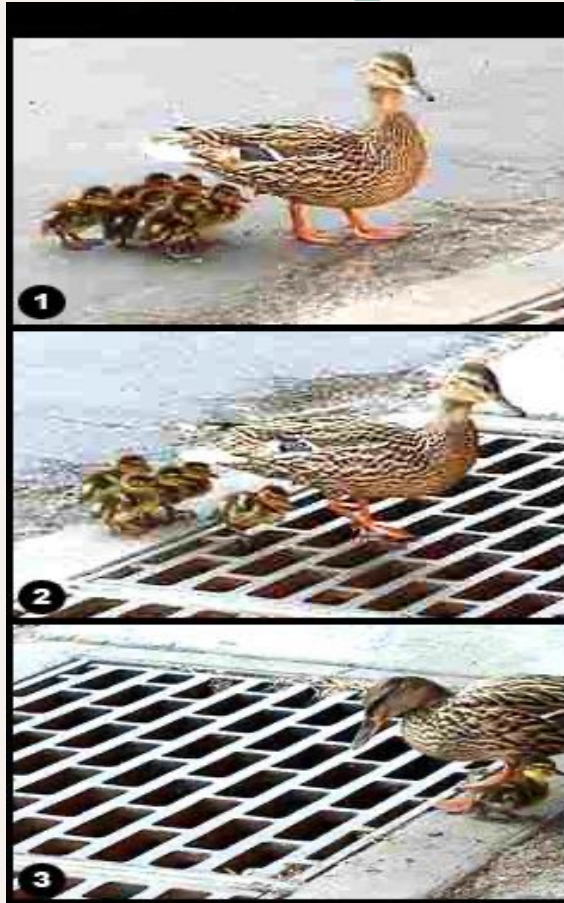
Does Leadership Matter?

POWERTHE**KNOWLEDGE**

 College of Education
University of Missouri

Does Leadership Matter?

- YES!

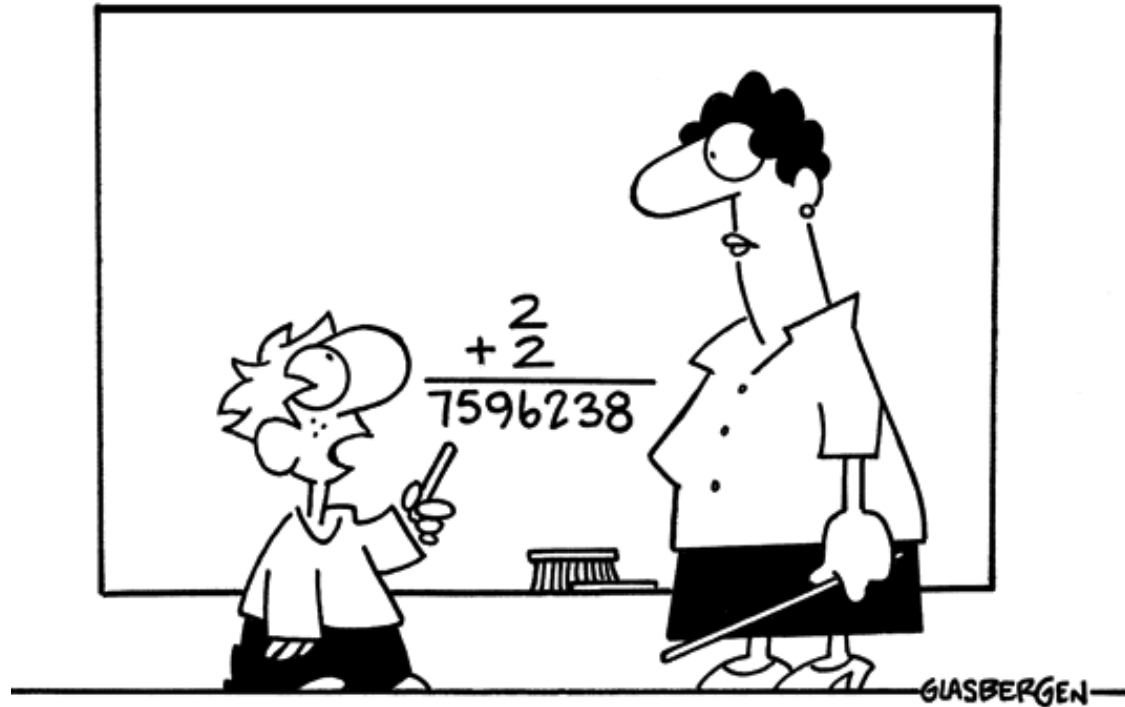




Change in education is like:

committing suicide by
standing in front of a
glacier

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“In an increasingly complex world, sometimes old questions require new answers.”

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