



Leading with Language

**Oklahoma Speech-Language-Hearing
Association Conference 2025**

**Douglas B. Petersen, PhD, BCS-CL
Professor, Vance Masteller Endowed
Research Chair of Child Language Disorders
Baylor University**

Disclosures

Dr. Petersen has an ownership interest in Language Dynamics Group, LLC, the company that owns the copyright for several of the assessments and interventions that will be discussed in this presentation.



How Do We Improve The Language and Literacy of Millions of Children?

- ▶ VALID Tier-1 Screening and Diagnostic Assessments for **DLD** and **Dyslexia**
- ▶ SYSTEM-WIDE *Valid* **Benchmark Assessments and Progress Monitoring** of Decoding and Academic Language
- ▶ SYSTEM-WIDE Explicit, Systematic Academic Language **Instruction** and Intervention



How Do We Improve The Language and Literacy of Millions of Children?

▶ VALID Tier-1 Screening and
Diagnostic Assessments for
DLD and **Dyslexia**

SYSTEM-WIDE *Valid*
**Benchmark Assessments and
Progress Monitoring** of
Decoding and Academic
Language

SYSTEM-WIDE Explicit,
Systematic Academic
Language **Instruction** and
Intervention



X



=



SCARBOROUGH'S READING ROPE

LANGUAGE COMPREHENSION

Background Knowledge

(facts and concepts needed for text-to-world connections)

Vocabulary

(general academic words, multiple-meaning words, and domain-specific words)

Language Structure

(subordination, modifiers, and relative pronouns; morphological awareness)

Verbal Reasoning

(figurative language and inferencing using text-to-text and text-to-self connections)

Literacy Knowledge

(discourse elements and patterns in narrative and informational content)

WORD RECOGNITION

Phonological Awareness

(blending, segmenting, identification of first sounds, and sound manipulation)

Decoding

(letter sound correspondences and phoneme blending of written words)

Sight Recognition

(automatic recognition of words learned through exposure while decoding)

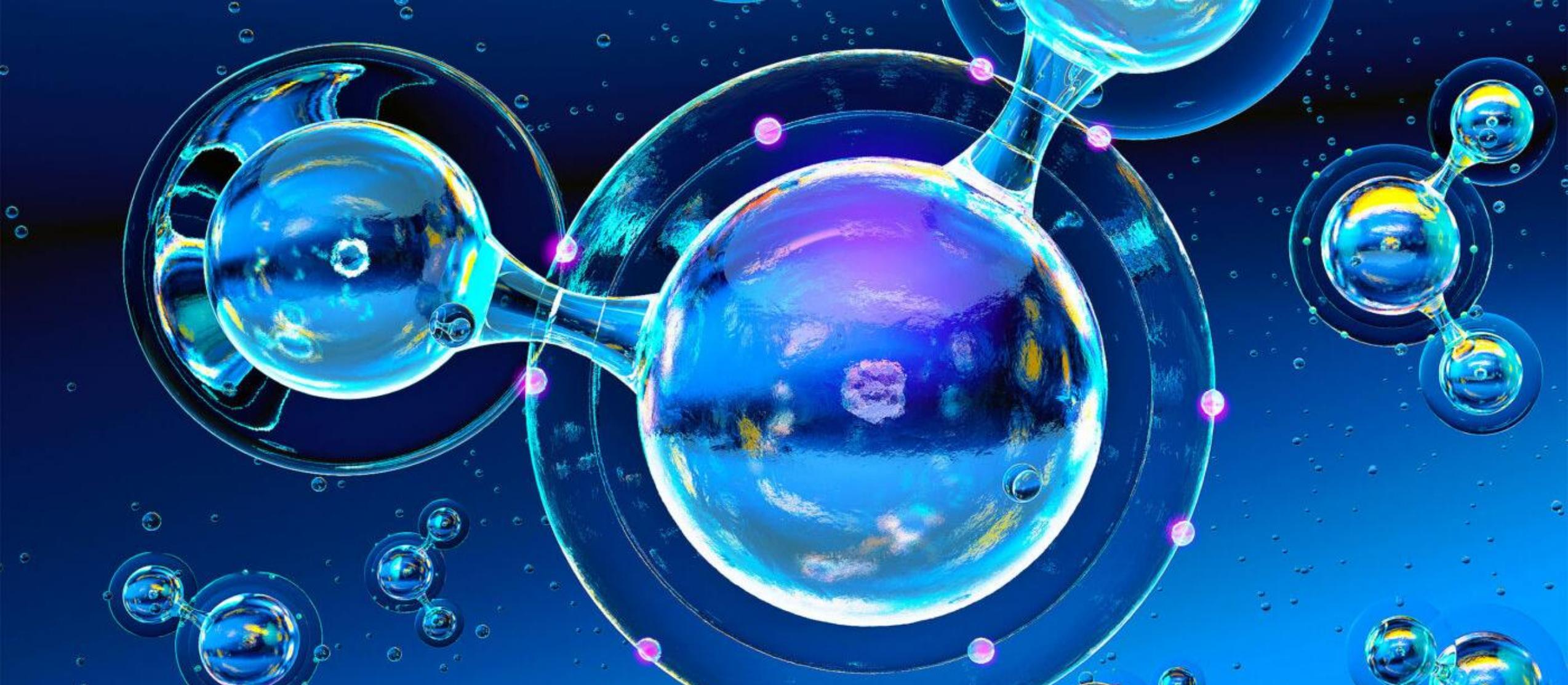
Increasingly
STRATEGIC

Increasingly
AUTOMATIC

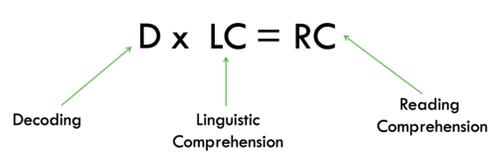
SKILLED READING

Fluent execution and coordination of word recognition and language comprehension





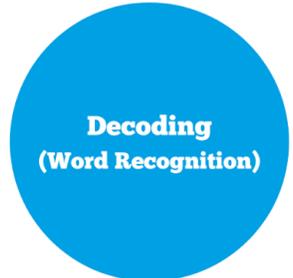
SIMPLEVIEW OF READING (SVR)
(GOUGH & TUNMER, 1986)



Reading:
print (code) and language



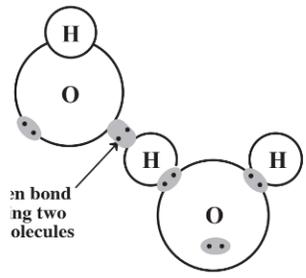
water (H₂O)



X



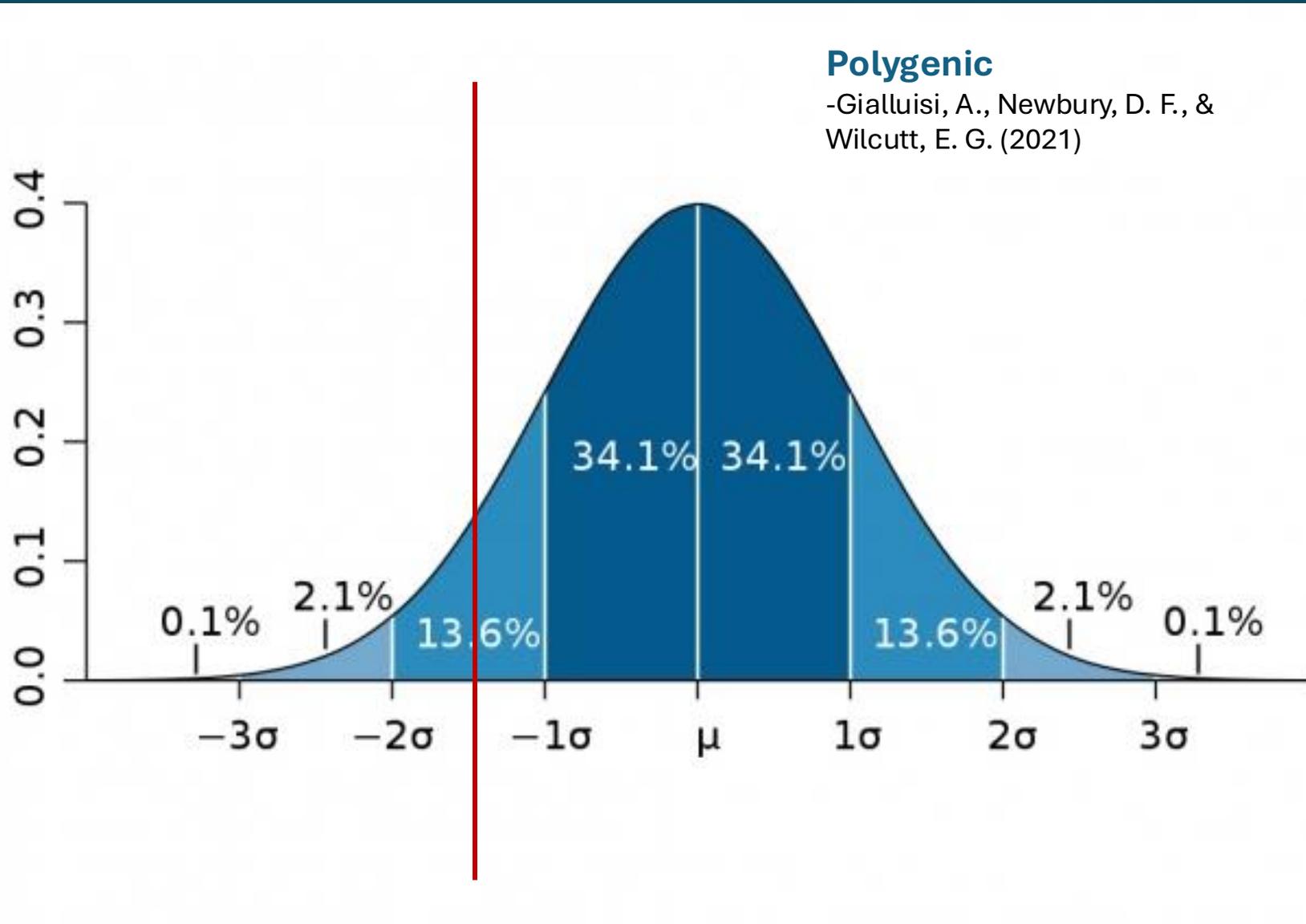
=



What is dyslexia?

“Dyslexia is a developmental disorder with a biological origin. It is characterized by difficulties in word recognition and/or fluent word reading skills, despite normal intelligence and adequate educational opportunities.”
-International Dyslexia Association

“Dyslexia is a developmental disorder characterized by difficulties in word recognition and/or fluent word reading skills, despite normal intelligence and adequate educational opportunities.”
-Snowling, Hulme, & Adams (2018)



biological in origin and/or fluent word reading skills.”

It is characterized by difficulties in word recognition and/or fluent word reading skills, despite normal intelligence and adequate educational opportunities.”

Are Dyslexia Screeners Accurate?

Sick	Healthy
TRUE POSITIVES (TP)	FALSE POSITIVES (FP)
FALSE NEGATIVES (FN)	TRUE NEGATIVES (TN)

Sensitivity

$$\frac{TP}{TP + FN}$$

Specificity

$$\frac{TN}{TN + FP}$$

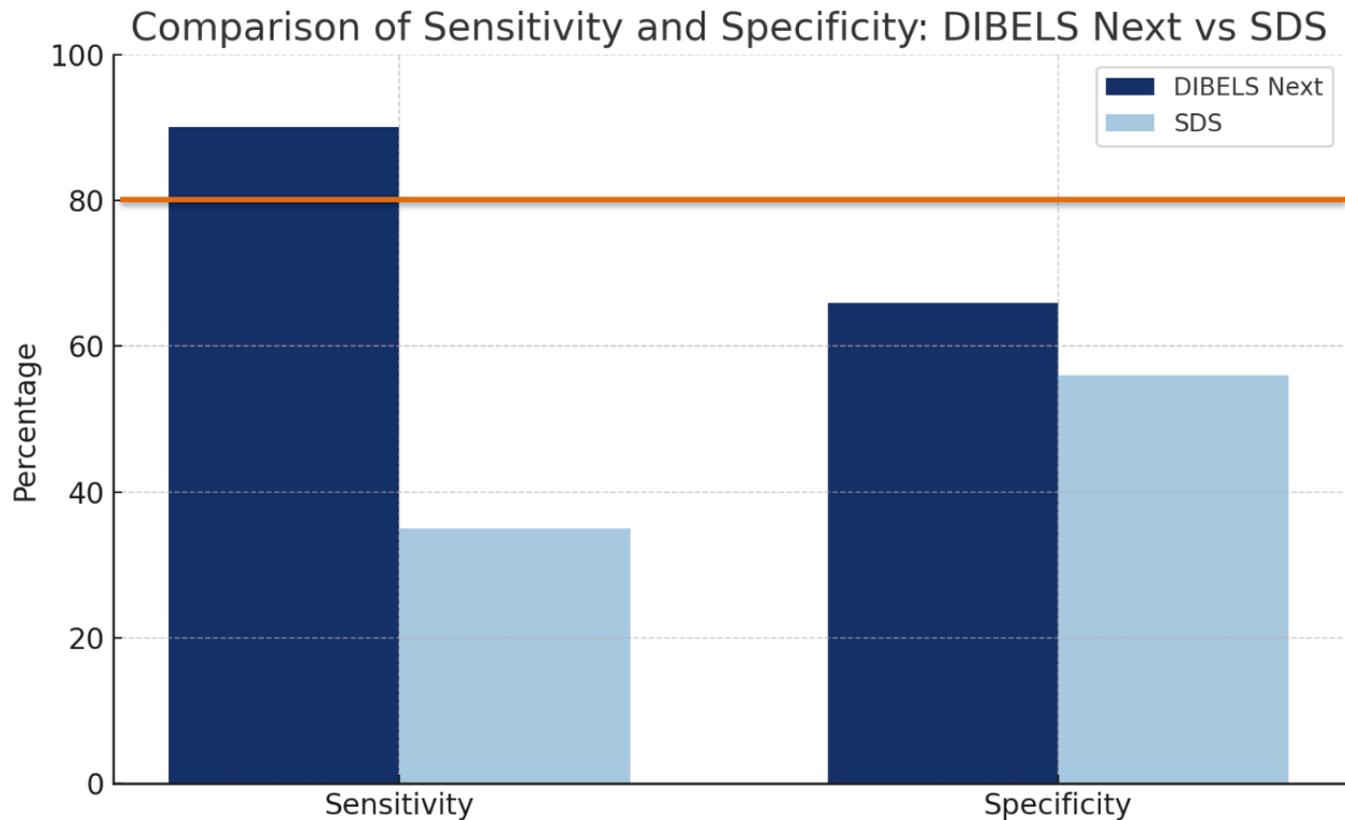
$$PVV = \frac{TP}{TP + FP}$$

$$NPV = \frac{TN}{TN + FN}$$

Sensitivity: The percent of people with the disorder who are correctly identified as having the disorder.

Specificity: The percent of people without the disorder who are correctly identified as *not* having the disorder.

Are Dyslexia Screeners Accurate?



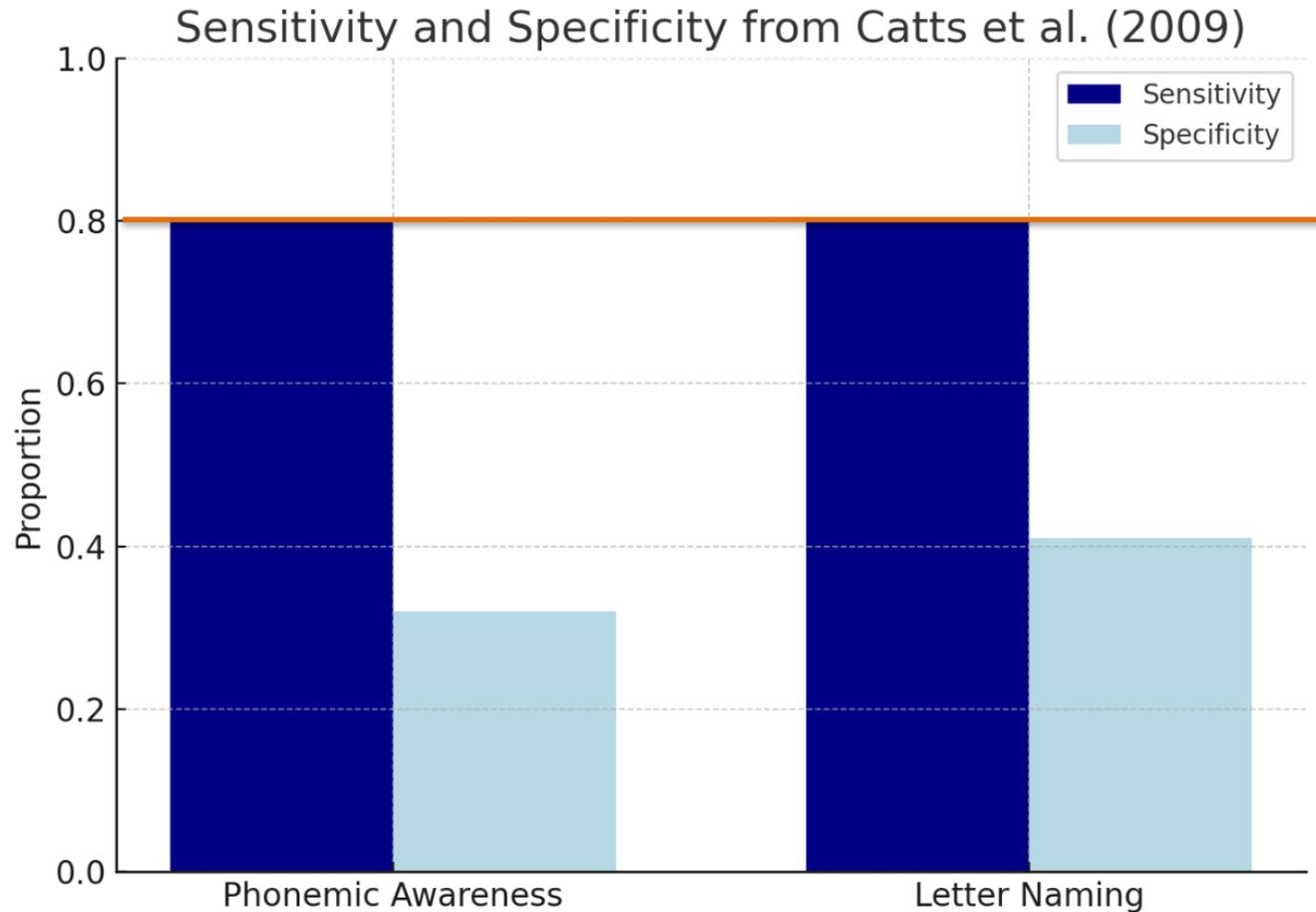
Burns et al. (2022)

“Shaywitz Dyslexia Screen (SDS) and Dynamic Indicators of Basic Early Literacy Skills Next (DIBELS Next) were compared for 115 K-3 students with specific reading deficits using the Phonological Awareness Composite of the Comprehensive Test of Phonological Processing as the criterion.”

“Results suggested that the decision accuracy for DIBELS Next (78%) was better than SDS (45%), and both sensitivity (**DIBELS Next = 90%, SDS = 35%**) ~~and positive post-test probability (DIBELS Next = 71%, SDS = 42%) favored DIBELS Next.~~”

...Specificity of 56% for the SDS and 66% for DIBELS Next.

Are Dyslexia Screeners Accurate?



N = 1,991 children

Grade level at screening: Kindergarten

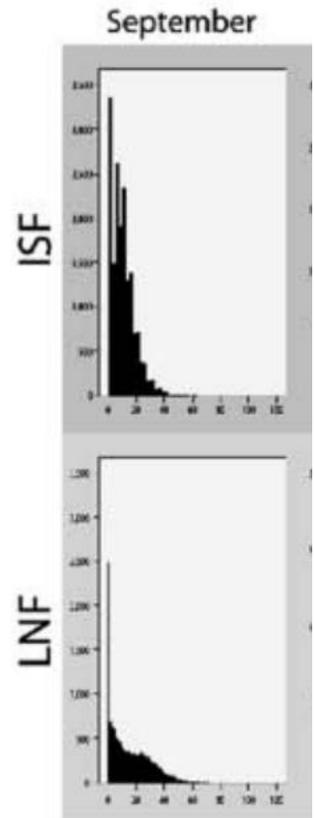
Phonemic Awareness:

80% sensitivity
32% Specificity

Letter Naming:

80% sensitivity
41% specificity

“...screening instruments designed to identify children at risk for reading disabilities continue to have limited predictive validity.”



Assessment Bias

Sensitivity and specificity is often lower for culturally and linguistically diverse students

- High potential for Content and Linguistic Bias
- Assessment in L1 does not guarantee valid results
- Static assessment cannot control for cultural, linguistic, and historical factors

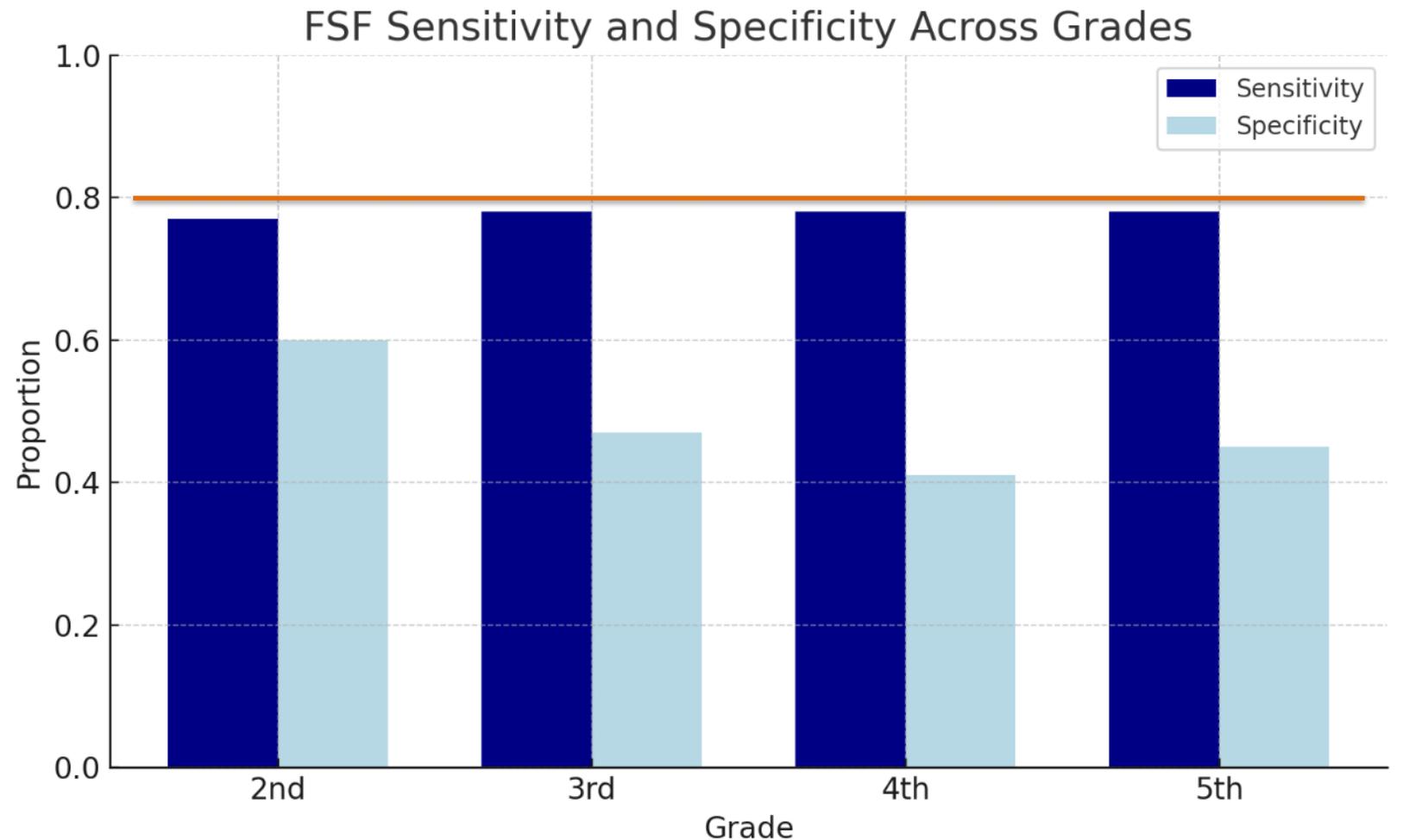


Are Dyslexia Screeners Accurate for Culturally and Linguistically Diverse Children?

-600 kindergarten students followed longitudinally to end of first grade, 300 followed to the end of fifth grade.

-50% Hispanic (primarily) Multilingual Students:

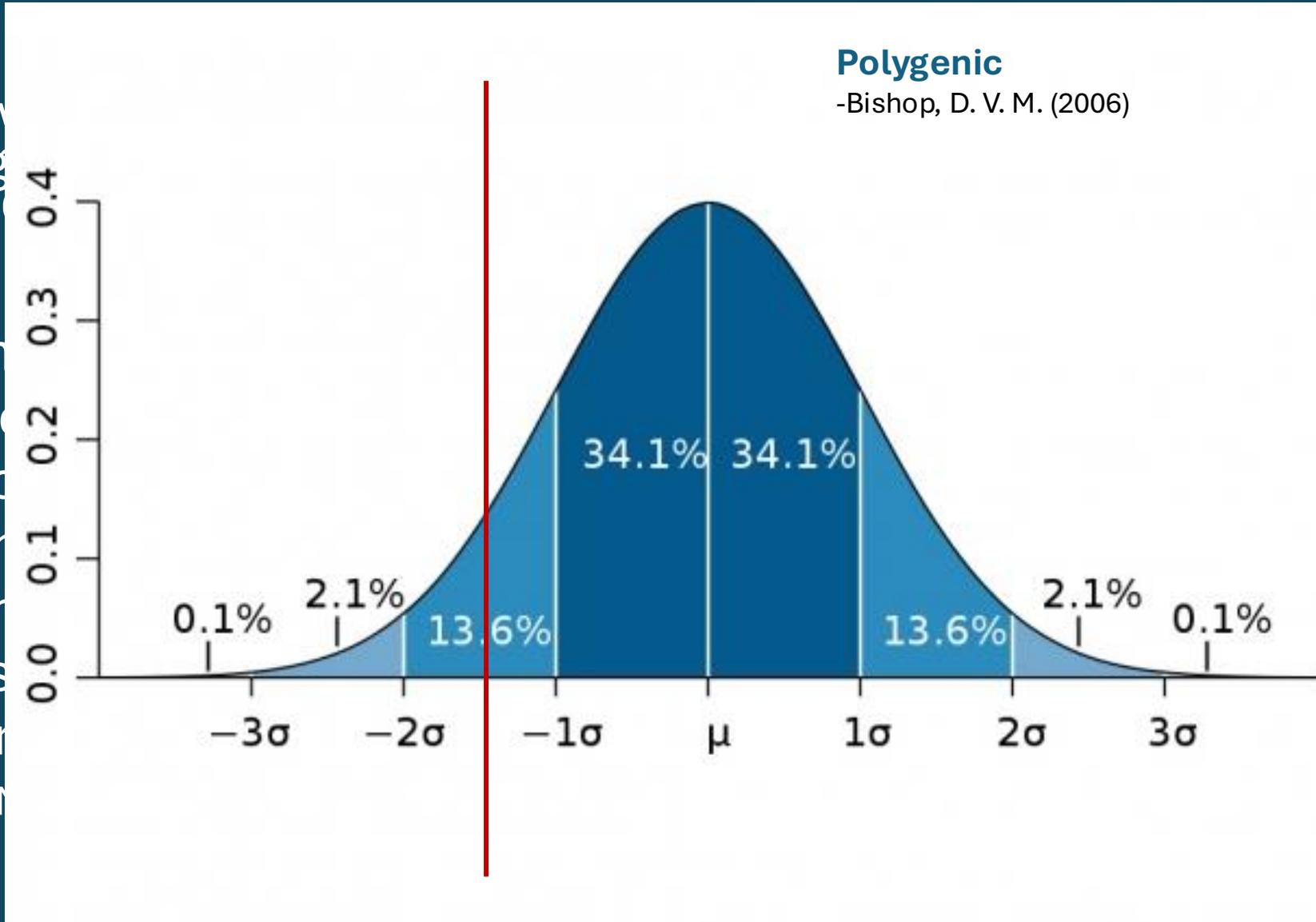
-Petersen, Gragg, & Spencer 2015



What is developmental language disorder (DLD)?

“People with DLD are not using language as well as they should be.”
-McGregor (2017)

“Developmental language disorder is a condition of language impairment that is not due to other biomedical factors such as hearing impairment, intellectual difficulties, or autism spectrum disorders.”
-Bishop, D. V. M. (2006)



standing,

mental
ties with
ned by
r, hearing
ese
ally

ortium. (2017)

Are Current DLD Screeners Accurate?

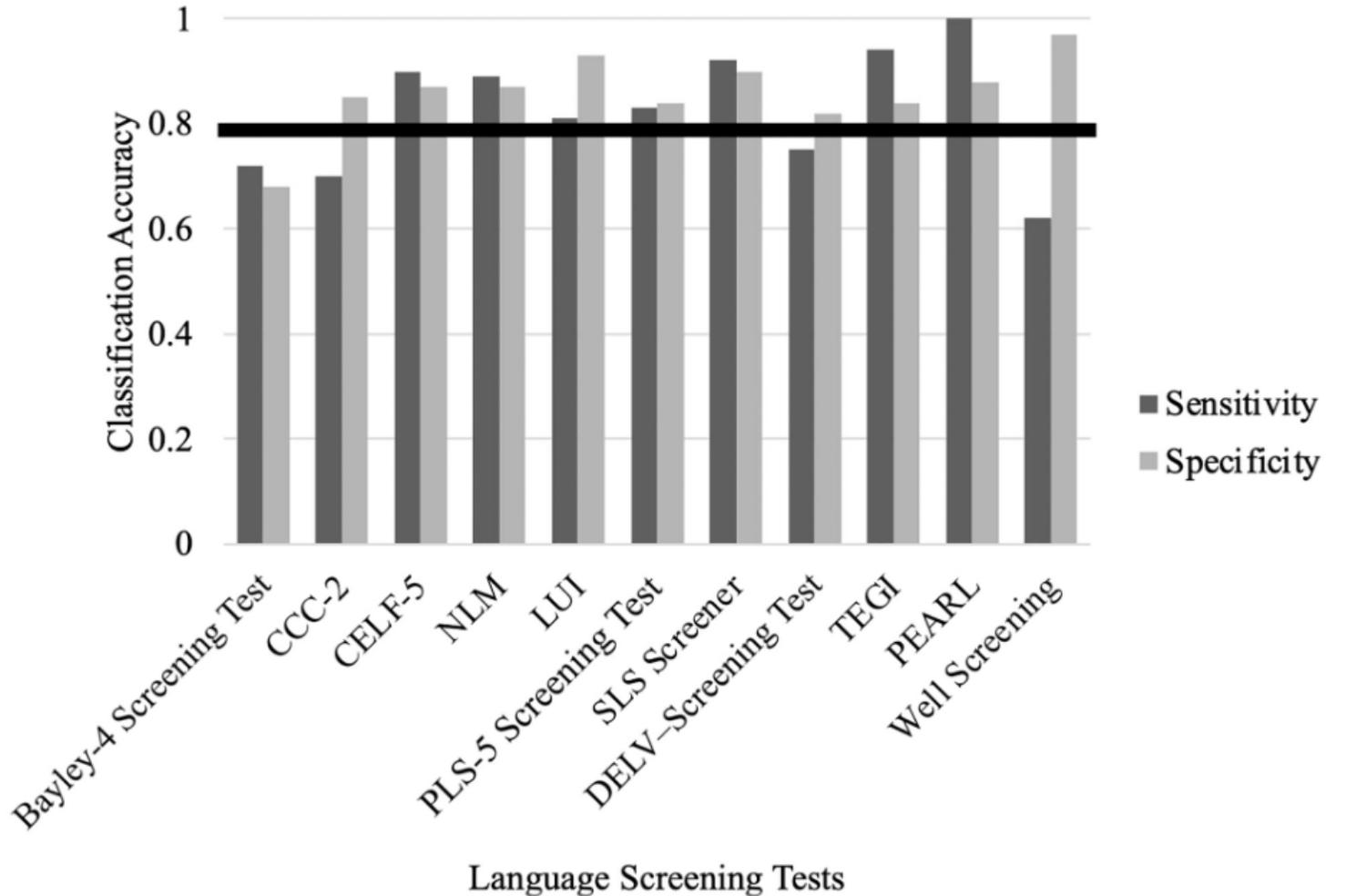


Review Article

A Review of Screeners to Identify Developmental Language Disorder

Xue Bao,^a Rouzana Komesidou,^a and Tiffany P. Hogan^a

^aSchool of Health and Rehabilitation Sciences, MGH Institute of Health Professions, Boston



Test Accuracy When Administered to Diverse Students

2024

EVALUATION OF CULTURAL-LINGUISTIC FACTS IN LANGUAGE TESTING WITH ENGLISH LEARNERS

Mayra Alejandra Reyes Ruiz

LSHSS

 **YOU HAVE ACCESS** | Clinical Forum | January 2003

Alternative Assessment of Language and Literacy in Diverse Populations

Authors: Sandra P. Laing  and Alan Kamhi | [AUTHORS INFO & AFFILIATIONS](#)

Publication: Language, Speech, and Hearing Services in Schools • Volume 34, Number 1 • Page

Performance of ELL Referred Students on WISC-V, CTOPP-2, and TAPS-4

	n	Scale Scores		Standard Scores	
		M	SD	M	SD
WISC-V					
Similarities	38	6.18	3.00	80.92	14.97
Vocabulary	38	6.84	2.52	84.21	12.60
Block Design	39	8.44	2.26	92.18	11.29
Visual Puzzles	41	8.85	2.57	94.27	12.87
Matrix Reasoning	41	8.12	3.01	90.61	15.05
Figure Weights	41	8.85	2.60	94.27	13.02
Digit Span	40	5.55	2.28	77.75	11.38
Picture Span	41	7.46	2.25	87.32	11.24
Coding	40	7.90	3.02	89.50	15.10
Symbol Search	37	8.46	2.85	92.30	14.27
CTOPP-2					
Elision	59	5.25	2.07	76.27	10.36
Blending Words	59	6.12	2.44	80.51	12.24
Phoneme Isolation	44	5.68	1.74	78.41	8.679
Memory for Digits	50	5.66	2.16	78.30	10.81
Nonword Repetition	51	6.35	3.26	81.96	16.10
Rapid Digit Naming	52	7.13	2.24	85.67	11.20
Rapid Letter Naming	47	6.77	2.43	83.83	12.17

Are Static Dyslexia and DLD Screeners
Accurate When Administered to Young Children?

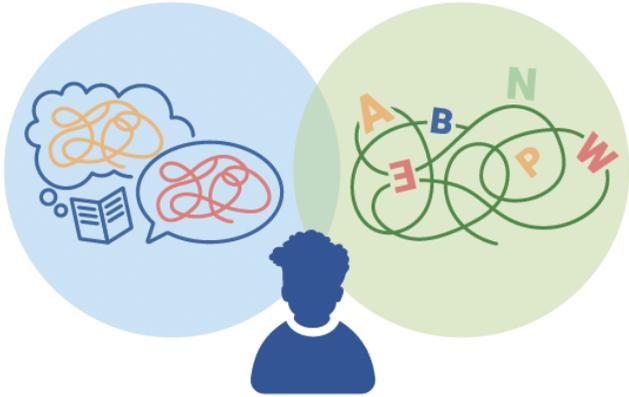
Are Static Dyslexia and DLD Screeners Accurate When
Administered to Culturally and Linguistically Diverse Students?

The results from most currently available static screeners cannot be validly interpreted when administered to culturally and linguistically diverse students.



Dynamic Assessment

DYMOND™



Diagnostic Assessment for DLD and Dyslexia

- Identify students who have DLD and/or Dyslexia
- Help determine eligibility for special education
- Differentiate difference from disorder
- Identify strengths, weaknesses, and intervention targets

WHO: Students (K-8) referred for special education eligibility

EXAMINERS: Individuals who have specialized training in assessment, evaluation, and diagnosis of language and/or reading disorders.



Tier 1 Screening for DLD and Dyslexia

- Determine risk for DLD and Dyslexia among all students, regardless of cultural and linguistic background
- Fulfill legislative requirements
- Reduce over-identification

WHO: All students (K-8)

EXAMINERS: Educators trained to administer the DYMOND (e.g., general education teacher)

DYMOND Subtests Administration Time

Diagnosis/Screening

- Dynamic Assessment of Narrative Discourse (DAND)
 - **6-8 minutes**
- Dynamic Assessment of Decoding (DAD)
 - **5-7 minutes**

Identifying Strengths, Weaknesses and Informing Instruction

- Dynamic Assessment of Inferential Word Learning (DAIWL)
 - 2 minutes
- Rapid Automated Naming (RAN)
 - 2 minutes

A NORMATIVE SAMPLE THAT IS DIVERSE!

Children
1454



States
38

Grades
K-8

Race/Ethnicity Other Than White

42.5%

Multilingual
24.7%

Free/Reduced Lunch
44.3%

359 (24.7%) of the DYMOND normative sample included multilingual children.

Children who received a score of 1 on the WIDA assessment (WIDA, 2020) were still eligible to be included in the normative sample.

It is the test developers' responsibility to adequately make the case that the test can be used for its intended purposes (validity)



Purpose 1 and 2 of the DYMOND: Identifying Language Learning Disorder and Decoding Learning Disorder



The Results of the DYMOND can be inferred to indicate a probable language learning disorder and decoding learning disorder for the majority of children across the U.S., including those who are culturally and linguistically diverse

Sensitivity and Specificity of the Language Learning Index

Table 5.1. Sensitivity and Specificity for the Language Learning Index (Sum of Scaled Scores of DAND Teaching Phase Step 2, DAND Behavior Scales, and DAND Learning Scale) for All Demographics.

CUT SCORES AND SENSITIVITY/SPECIFICITY FOR LANGUAGE LEARNING INDEX (cut score = sum of subtest scaled scores)							
Subtests	Age	Optimal Cut Scores and Sensitivity/Specificity			Cut Score of 20 and Sensitivity/Specificity		
		Cut Score	Sensitivity	Specificity	Cut Score	Sensitivity	Specificity
DAND Teaching Phase Step 2 DAND Behavior Scales DAND Learning Scale	5;0-14;5 (all ages)	20	95%	91%	20	95%	91%
	5;0-5;5	16	94%	98%	20	94%	88%
	5;6-5;11	20	94%	91%	20	94%	91%
	6;0-6;5	20	94%	89%	20	94%	89%
	6;6-6;11	20	91%	91%	20	91%	91%
	7;0-7;5	21	91%	89%	20	91%	89%
	7;6-7;11	21	100%	90%	20	97%	92%
	8;0-8;5	21	94%	92%	20	89%	92%
	8;6-8;11	23	100%	89%	20	89%	94%
	9;0-9;11	20	92%	95%	20	92%	95%
	10;0-10;11	17	96%	97%	20	96%	93%
	11;0-14;5	20	98%	96%	20	98%	96%

Note. Age bands for the multilingual sample were formed based on similarities of optimal cut scores. This resulted in the following age groups: 5;0-7;5, 7;6-8;11, 9;0-14;5.

CUT SCORES AND SENSITIVITY/SPECIFICITY FOR DECODING LEARNING INDEX

(cut score = sum of subtest scaled scores)

SUBTESTS	AGE	Optimal Cut Scores and Sensitivity/Specificity			Cut Score of 35 and Sensitivity/Specificity (Kindergarten Cut Score 69)		
		CUT SCORE	SENSITIVITY	SPECIFICITY	CUT SCORE	SENSITIVITY	SPECIFICITY
<ul style="list-style-type: none"> • DAD Pretest Correct Words / Correct Sounds* • DAD Teaching Phase Correct Words / Correct Sounds* • DAD Posttest Correct Words / Correct Sounds* • DAD Behavior Scales • DAD Learning Scale <p><i>*Correct Sounds Kindergarten only</i></p>	~5;0-6;5 (kindergarten)	69	91%	98%	69	91%	98%
	~6;0-14;5 (grades 1-8)	35	95%	91%	35	95%	91%
	6;0-6;5	42	100%	90%	35	91%	92%
	6;6-6;11	32	100%	96%	35	100%	91%
	7;0-7;5	29	100%	100%	35	100%	90%
	7;6-7;11	25	100%	97%	35	100%	90%
	8;0-8;5	19	100%	100%	35	100%	90%
	8;6-8;11	24	100%	100%	35	100%	90%
	9;0-9;11	21	95%	98%	35	95%	89%
	10;0-10;11	41	100%	84%	35	88%	90%
11;0-14;5	21	100%	100%	35	100%	88%	

CUT SCORES AND SENSITIVITY/SPECIFICITY FOR LANGUAGE LEARNING INDEX

FOR MULTILINGUAL SAMPLE

(cut score = sum of subtest scaled scores)

SUBTESTS	N AGE	Optimal Cut Scores and Sensitivity/Specificity			Cut Score of 20 and Sensitivity/Specificity		
		CUT SCORE	SENSITIVITY	SPECIFICITY	CUT SCORE	SENSITIVITY	SPECIFICITY
1. DAND Teaching Phase Step 2 2. DAND Behavior Scales 3. DAND Learning Scale	385/75 5;0-14;5 (all ages)	18	96%	94%	20	96%	90%
	138/43 5;0-7;5	18	95%	90%	20	95%	85%
	105/19 7;6-8;11	17	95%	93%	20	95%	89%
	142/13 9;0-14;5	17	100%	99%	20	100%	96%

CUT SCORES AND SENSITIVITY/SPECIFICITY FOR DECODING LEARNING INDEX

THE MULTILINGUAL SAMPLE

(cut score = sum of subtest scaled scores)

SUBTESTS	AGE	Optimal Cut Scores and Sensitivity/Specificity			Cut Score of 35 and Sensitivity/Specificity (Kindergarten Cut Score 69)		
		CUT SCORE	SENSITIVITY	SPECIFICITY	CUT SCORE	SENSITIVITY	SPECIFICITY
DAD Pretest DAD Teaching Phase DAD Posttest DAD Responsiveness	~5;0-6;5 (kindergarten)	67	100%	100%	69	100%	98%
	~6;0-14;5 (grades 1-8)	33	94%	94%	35	97%	91%
	6;0-6;11	38	100%	100%	35	95%	100%
	7;0-8;5	28	100%	100%	35	100%	89%
	8;6-14;5	31	92%	97%	35	92%	89%

**CUT SCORES AND SENSITIVITY/SPECIFICITY FOR LANGUAGE LEARNING INDEX
BY RACE/ETHNICITY FOR ALL AGES**

(cut score = sum of subtest scaled scores)

SUBTESTS	Race/Ethnicity	Optimal Cut Scores and Sensitivity/Specificity			Cut Score of 20 and Sensitivity/Specificity		
		CUT SCORE	SENSITIVITY	SPECIFICITY	CUT SCORE	SENSITIVITY	SPECIFICITY
1. DAND Teaching Phase Step 2	White	20	96%	94%	20	96%	90%
	Hispanic	21	92%	91%	20	95%	85%
2. DAND Behavior Scales	Black	19	95%	88%	20	95%	89%
		16	93%	96%			
3. DAND Learning Scale	Asian	20	100%	98%	20	100%	96%
	American Indian, Native Alaskan, Hawaiian/Pacific Islander, and Multiracial	19	88%	89%	20	88%	82%

**CUT SCORES AND SENSITIVITY/SPECIFICITY FOR DECODING LEARNING INDEX
BY RACE/ETHNICITY FOR GRADES 1-8**

(cut score = sum of subtest scaled scores)

SUBTESTS	Race/Ethnicity	Optimal Cut Scores and Sensitivity/Specificity			Cut Score of 35 and Sensitivity/Specificity		
		CUT SCORE	SENSITIVITY	SPECIFICITY	CUT SCORE	SENSITIVITY	SPECIFICITY
DAD Pretest DAD Teaching Phase DAD Posttest DAD Responsiveness	White	33	95%	92%	35	97%	89%
	Hispanic	31	100%	97%	35	100%	93%
	Black	35	92%	91%	35	92%	91%
	Asian	32	100%	100%	35	100%	96%
	American Indian, Native Alaskan, Hawaiian/Pacific Islander, and Multiracial	33	100%	87%	35	100%	84%

**CUT SCORES AND SENSITIVITY/SPECIFICITY FOR LANGUAGE LEARNING INDEX
BY SOCIOECONOMIC STATUS (SES; FREE/REDUCED LUNCH) FOR ALL AGES**

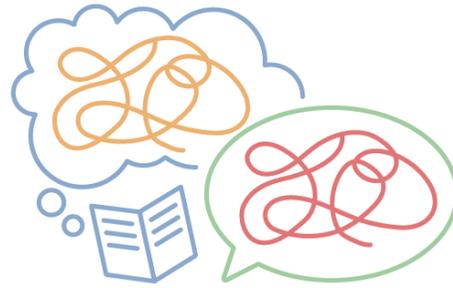
(cut score = sum of subtest scaled scores)

SUBTESTS	SES; FREE/REDUCED LUNCH	Optimal Cut Scores and Sensitivity/Specificity			Cut Score of 20 and Sensitivity/Specificity		
		CUT SCORE	SENSITIVITY	SPECIFICITY	CUT SCORE	SENSITIVITY	SPECIFICITY
1. DAND Teaching Phase Step 2	Free/Reduced Lunch	20	92%	90%	20	92%	90%
2. DAND Behavior Scales	Paid Lunch	19	95%	95%	20	96%	94%
3. DAND Learning Scale		21	97%	93%			

**CUT SCORES AND SENSITIVITY/SPECIFICITY FOR DECODING LEARNING INDEX
BY SOCIOECONOMIC STATUS (SES; FREE/REDUCED LUNCH) FOR GRADES 1-8**

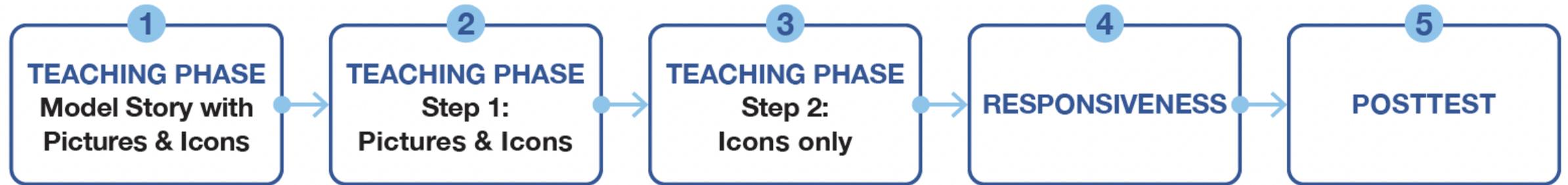
(cut score = sum of subtest scaled scores)

SUBTESTS	SES; FREE/REDUCED LUNCH	Optimal Cut Scores and Sensitivity/Specificity			Cut Score of 35 and Sensitivity/Specificity		
		CUT SCORE	SENSITIVITY	SPECIFICITY	CUT SCORE	SENSITIVITY	SPECIFICITY
DAD Pretest	Free/Reduced Lunch	32	92%	90%	35	96%	86%
DAD Teaching Phase		29	91%	95%			
DAD Posttest	Paid Lunch	33	100%	94%	35	100%	91%
DAD Responsiveness							



LANGUAGE DISORDER

DYNAMIC ASSESSMENT OF NARRATIVE DISCOURSE



TEACHING PHASE (Continued)

STEP 1: PICTURES AND ICONS

When you are done modeling the story,
SAY: "Thanks for listening. Now you tell me that story. I'll help you if you need it."

Start audio recorder for TEACHING STEP 1 & 2

Points: Place a for every story the child accurately and independently.
Teaching Prompts: If the child omits use a level 1 and, if needed, a level 2 and then use the overcorrection procedure more than 3x. Circle each.
Feelings: Award a point for any feeling yet always prompt the child to use *distraught*, *disappointed*, and *satisfied* (place a if independently used).



SCORING

1 PT EACH	Examples of Acceptable Responses	CORRECT		
		Level 1 Prompts <i>(Use if child gives incorrect/incomplete response)</i>	Level 2 Prompt Examples <i>(Use if child gives incorrect/incomplete response on Level 1 prompt)</i>	Overcorrection <i>(Max 3x)</i>
	Sam any proper name	"Who was the character?"	"Yesterday, Sam rushed into the kitchen to have lunch with his mother. You say that."	"Go back to the beginning. Remember to tell me the character and setting."
	kitchen	"Where was Sam?" "What part of the house?"		
	didn't like mustard on sandwich	"What was the problem?"	"His mom accidentally put mustard on his sandwich. He hated mustard. You say that."	"Go back to the beginning. Remember to tell me the problem."
	any negative feeling <i>(sad, mad, etc; prompt distraught)</i> <input checked="" type="checkbox"/> <i>distraught used independently</i>	"How did he feel?" <i>(prompt: "distraught")</i>	"When he saw the mustard, he was distraught. You say that."	"Go back to the problem. Remember to tell me the feeling."
	wondered if he could fix it decided to fix it made a plan to fix it	"What was his plan?" "What did he decide to do?"		
	scraped really hard scraped with a knife	"How did he try to fix the problem?"		
	it didn't work it still tasted like mustard	"What happened after he tried to scrape the mustard?"		
	any negative feeling <i>(sad, mad, etc; prompt disappointed)</i> <input type="checkbox"/> <i>disappointed used independently</i>	"How did he feel?" <i>(prompt: "disappointed")</i>		
	decided to talk to his mom made a plan to talk to his mom	"What was his plan?" "What did he decide to do?"		
	said "mom, can you make me a new sandwich?" asked his mom for a new sandwich	"How did he try to fix the problem?"		
	said "come help me" worked together to make a sandwich	"What happened after he asked his mom for a sandwich?" <i>(what say? What did they do?)</i>		
	any positive feeling <i>(glad, happy, etc; prompt satisfied)</i> <input type="checkbox"/> <i>satisfied used independently</i>	"How did he feel?" <i>(prompt: "satisfied")</i>		
	had a sandwich he could eat had a sandwich he liked	"How did the story end?" <i>(Why was he happy?)</i>		

SUBTEST: DAND (Continued)

TEACHING PHASE (Continued)

STEP 2: ICONS ONLY

Display stimulus page 5 (icons only)

SAY: (Praise) "Now I'm going to take away the pictures and you are going to retell this story with just the icons. I'll help you if you need it."

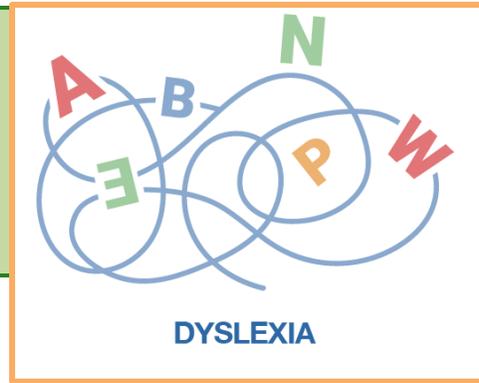
Points: Place a for every story the child accurately and independently.
Teaching Prompts: If the child omits use a level 1 and, if needed, a level 2 and then use the overcorrection procedure more than 3x. Circle each.
Feelings: Award a point for any feeling yet always prompt the child to use *distraught*, *disappointed*, and *satisfied* (place a if independently used).



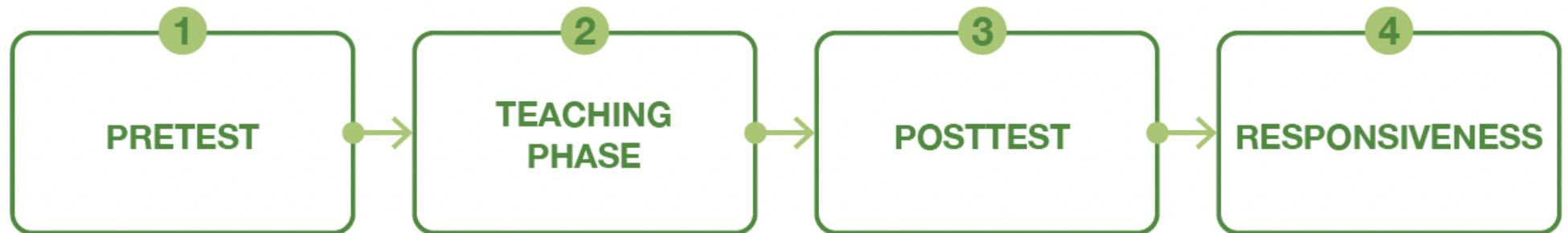
SCORING

1 PT EACH	Examples of Acceptable Responses	CORRECT		
		Level 1 Prompts <i>(Use if child gives incorrect/incomplete response)</i>	Level 2 Prompt Examples <i>(Use if child gives incorrect/incomplete response on Level 1 prompt)</i>	Overcorrection <i>(Max 3x)</i>
	Sam any proper name	"Who was the character?"	"Yesterday, Sam rushed into the kitchen to have lunch with his mother. You say that."	"Go back to the beginning. Remember to tell me the character and setting."
	kitchen	"Where was Sam?" "What part of the house?"		
	didn't like mustard on sandwich	"What was the problem?"	"His mom accidentally put mustard on his sandwich. He hated mustard. You say that."	"Go back to the beginning. Remember to tell me the problem."
	any negative feeling <i>(sad, mad, etc; prompt distraught)</i> <input checked="" type="checkbox"/> <i>distraught used independently</i>	"How did he feel?" <i>(prompt: "distraught")</i>	"When he saw the mustard, he was distraught. You say that."	"Go back to the problem. Remember to tell me the feeling."
	wondered if he could fix it decided to fix it made a plan to fix it	"What was his plan?" "What did he decide to do?"	Remember, there are two parts to this picture. A plan and an attempt. He wondered if he could get rid of the mustard. You say that."	"Go back to the feeling. Remember to tell me the plan."
	scraped really hard scraped with a knife	"How did he try to fix the problem?"	"He tried scraping the mustard off really hard with a knife. You say that."	"Go back to the feeling. Remember to tell me the plan and attempt."
	it didn't work it still tasted like mustard	"What happened after he tried to scrape off the mustard?"	"After he took a bite, it still tasted like disgusting mustard. You say that."	"Go back to the attempt. Remember to tell me the consequence."
	any negative feeling <i>(sad, mad, etc; prompt disappointed)</i> <input type="checkbox"/> <i>disappointed used independently</i>	"How did he feel?" <i>(prompt: "disappointed")</i>	"Sam was so disappointed because he thought it would taste better. You say that."	"Go back to the consequence. Remember to tell me the feeling."
	decided to talk to his mom	"What was his plan?" "What did he decide to do?"	Remember, there are two parts to this picture. A plan and an attempt. He wondered if he could get rid of the mustard. You say that."	"Go back to the feeling. Remember to tell me the plan."

Figure 2.3. Page 4 and 5 of Record Form showing Teaching Phase Step 1 and Step 2 with example of scoring and appropriate stimulus pages from Stimulus Book.



DYNAMIC ASSESSMENT OF DECODING



PRETEST

Display stimulus page 8 (PRETEST Kindergarten & First Grade)
 SAY: "Please read these words. They are not real words."
 (point to each PRETEST word)

Use the following prompts below if the child does not respond or refuses to read (Encourage up to 2x for each word): "I can't help you. Just try your best." or "What do you think this word is?"

SCORING: Kindergarten – 1st Grade: Award 1 point for each word blended correctly (Correct Words).
 *Kindergarten only: Underline Correct Sounds (1 pt for each sound).

PRETEST: Closed Syllables

min ① sal ① jom ① vun ① quin ① whav ①
 [mɪn] [səl] [dʒɒm] [vʌn] [kwɪn] [wəv]

CORRECT SOUNDS = 18 CORRECT WORDS = 6
 (kindergarten only)

If child scores 5 or less correct words, continue to TEACHING PHASE.

If child scores 6 correct words, award full points in TEACHING PHASE, POSTTEST, and RESPONGIVENESS sections below.

PRETEST: Closed Syllables

min ✓ [min] sal ✓ [sal] jom ① [dʒɒm] vun ① [vʌn] quin ① [kwɪn] whav ① [wəv]

CORRECT SOUNDS = 18 CORRECT WORDS = 6
 (kindergarten only)

	SAY: "[o]"	Child says: "[o]"
	SAY: "[m]"	Child says: "[m]"
	SAY: "[j]-[o]-[m]"	Child says: "[j]-[o]-[m]"
	SAY: "jom"	Child says: "sal"
(vun [vʌn]):	SAY: "[v]"	Child says: "[v]"
	SAY: "[uh]"	Child says: "[uh]"
	SAY: "[n]"	Child says: "[n]"
	SAY: "[v]-[uh]-[n]"	Child says: "[v]-[uh]-[n]"
	SAY: "vun"	Child says: "vun"
(quin [kwɪn]):	SAY: "[kw]"	Child says: "[kw]"
	SAY: "[i]"	Child says: "[i]"
	SAY: "[n]"	Child says: "[n]"
	SAY: "[kw]-[i]-[n]"	Child says: "[kw]-[i]-[n]"
	SAY: "quin"	Child says: "quin"
(whav [wəv]):	SAY: "[w]"	Child says: "[w]"
	SAY: "[ə]"	Child says: "[ə]"
	SAY: "[v]"	Child says: "[v]"
	SAY: "[w]-[ə]-[v]"	Child says: "[w]-[ə]-[v]"
	SAY: "whav"	Child says: "whav"

Continue to POSTTEST

min sal jom vun quin whav



Figure 2.16. Page 10 of Record Form and Page 8 from Stimulus Book with example of how to score the Pretest for the Dynamic Assessment of Decoding (DAD) for Kindergarten and First Grade.



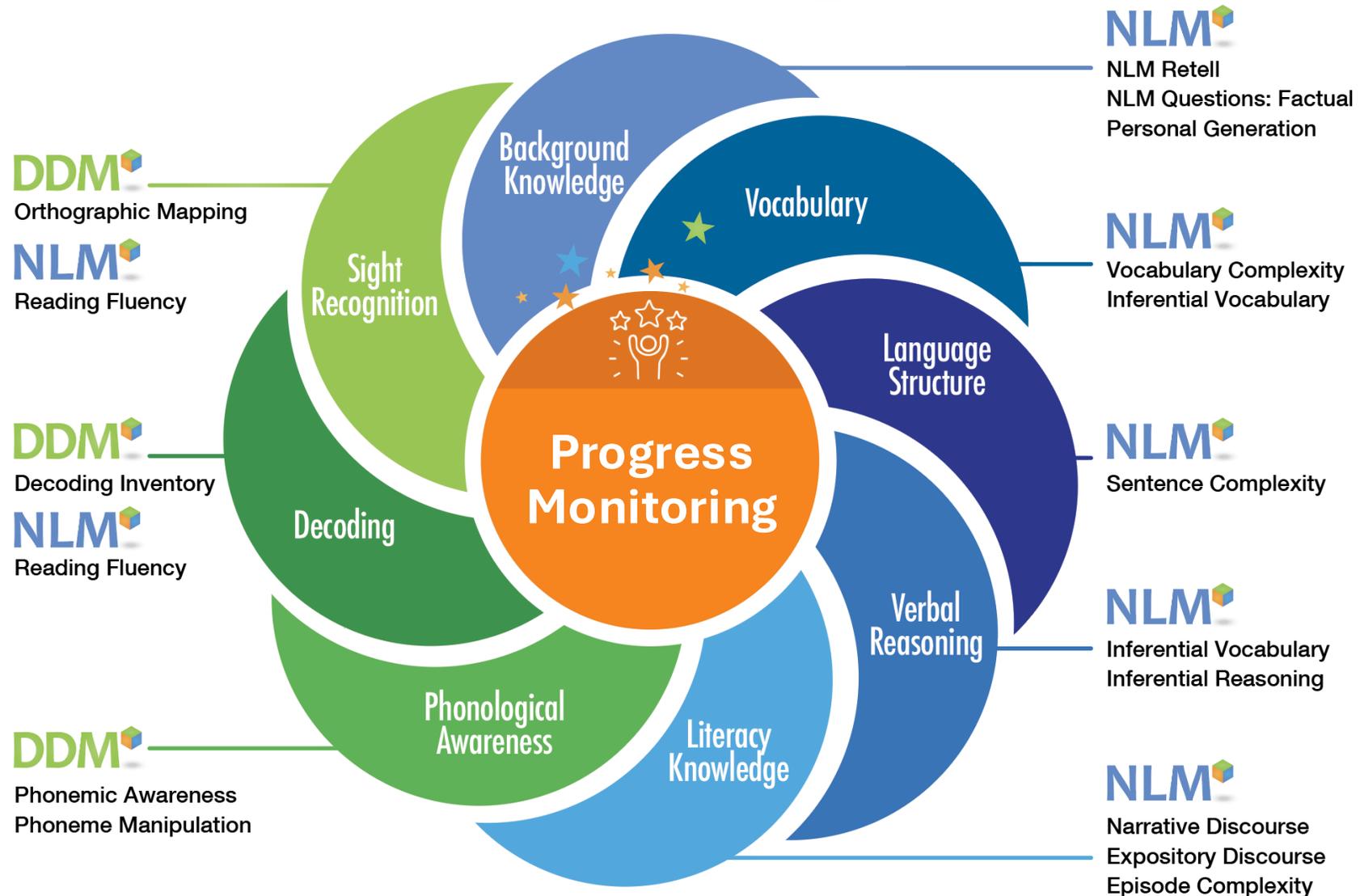
How Do We Improve The Language and Literacy of Millions of Children?

VALID Tier-1 Screening and
Diagnostic Assessments for
DLD and **Dyslexia**

SYSTEM-WIDE *Valid*
**Benchmark Assessments and
Progress Monitoring** of
Decoding and Academic
Language

SYSTEM-WIDE Explicit,
Systematic Academic
Language **Instruction** and
Intervention

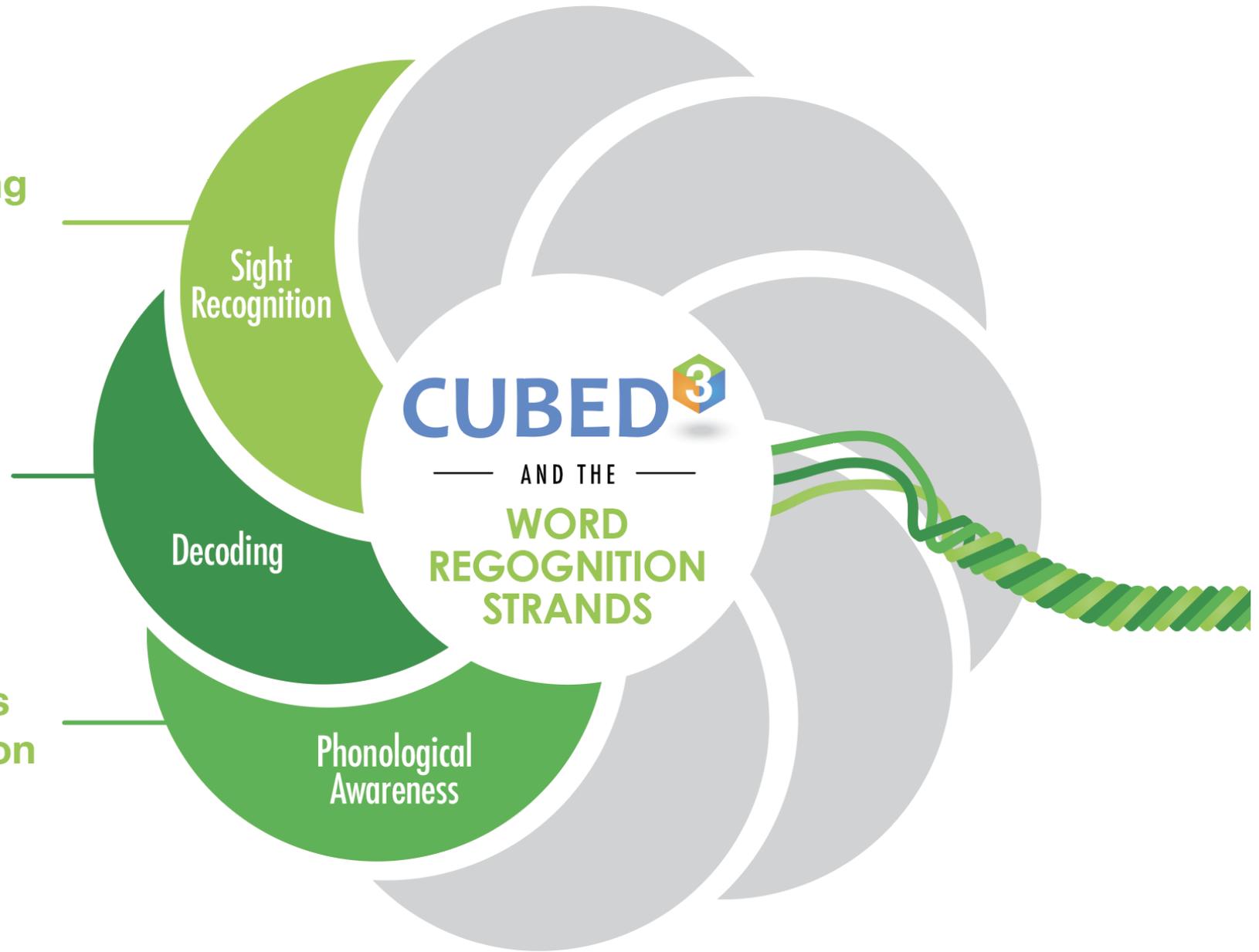
CUBED³

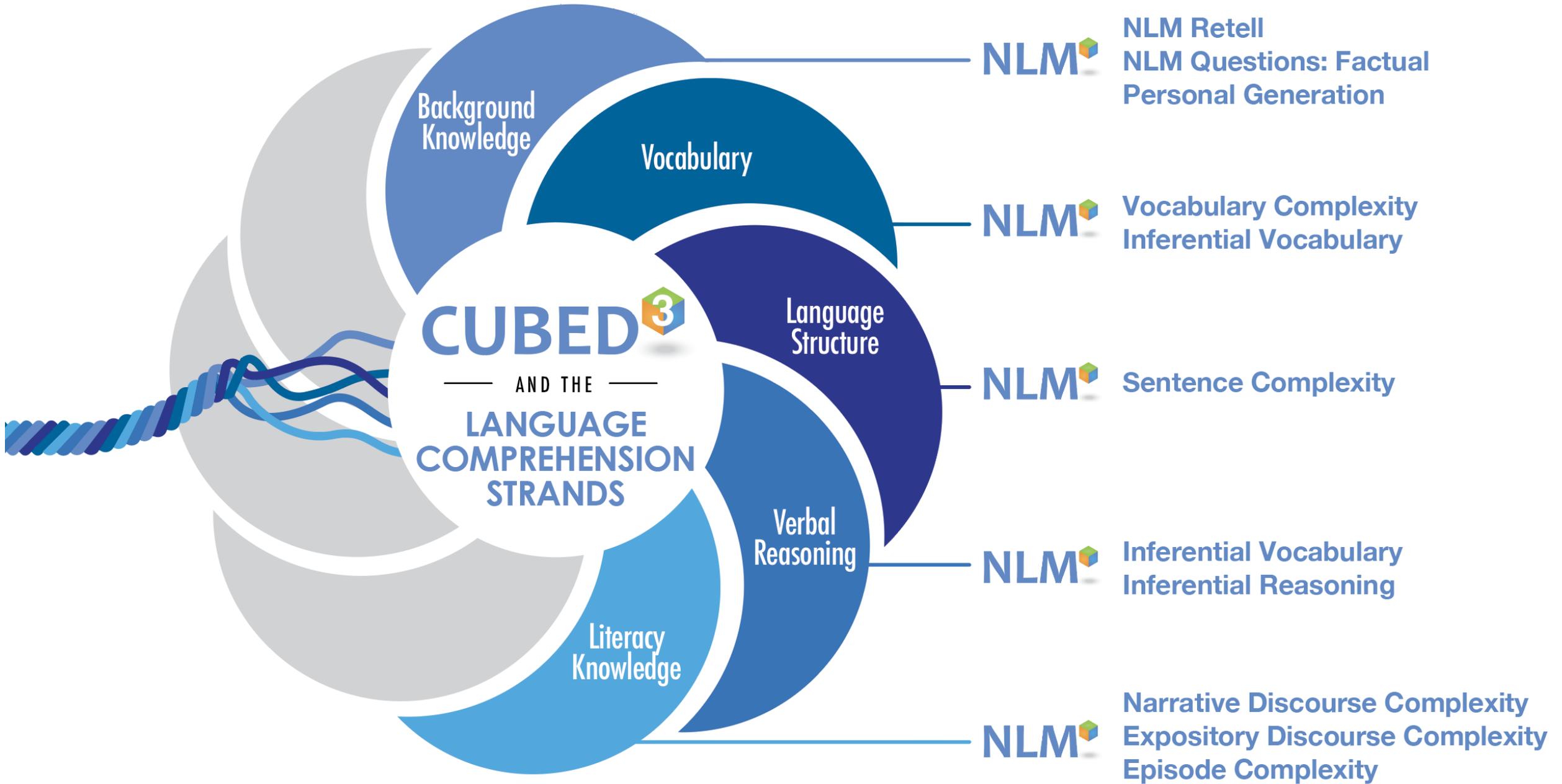


DDM Orthographic Mapping
NLM Reading Fluency

DDM Decoding Inventory
NLM Reading Fluency

DDM Phonemic Awareness
Phoneme Manipulation







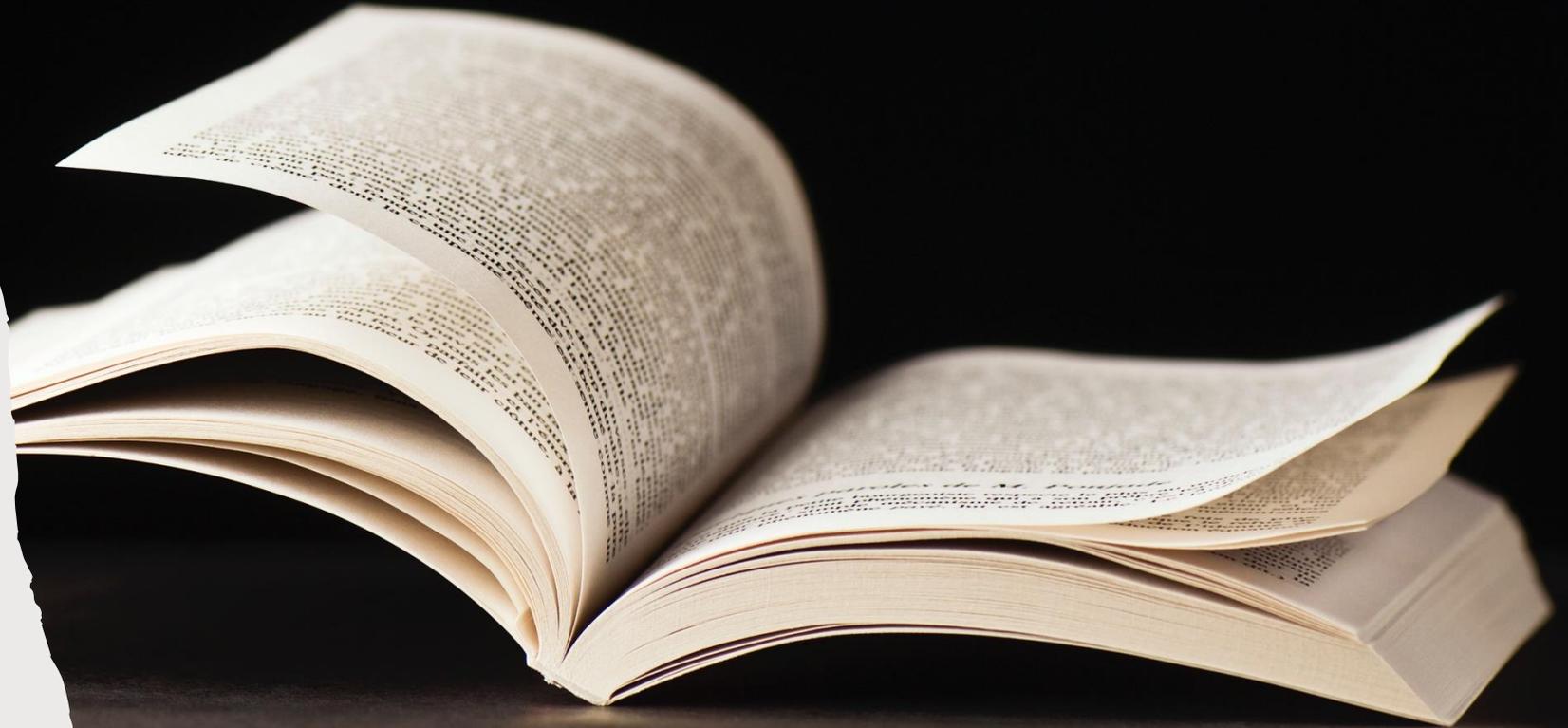
How Do We Improve The Language and Literacy of Millions of Children?

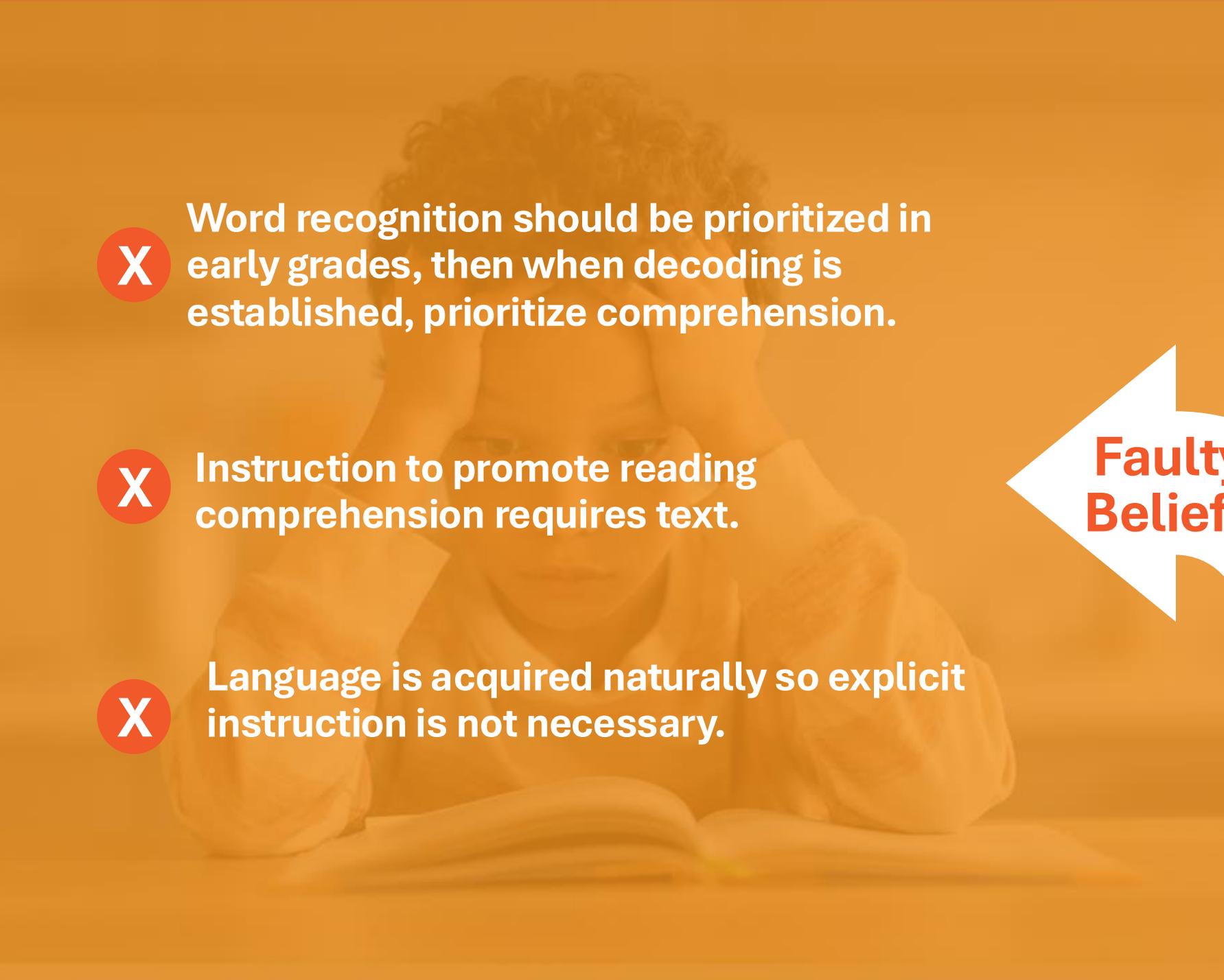
VALID Tier-1 Screening and
Diagnostic Assessments for
DLD and **Dyslexia**

SYSTEM-WIDE *Valid*
**Benchmark Assessments and
Progress Monitoring** of
Decoding and Academic
Language

SYSTEM-WIDE Explicit,
Systematic Academic
Language **Instruction** and
Intervention

What is currently being done at Tier-1 for language instruction?



- 
- X** Word recognition should be prioritized in early grades, then when decoding is established, prioritize comprehension.
 - X** Instruction to promote reading comprehension requires text.
 - X** Language is acquired naturally so explicit instruction is not necessary.

Faulty Beliefs

Science



LITERACY

**Family
Beliefs**



Science

Myth

1

Print concepts, phonological awareness, phonics, and fluency are foundational literacy skills.

Foundational

Essential skills that form the base upon which other skills or knowledge are built.

Pivotal

Of critical importance at a specific point of development or transition; enable progress from one stage to another.

“Early language skills are foundational—not just consequential—to later reading comprehension.”

--Dickinson, McCabe, & Essex, 2006

Additional Evidence

Strong early spoken language skills...

- Support the development of decoding (Tunmer & Chapman, 2012; Lonigan et al., 2000; Nation & Snowling, 2004)
- Prevent later reading comprehension failure (Catts et al., 2006; Justice et al., 2005)

**Word recognition
in early grades
established**



**prioritized
coding is
comprehension.**

Myth

2

Spoken language is less complex
than written language.

MODALITY

SPOKEN LANGUAGE

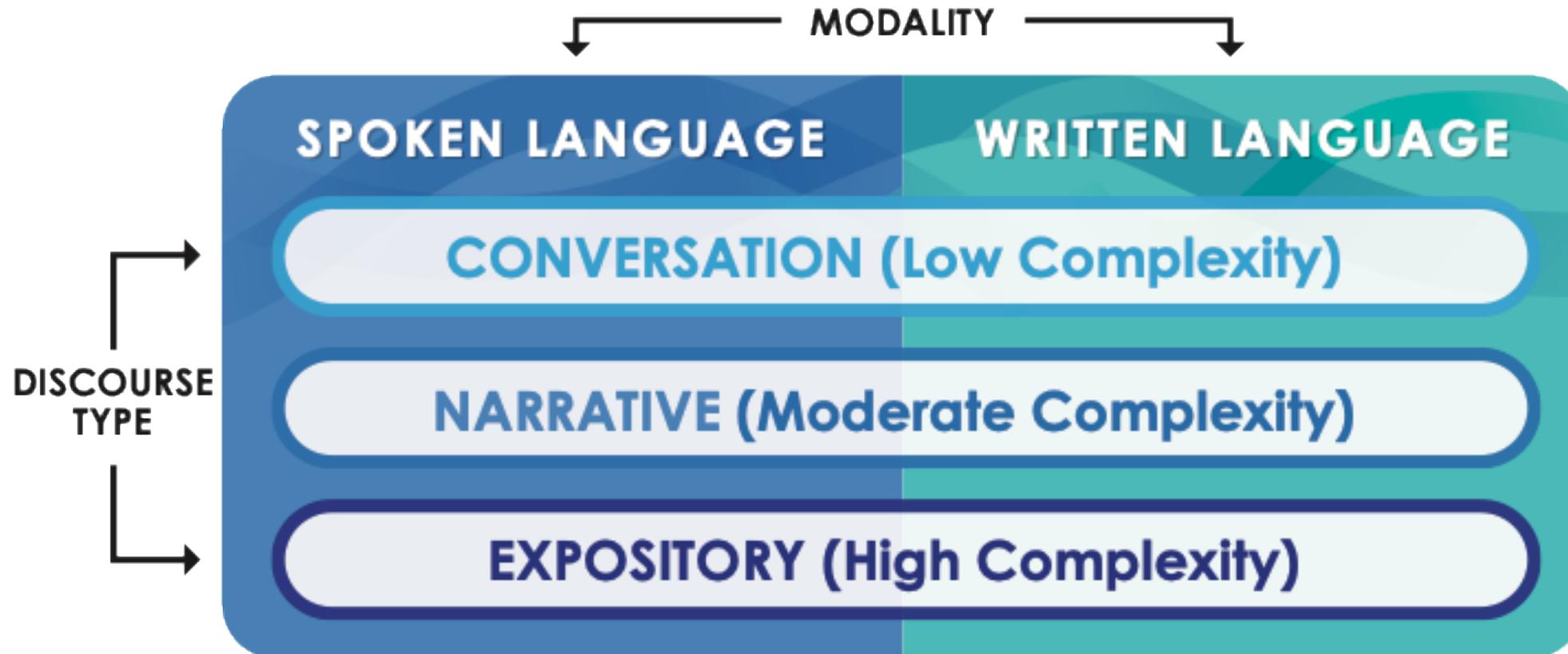
Low Complexity

WRITTEN LANGUAGE

High Complexity

COMPLEXITY OF LANGUAGE

*Discourse type matters more for complexity than modality of language.
As a result, **spoken language can be** as complex as written language.*



Yah, but...what about read alouds?

Reading aloud helps students **HEAR** complex language

...but even in good dialogue students' **USE** of complex language is low

Incidental Word Learning = Storytelling > Adult Reading Aloud > Student Reading to Self

--Suggate et al., 2013



KINDERGARTEN
INTERVENTION
RESEARCH

times each week. The students assigned to the active control group participated in Tier 1 shared storybook reading instruction with their classroom teacher twice a week for 15–20 min. Students in the no-treatment control group participated in classroom activities that were in place at the outset of the school year. Narrative and expository language samples elicited at pretest and posttest were analyzed for several features of complex language. Results indicated that students in the contextualized narrative language group produced significantly more complex language with large effect sizes compared to the shared storybook treatment and no-treatment control groups. Additionally, gains in expository language were noted, indicating that the intervention generalized across discourse types. The findings from this study add to a meaningful corpus of research that supports the use of multi-tiered explicit and systematic contextualized narrative language instruction to increase the

Instru
comp



ading
s text.

“Comprehension-building interventions may be most beneficial when presented in a format that does not require extensive other skills such as decoding.”

--Van den Broek, Kendeou, Lousberg, & Visser, 2011

Ameliorating Children's Reading-Comprehension Difficulties: A Randomized Controlled Trial

Psychological Science
21(8) 1106–1116
© The Author(s) 2010
Reprints and permission:
sagepub.com/journalsPermissions.nav
DOI: 10.1177/0956797610375449
<http://pss.sagepub.com>


Paula J. Clarke, Margaret J. Snowling, Emma Truelove, and Charles Hulme

University of York

Abstract

Children with specific reading-comprehension difficulties can read accurately, but they have poor comprehension. In a randomized controlled trial, we examined the efficacy of three interventions designed to improve such children's reading comprehension: text-comprehension (TC) training, oral-language (OL) training, and TC and OL training combined (COM). Children were assessed preintervention, midintervention, postintervention, and at an 11-month follow-up. All intervention groups made significant improvements in reading comprehension relative to an untreated control group. Although these gains were maintained at follow-up in the TC and COM groups, the OL group made greater gains than the other groups did between the end of the intervention and follow-up. The OL and COM groups also demonstrated significant improvements in expressive vocabulary compared with the control group, and this was a mediator of the improved reading comprehension of the OL and COM groups. We conclude that specific reading-comprehension difficulties reflect (at least partly) underlying oral-language weaknesses that can be effectively ameliorated by suitable teaching.

Myth

3

Structured literacy only applies to
word recognition.

WHAT TO TEACH

STRUCTURED LITERACY

Semantics
Syntax

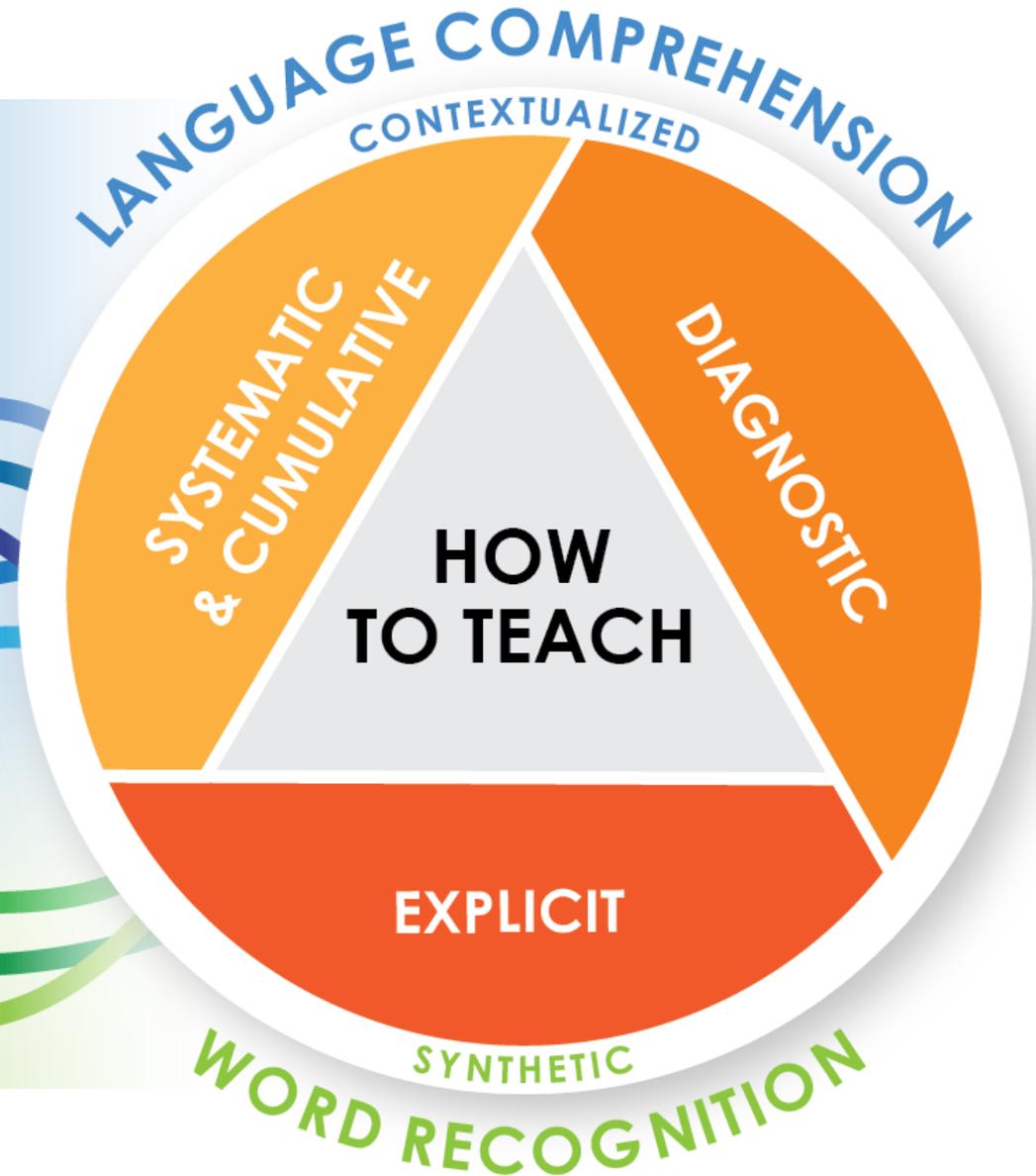
Morphology

Phonology
Syllables
Sound-Symbol Association

SCARBOROUGH'S READING ROPE

Background Knowledge
Vocabulary
Language Structure
Verbal Reasoning
Literacy Knowledge

Phonological Awareness
Decoding
Sight Recognition



Language is
instr



so explicit
sary.

Where the focus has been

WORD RECOGNITION

- Phonological Awareness
- Decoding
- Sight Recognition

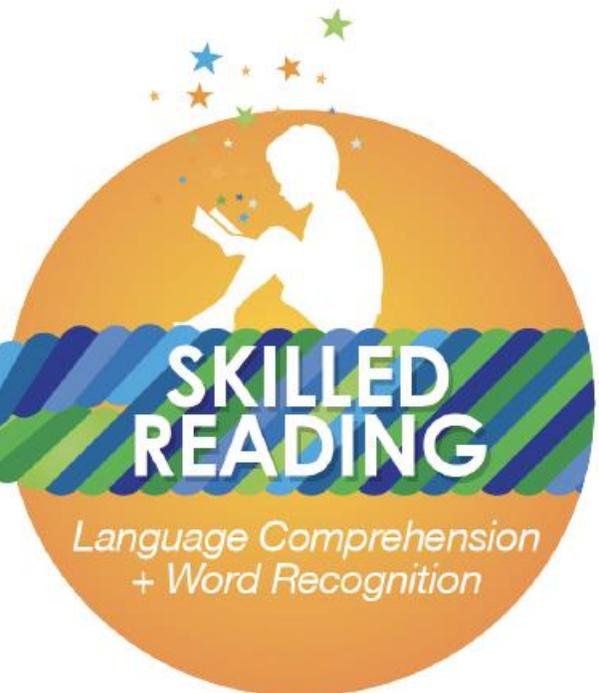
Increasingly AUTOMATIC

LANGUAGE COMPREHENSION

- Background Knowledge
- Vocabulary
- Language Structure
- Verbal Reasoning
- Literacy Knowledge

Increasingly STRATEGIC

Without a stronger focus on **language comprehension** (in addition to word recognition), reading comprehension will not improve



Interpretation of the Reading Rope

Definition of Structured Literacy

Key features of SL approaches include (a) **explicit**, **systematic**, and **sequential** teaching of **language** at multiple levels—phonemes, letter-sound relationships, syllable patterns, morphemes, vocabulary, sentence structure, paragraph structure, and text structure; (b) **cumulative** practice and **ongoing review**; (c) a high level of student-teacher interaction; (d) the use of carefully chosen examples and nonexamples; (e) decodable text; and (f) prompt, corrective feedback.

—adapted from Spear-Swerling, 2019

Structured Literacy is NOT just for Phonics

Struc

“One
it is ce
and it
elemen
isn't ju
to tea
-Lexia

STRUCTURED LITERACY PRIMER

Why Structured Literacy?

Children with dyslexia are in nearly every classroom—but effective reading instruction is **NOT**.

← **Dyslexia**
Up to 15-20% of the population may have symptoms of dyslexia.

Learning to read can be a significant **challenge** for students with dyslexia. Fortunately, this challenge usually **CAN** be overcome with effective reading instruction. Unfortunately, if not overcome, lifelong consequences can be harsh.

Popular reading approaches (e.g., Guided Reading or Balanced Literacy) are not effective for students with dyslexia because these approaches do not focus on the **decoding** skills struggling readers need to succeed.

Structured Literacy explicitly teaches systematic word-identification/decoding strategies. These benefit most students and are **vital** for those with dyslexia.

is that
ading—
many
o, it
ly how

Importance of Language

“Children’s oral language competence is **strongly predictive of their facility in learning to read and write...** listening and speaking vocabulary and even mastery of syntax set boundaries as to what children can read and understand **no matter how well they can decode.**”

(CCSS; Appendix A, pg. 26)



Language is Language

Oral language isn't
RELATED to written
language.

Oral language doesn't
CORRELATE with written
language.

Language is Language





WORLD
OF
WARCRAFT

BATTLE FOR AZEROTH

How is Comprehension Measured in the Real World?



“A crystal blowing of sand touched the exposed portions of his face, bringing the scent of the pre-spice mass. ‘El Sayal, the rain of sand that brings the morning,’ he said. He looked out across the gray light of the desert landscape, the landscape beyond pity, the sand that was form absorbed in itself. Dry lighting streaked a dark corner to the south – sign that a storm had built up its static charge there. The roll of thunder boomed long after. ‘The voice that beautifies the land,’ Chani said. [...] The troop’s watermaster began the morning chanty, adding to it now the call for the rite to initiate a sandrider...”

-Frank Herbert

Narratives are causally related
events told or retold in
temporal order



Narrative Language

Considered a bridge between
oral language and written language

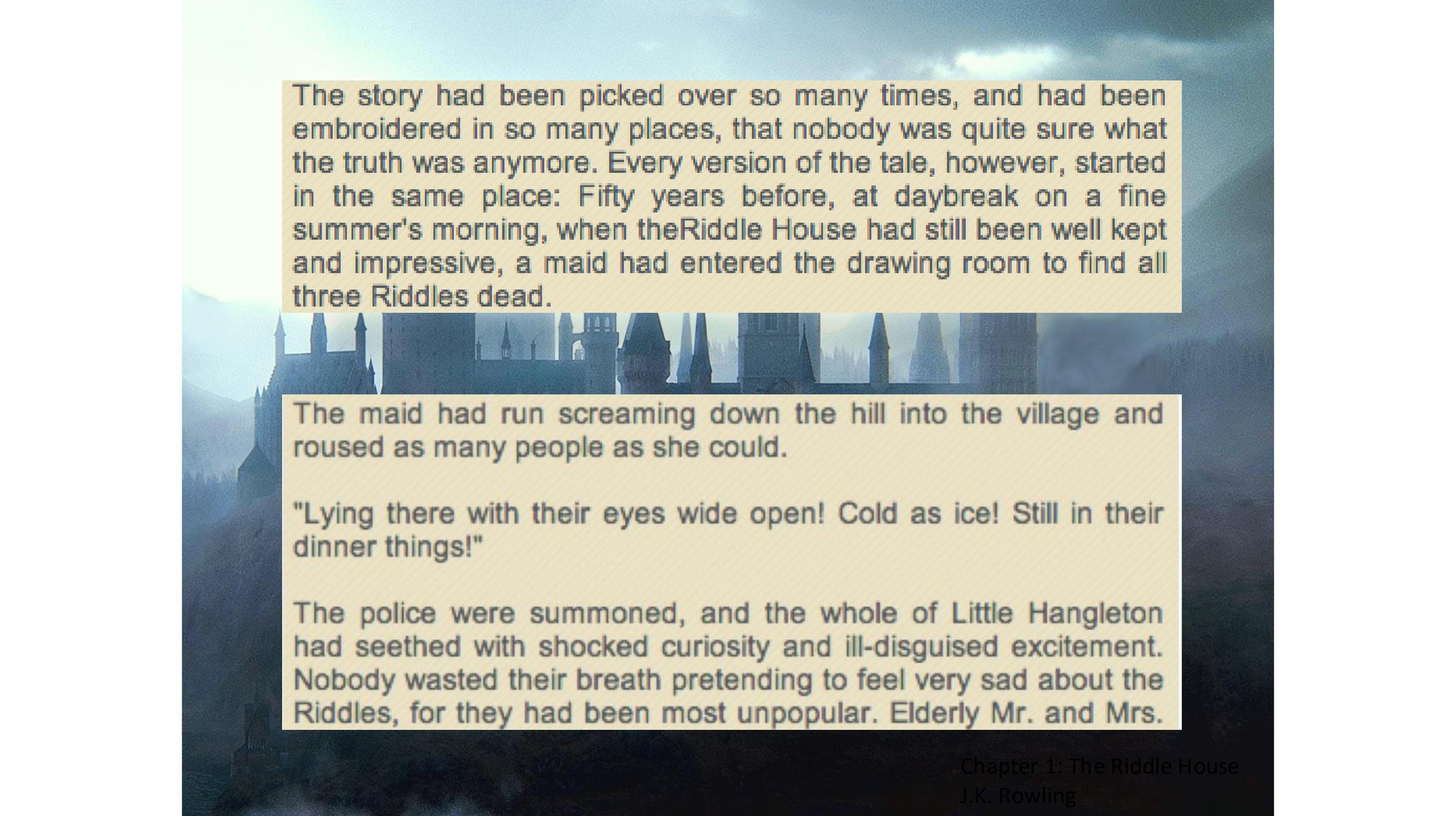
Personally-relevant
Culturally-relevant
Academically-relevant



Story Grammar

- *Story Grammar:*
 - Setting
 - **Initiating Event (e.g., Problem)**
 - Internal Response (Feeling)
 - **Plan/Attempt (Goal Directed Action)**
 - **Consequence**
 - Resolution (Ending)
 - Reaction (End Feeling)
- Minimally Complete Episode
 - Initiating Event
 - Attempt
 - Consequence
- Stein & Glenn (1979) story grammar is reinforced and tested in schools





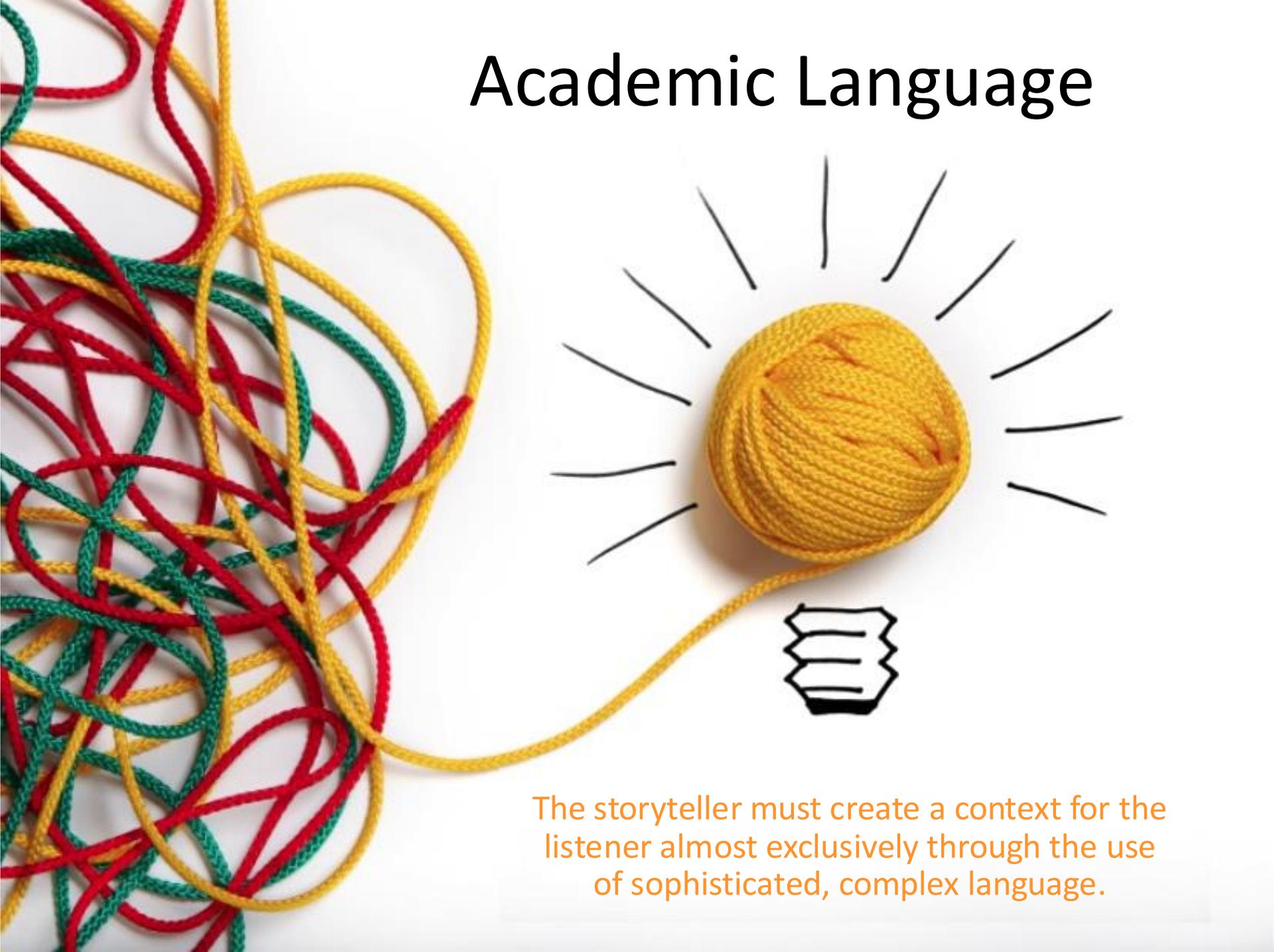
The story had been picked over so many times, and had been embroidered in so many places, that nobody was quite sure what the truth was anymore. Every version of the tale, however, started in the same place: Fifty years before, at daybreak on a fine summer's morning, when the Riddle House had still been well kept and impressive, a maid had entered the drawing room to find all three Riddles dead.

The maid had run screaming down the hill into the village and roused as many people as she could.

"Lying there with their eyes wide open! Cold as ice! Still in their dinner things!"

The police were summoned, and the whole of Little Hangleton had seethed with shocked curiosity and ill-disguised excitement. Nobody wasted their breath pretending to feel very sad about the Riddles, for they had been most unpopular. Elderly Mr. and Mrs.

Academic Language



The storyteller must create a context for the listener almost exclusively through the use of sophisticated, complex language.

Academic Language

Language used in school to help students acquire and use knowledge

- Text structures
- Complex syntax
- Vocabulary
- Inferencing



Academic Language



- Adverbs (e.g., quickly)
- Temporal subordination (e.g., **When** he was walking...)
- Causal subordination (e.g., I was frightened **because** the dog was chasing me.)
- Elaborated noun phrases (e.g., The **enormous** dog **that** was scary)
- Mental & linguistic verbs (e.g., decided, considered)
- Conjunctions (e.g., and, but)
- Dialogue (e.g., He hollered, “I need some help!”)

IF...

Spoken language skills are
THE FOUNDATIONAL
literacy skills

Spoken language can be
AS COMPLEX AS
written language

AND...

Strong early spoken language skills help students **DEVELOP** decoding skills and **PREVENT** later comprehension problems

80-95% of low SES students need more (and better) language instruction than they are receiving

THEN...

We should prioritize
**TEACHING SPOKEN
LANGUAGE SKILLS VIA
NON-READING
APPROACHES...**

...in early grades alongside
teaching pivotal code
skills...because spoken
language instruction is
GOOD FOR ALL STUDENTS
and **ESSENTIAL FOR SOME.**

AND...

We can do it with
STRUCTURED LITERACY!

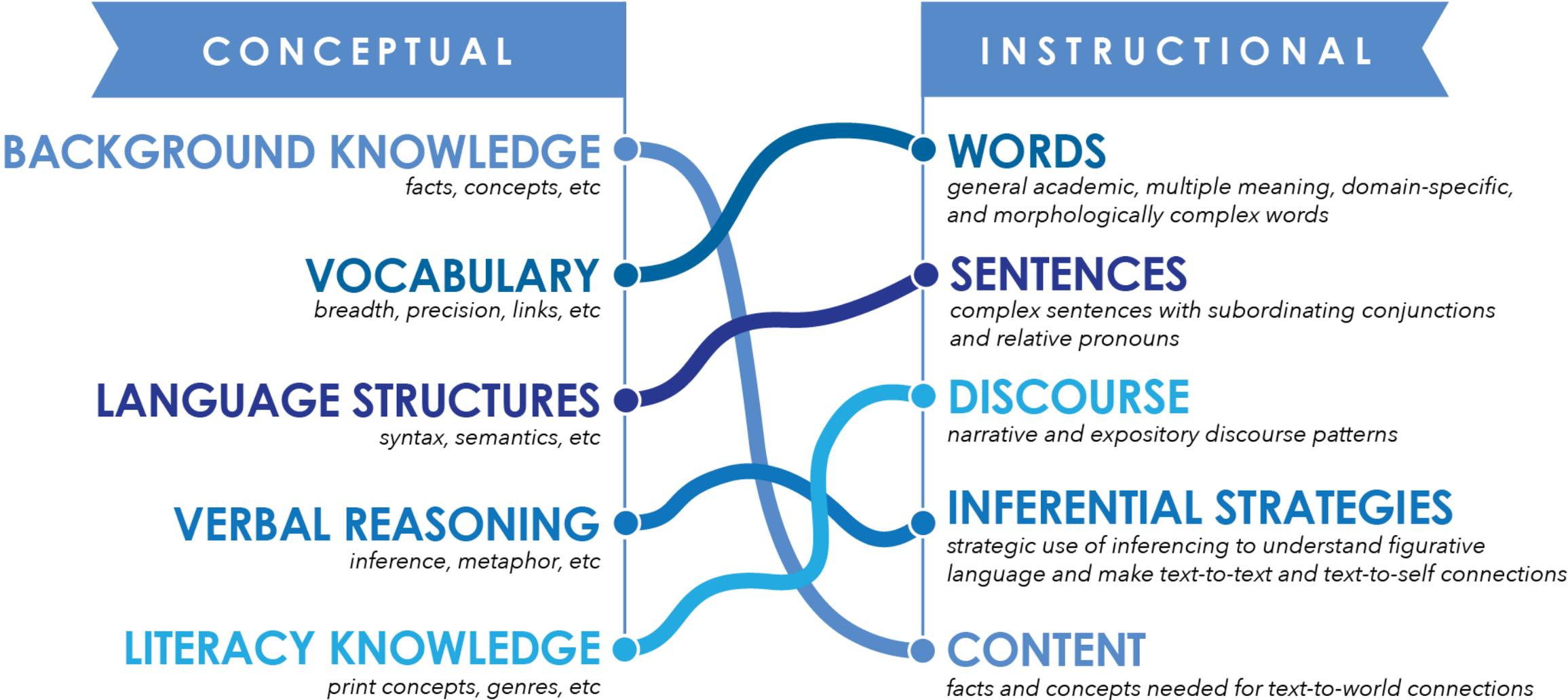
Part 3

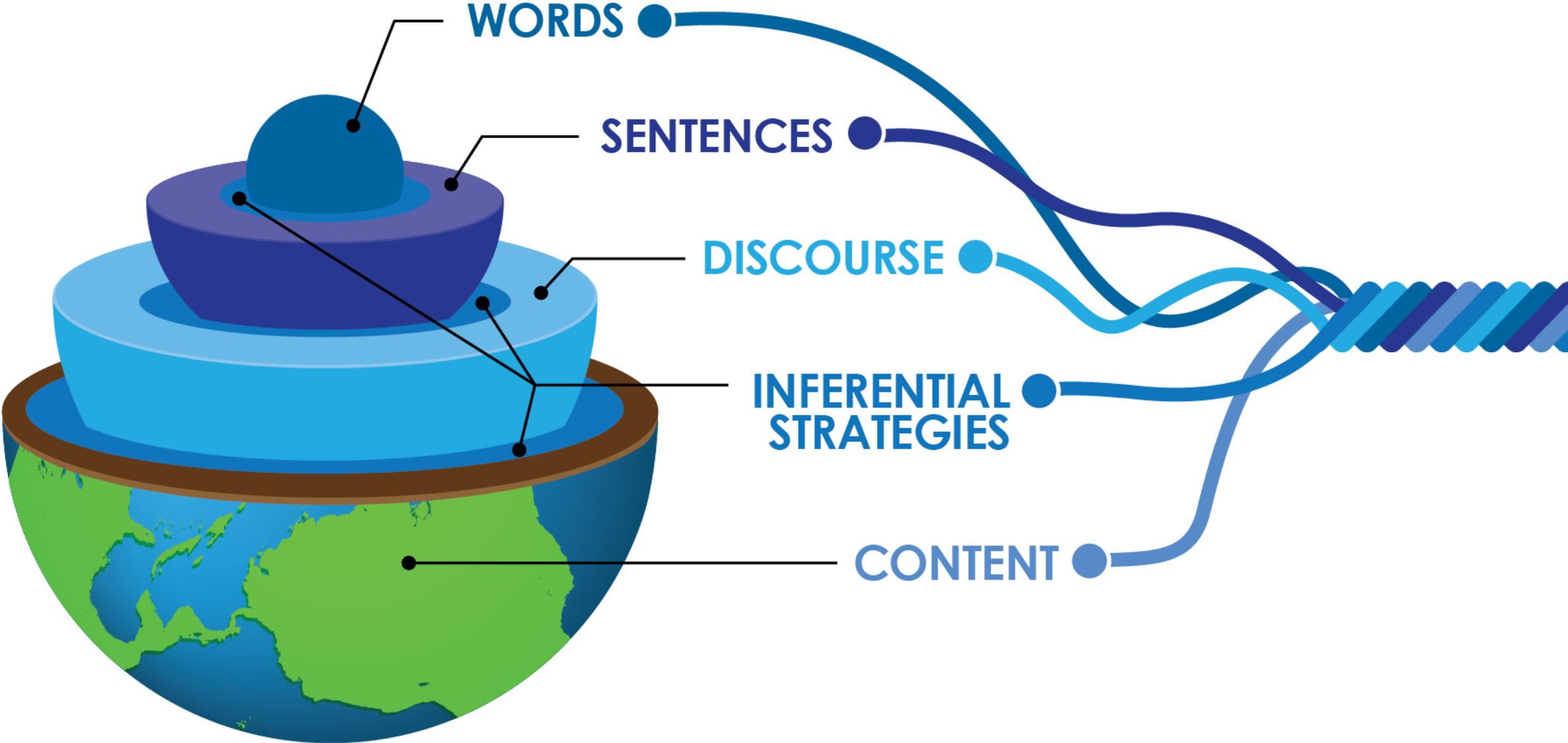
UNRAVELING

THE WHAT

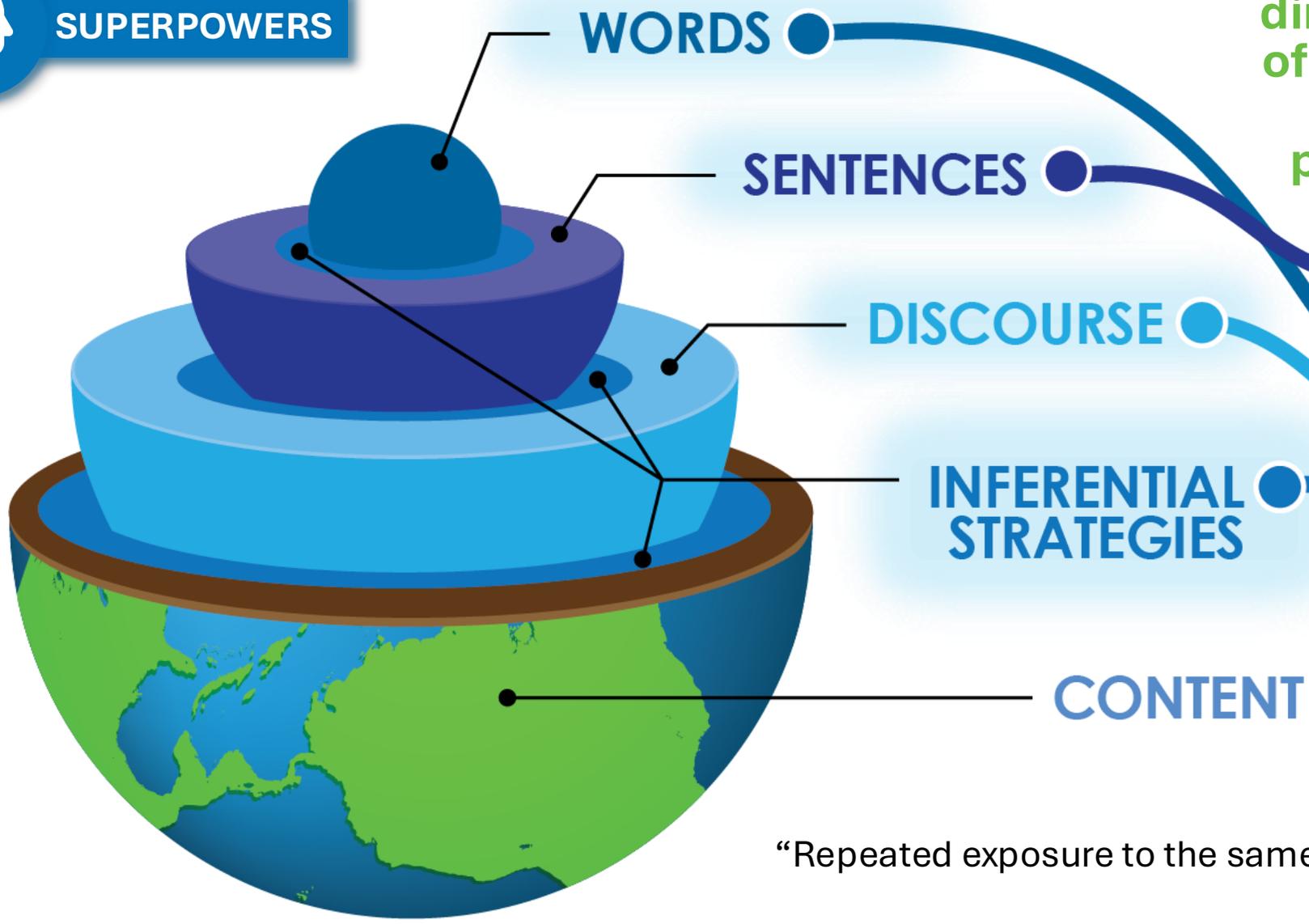


UNRAVELING THE LANGUAGE COMPREHENSION STRANDS OF THE READING ROPE





 SUPERPOWERS

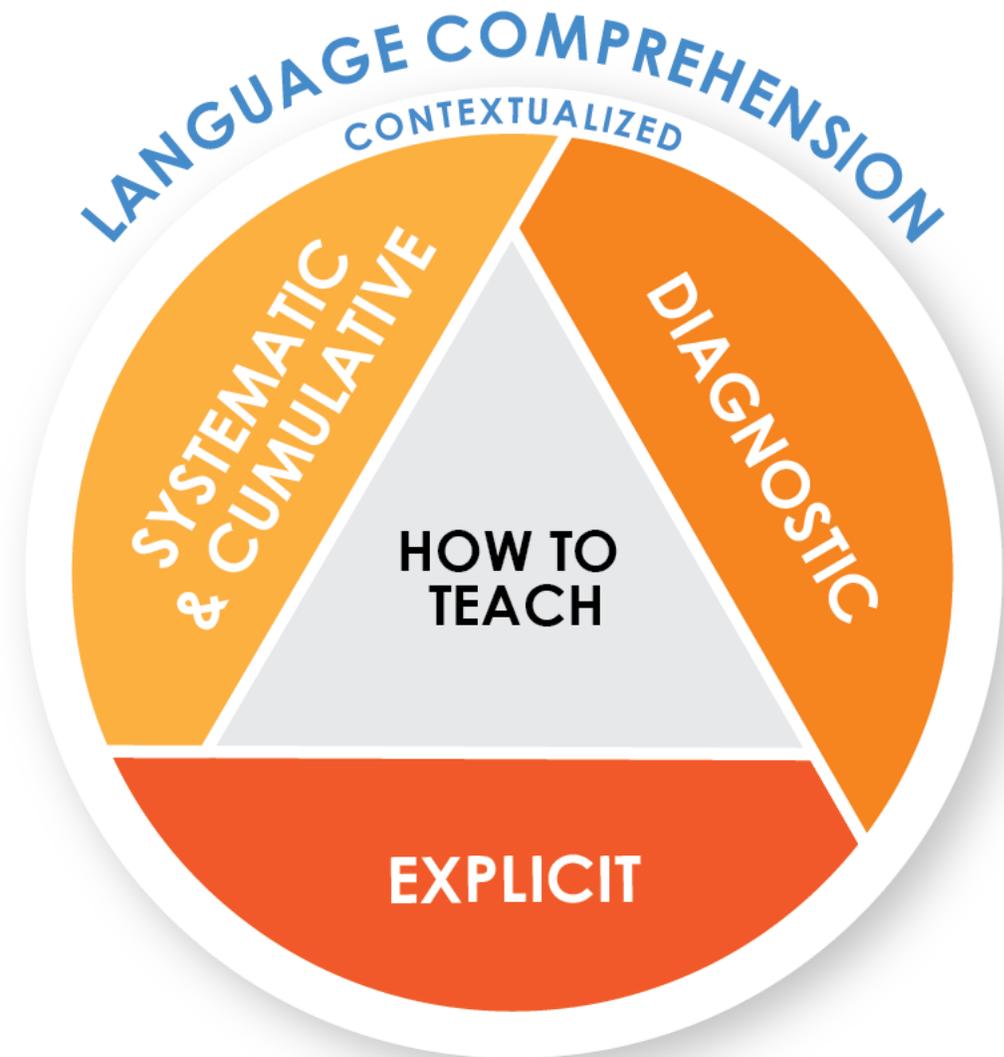


These dimensions of language have patterns!

Not unlike....
CVC
CCVC
CVCC
CVCV
etc.

“Repeated exposure to the same patterns builds neural networks.”
--Bruce Perry (Aug. 6, 2025)

UNPACKING THE HOW

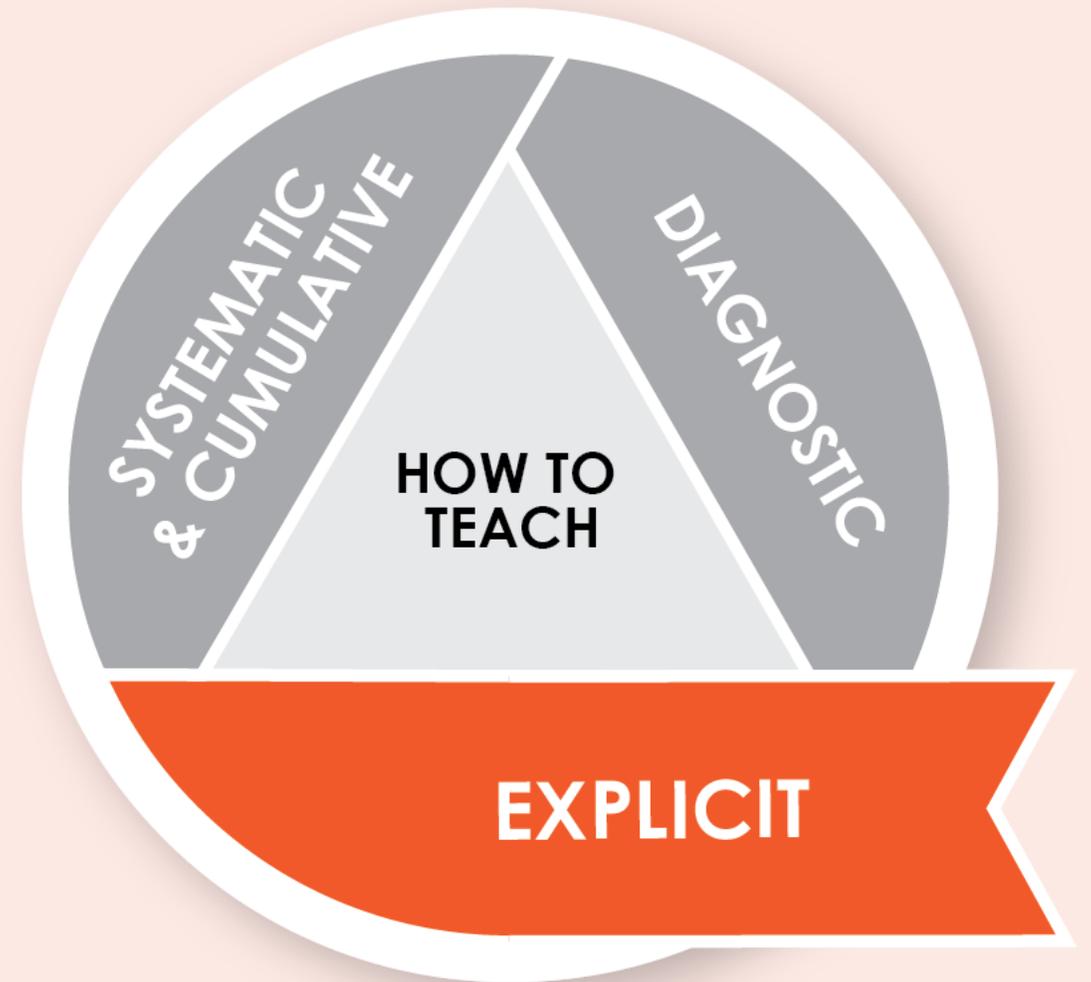


Explicit

Direct and clear, leaving little to chance or assumption.

Concepts and skills are taught clearly and directly, rather than being "discovered" by students.

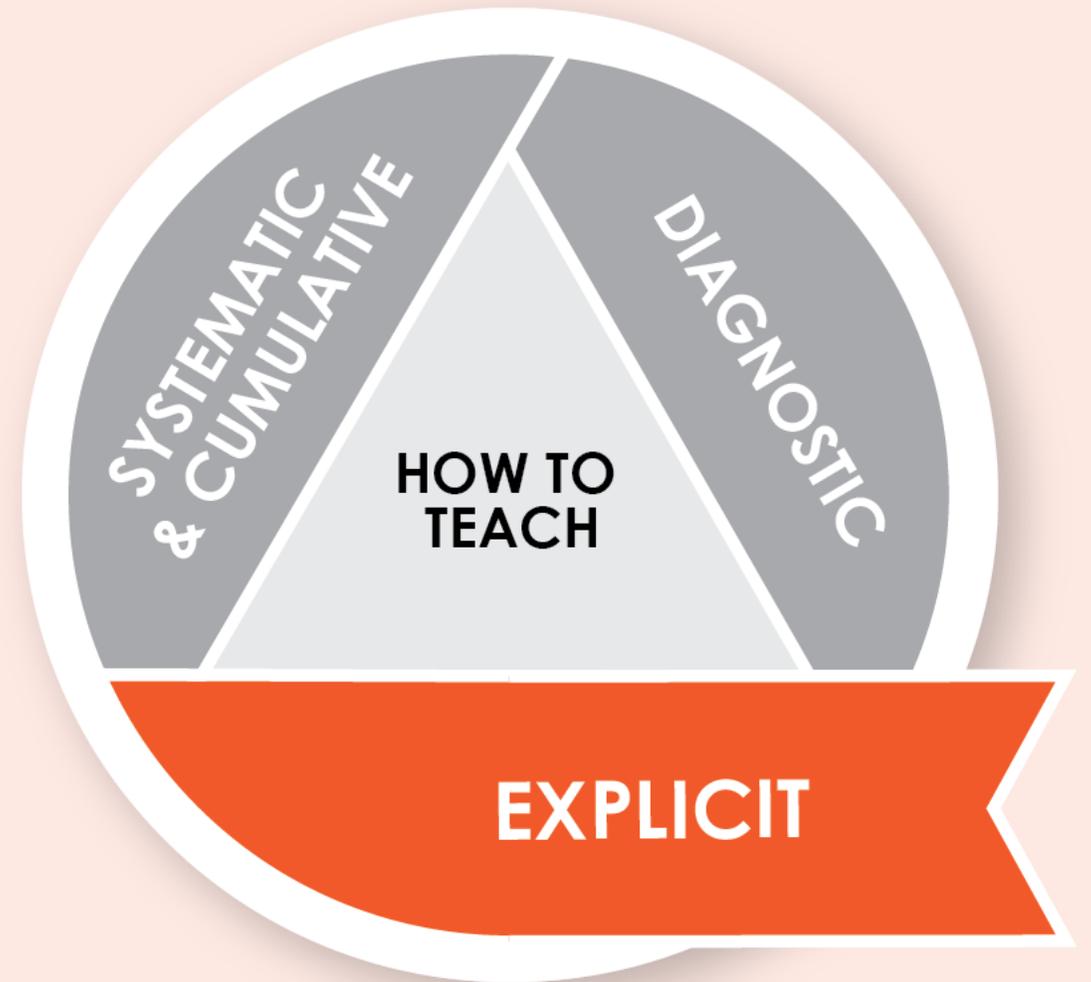
Teachers model skills, explain rules, and provide guided practice.



Explicit

For example, instead of assuming students will infer the patterns in words, sentences, and discourse, they are shown to students and made concrete.

For example, students are explained multiple meaning word, figurative language, and morphologically complex words, as well as provided multiple opportunities to use them.



Systematic / Cumulative

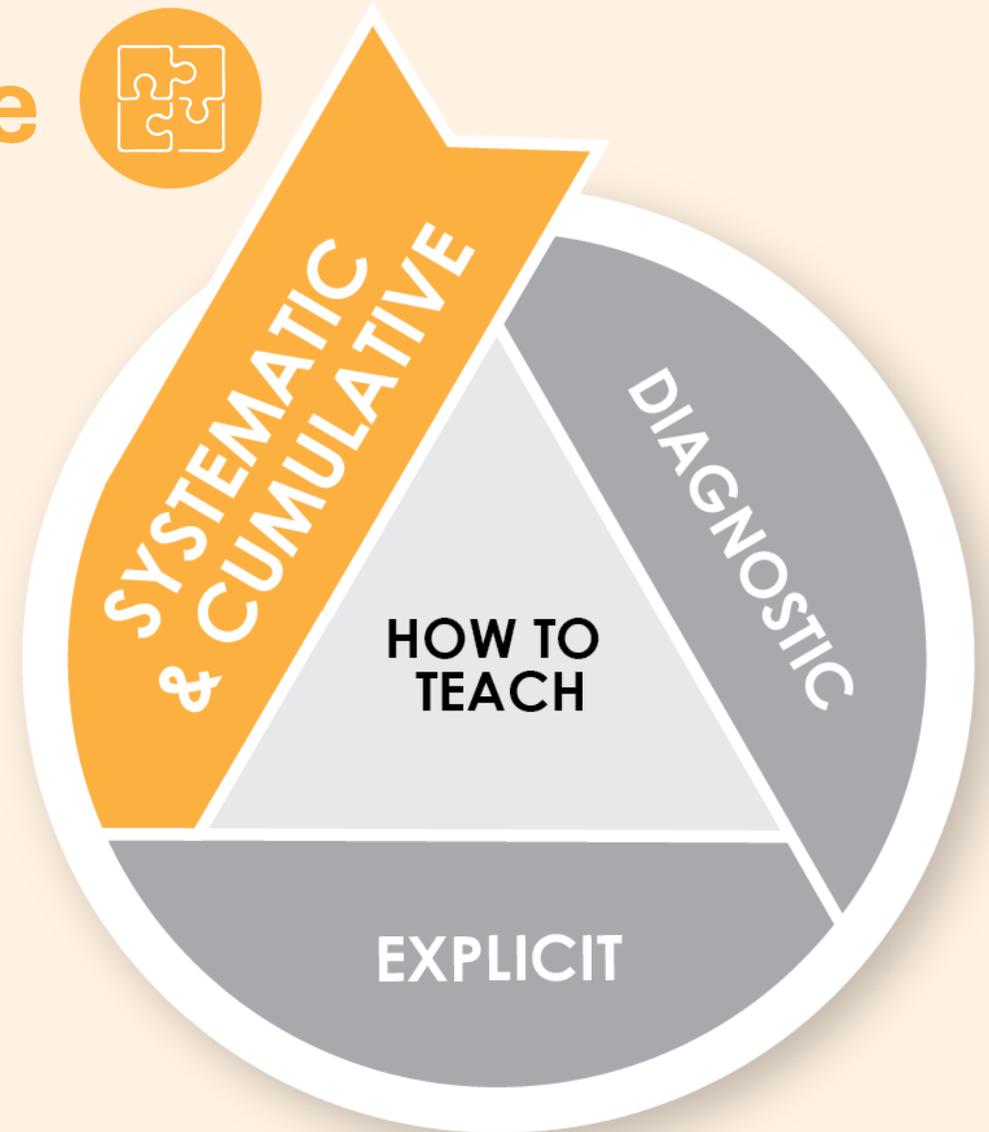


Instruction that follows a planned sequence that builds from simple to more complex skills in a logical progression.

Instruction that continuously builds on previously learned material, with frequent review and integration of old and new content.

Lessons are designed to reinforce and integrate previously learned skills.

New learning is connected to and layered on top of what has already been taught.

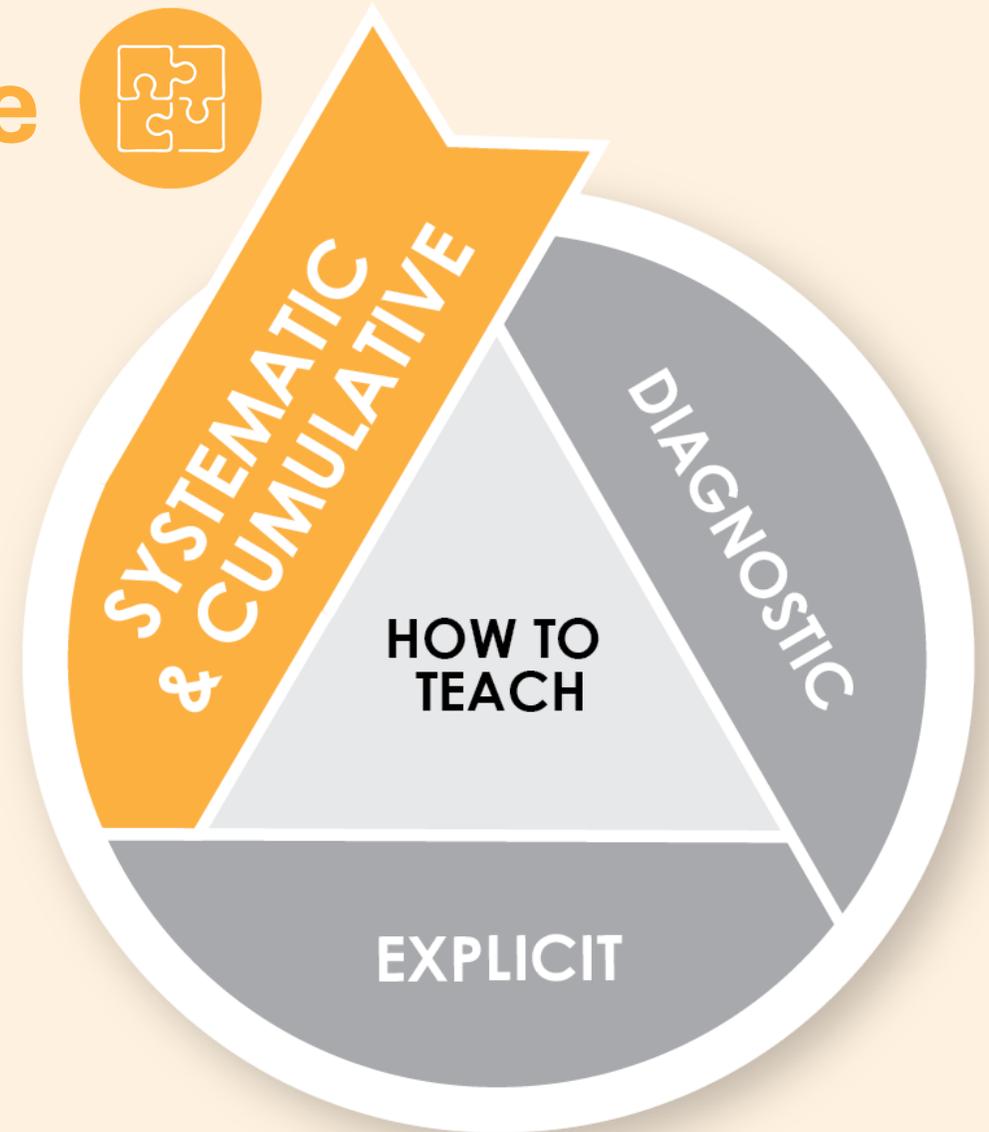


Systematic / Cumulative



For example, the curriculum begins with easier skills like retelling brief stories and paragraphs, and progresses to generating fictional stories, and eventually expository content.

For example, previously learned targets like specific words or complex sentence patterns show up in subsequent lessons.



Diagnostic

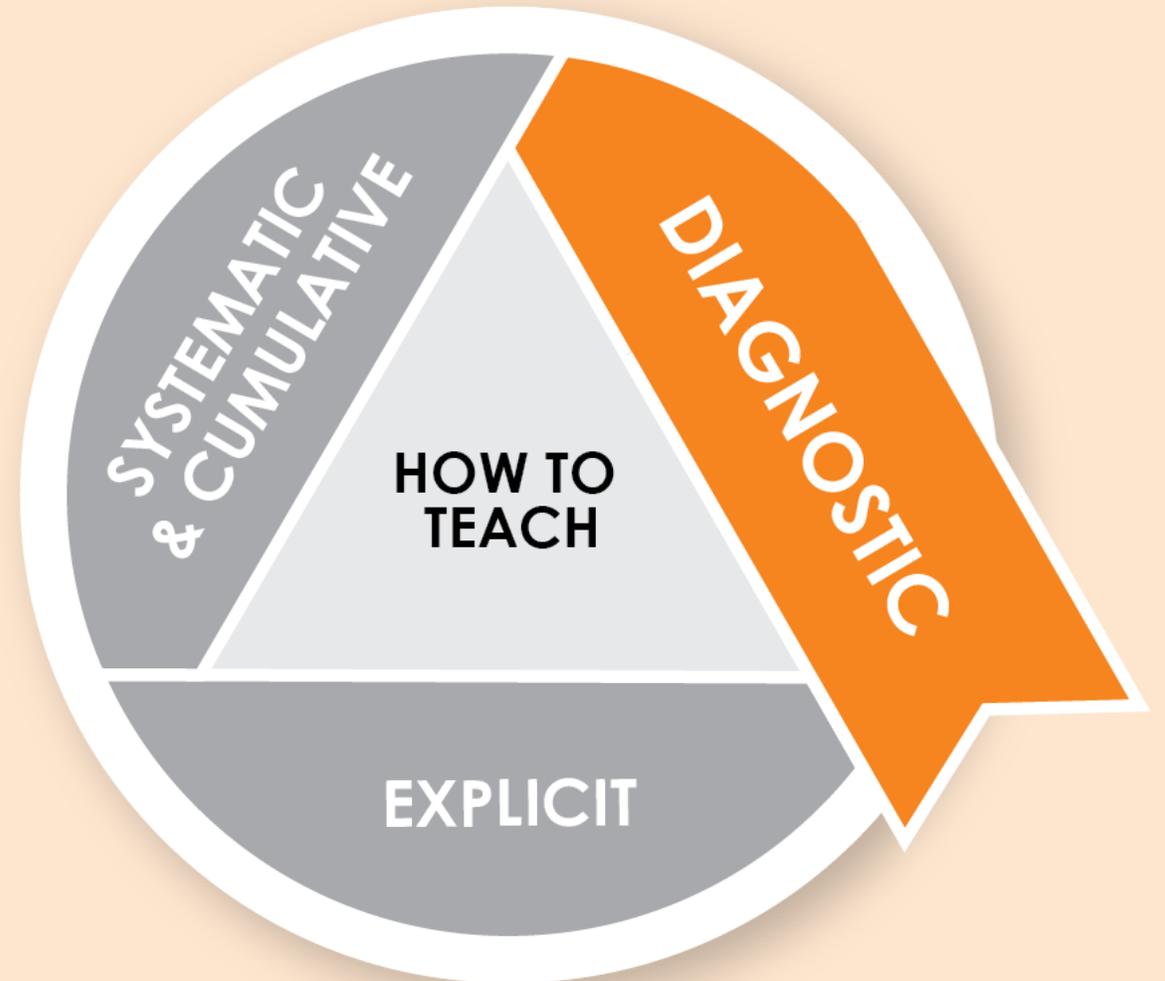


Instruction that is responsive to individual student performance, using data from continuous assessment to inform teaching.

Teachers frequently monitor progress and adjust instruction based on students' specific needs.

Errors are analyzed to determine instructional next steps.

Teacher adjust the difficulty or complexity of a prompted sentence depending on a student's expressive proficiency.

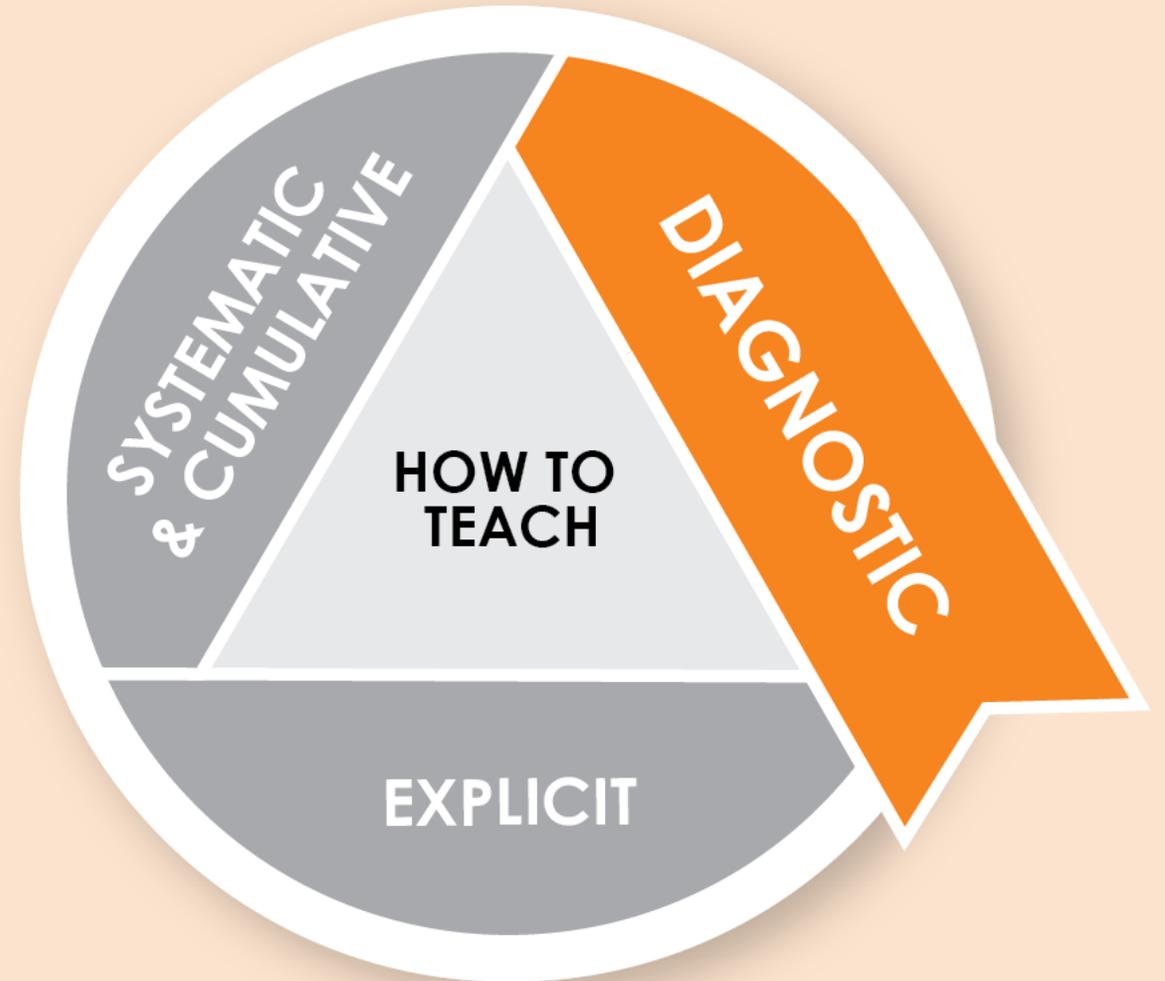


Diagnostic



For example, the teacher adjusts the difficulty or complexity of a prompted sentence depending on a student's expressive proficiency.

For example, teacher puts three students who are showing slower progress in a small group instructional arrangement to increase their opportunities to respond with more teacher direction.





$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$



$$A = \frac{1}{2}bh$$



$$\sin(\theta) = \frac{opp}{hyp}$$



$$V = s^3$$



$$V = \frac{4}{3}\pi r^3$$



Features of Structured Literacy for Language Comprehension



EXPLICIT

Frequent Student Responding: Do lessons ensure students are responding frequently?

Direct Teaching: Do lessons ensure concepts and targets are taught directly and deliberately involving modeling, explanations, and practice?

Specific and Comprehensive: Does the program specifically target all of the language comprehension strands in an integrated and interleaving manner?

Clear Language: Do lessons clearly specify what the teacher should say/do and what the students should say/do?

Corrective Feedback: Do lessons include guidance on how to deliver immediate corrections that result in correct student responses?



SYSTEMATIC/ CUMULATIVE

Focused and Efficient: Do lessons have a clear focus and introduce new targets gradually? Do lessons facilitate a brisk instructional pace?

I Do, We Do, You Do: Do lessons provide for sufficient guided and independent practice of new material across activities or exercises?

Within Lesson Sequence: Do lessons have a logical, intentional, and systematic sequence of related and meaningful activities?

Across Lesson Sequence: Do lessons follow a planned sequence that builds from simple to complex skills and reviews previous targets?



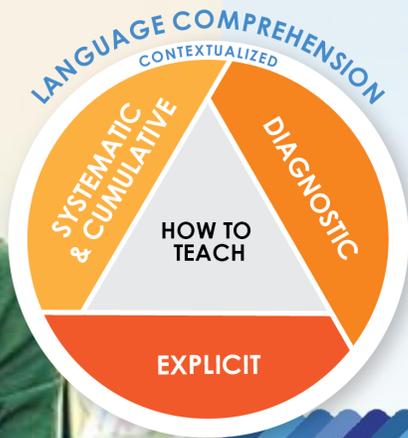
DIAGNOSTIC

Differentiation: Do lessons include guidance for accommodating diverse language needs?

Progress Monitoring: Do lessons allow for informal monitoring of learning? Is there an assessment tool that is aligned with the program?



Contextualized: Do lessons ensure targets are practiced within meaningful communication contexts that reflect academic complexity?



STRUCTURED LITERACY CHECKLIST for Language Comprehension Instructional Tools

Explicit, systematic, cumulative, and diagnostic instruction can be accomplished two ways...

INSTRUCTIONAL DESIGN

Curriculum-controlled aspects of lessons are engineered by intervention designers and curriculum developers to make the job of teaching easier and more effective.

DELIVERY PROCEDURES

Teacher-controlled aspects are the important ways in which teachers deliver lessons to maximize their effectiveness for all their students.

Areas where the curriculum falls short become the burden for the teacher to deliver!



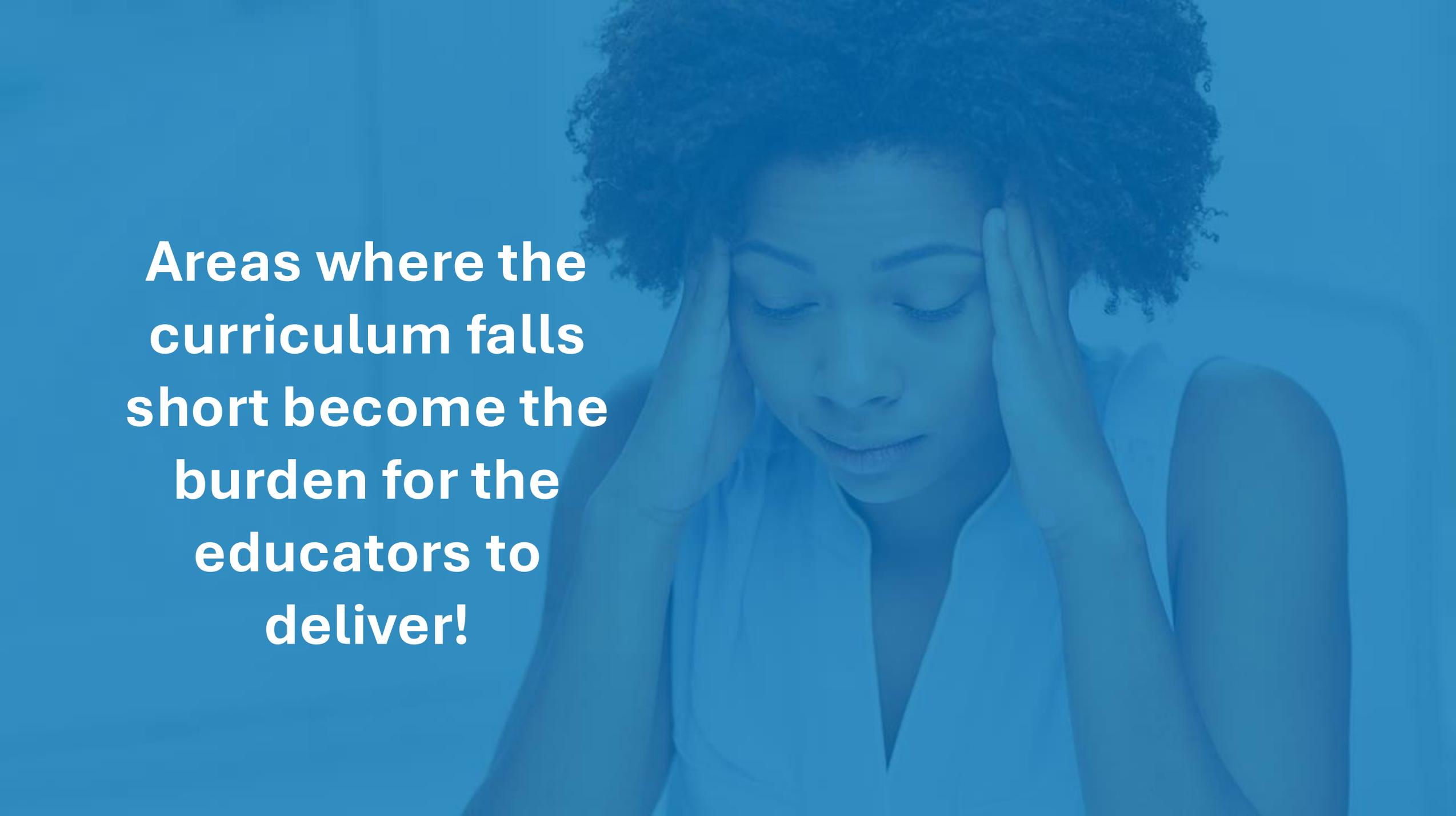
STRUCTURED LITERACY CHECKLIST

Dr. Trina Spencer and Dr. Douglas Petersen

STRUCTURED LITERACY FEATURES		YES	SOMEWHAT	NO
Frequent Student Responding: Do lessons ensure students are responding frequently? Do lessons minimize the amount of teacher talk?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Direct Teaching: Do lessons ensure concepts and targets are taught directly and deliberately involving modeling, explanations, and practice?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Specific and Comprehensive: Does the program specifically target all of the language comprehension strands in an integrated and interleaving manner?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Contextualized: Do lessons ensure targets are practiced within meaningful communication contexts that reflect academic complexity?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Focused and Efficient: Do lessons have a clear focus and introduce new targets gradually? Do lessons facilitate a brisk instructional pace?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
I Do, We Do, You Do: Do lessons provide for sufficient guided and independent practice of new material across activities or exercises?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Clear Language: Do lessons clearly specify what the teacher should say/do and what the students should say/do?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Corrective Feedback: Do lessons include guidance on how to deliver immediate corrections that result in correct student responses?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Within Lesson Sequence: Do lessons have a logical, intentional, and systematic sequence of related and meaningful activities?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Across Lesson Sequence: Do lessons follow a planned sequence that builds from simple to complex skills and reviews previous targets?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Differentiation: Do lessons include guidance for accommodating diverse language needs?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Progress Monitoring: Do lessons allow for informal monitoring of learning? Is there an assessment tool that aligns with the program?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

Free to download!

<https://languagedynamicsgroup.com/resources/>



**Areas where the
curriculum falls
short become the
burden for the
educators to
deliver!**



STORY CHAMPS

Instructional Tools

CORE FEATURES

- 1 Carefully constructed personally-themed stories and science and social studies expository passages to model and practice the complex **word, sentence, and discourse patterns** of academic language
- 2 **Strategic use of visual supports** that are quickly faded to enhance independent responding and generalization
- 3 **Explicit and systematic instruction** featuring teaching procedures derived from cognitive and behavioral learning sciences (e.g., retrieval practice, interleaving)



INTERVENTION

Multi-Grade



CURRICULUM

P K 1 2

Coming Soon!

CUBED³
Dynamic Decoding
Measures (DDM)

BENCHMARK & PROGRESS MONITORING

III
INTENSIVE
INTERVENTION

TIER II
TARGETED INTERVENTION

explicit,
systematic,
cumulative,
& diagnostic
decoding
instruction

TIER I
CORE INSTRUCTION



BENCHMARK & PROGRESS MONITORING

CUBED³
Narrative Language
Measures (NLM)

TIER-1 SCREENING FOR DYSLEXIA & DLD

PEARL 
PreK-Early Kindergarten

DYMOND 
Kindergarten-Grade 8



1. Stories
2. Visuals
3. Teaching

- ✓ Fluid
- ✓ Aligned
- ✓ Layered



One morning, Jared was **happy as a clam**, playing in the awesome, toy room. He was **cleverly constructing** a tall, colorful wall with his blocks so that he could jump his truck over it.



When Jared went to get his truck, he **couldn't find** it.



He was devastated **because** he **misplaced** his truck.



He decided to talk to his dad, **who** was a **helpful** person. Jared said, "I have **misplaced** my truck, but *I've looked everywhere.*" Then Jared's father said, "Let's look in the living room. I think I saw it there."



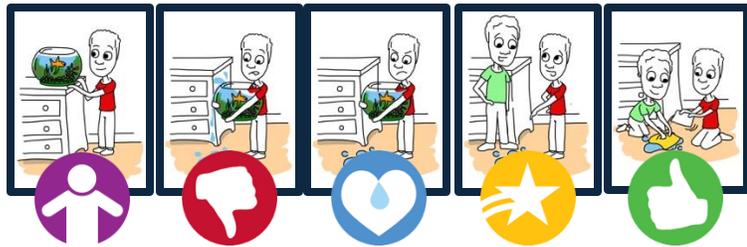
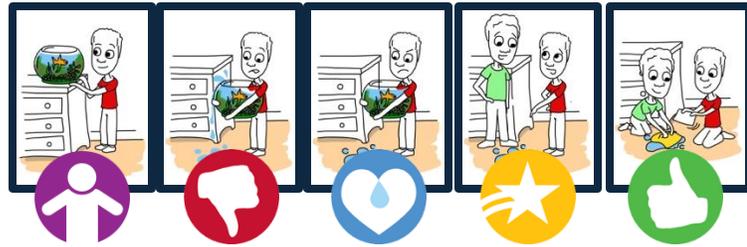
After looking behind the couch in the living room, Jared's father found **several** trucks **that had been lost**. Jared was excited **because** he **found several** trucks and jumped all of them over the wall he **built**.

Carefully constructed personal-themed stories

Carefully constructed expository passages



- ☁ The human body is like a machine.
- 👤 It has many **systems** that help the body **perform** its **functions** smoothly.
- 👤 **Because** the **systems** **work together**, they can protect the body and keep it alive.
- 👤 Each body **system** is made up of **different** body parts, also called **organs**.
- 👤 The brain **coordinates** all the **systems** and **tells the organs** **how to do their jobs**.
- 👤 **Although** **organs** have **specialized** jobs, they all contribute to the health of a **complex body** machine.



Fading begins



1

MODEL STORY

Read the story

Name the parts of the story

2

TEAM RETELL

Each child tells one part of the story

Summarize the whole story

3

INDIVIDUAL RETELL

Individual children take turns retelling the story

After each one, summarize the whole story

Strategic
Use of
Visual
Supports
that are
Faded
Quickly

3 FADE WITHIN SESSION

1

**RETELL WITH
PICTURES & ICONS**



2

RETELL WITH ICONS



3

**RETELL WITHOUT
VISUAL SUPPORTS**

NO VISUALS
resembles natural environment conditions

CHAMP Checks
EXPOSITORY RETELL

PARTNER 1 PARTNER 2

	<input type="text"/>		<input type="text"/>
	<input type="text"/>		<input type="text"/>
	<input type="text"/>		<input type="text"/>
	<input type="text"/>		<input type="text"/>
	<input type="text"/>		<input type="text"/>
	<input type="text"/>		<input type="text"/>
	<input type="text"/>		<input type="text"/>
	<input type="text"/>		<input type="text"/>
	<input type="text"/>		<input type="text"/>
	<input type="text"/>		<input type="text"/>

FADE WITHIN SESSION

Student 1

Student 1 retells the paragraph with **pictures & icons**



Student 2

Student 2 retells the paragraph with **icons only**



Student 3

Student 3 retells the paragraph without pictures or icons





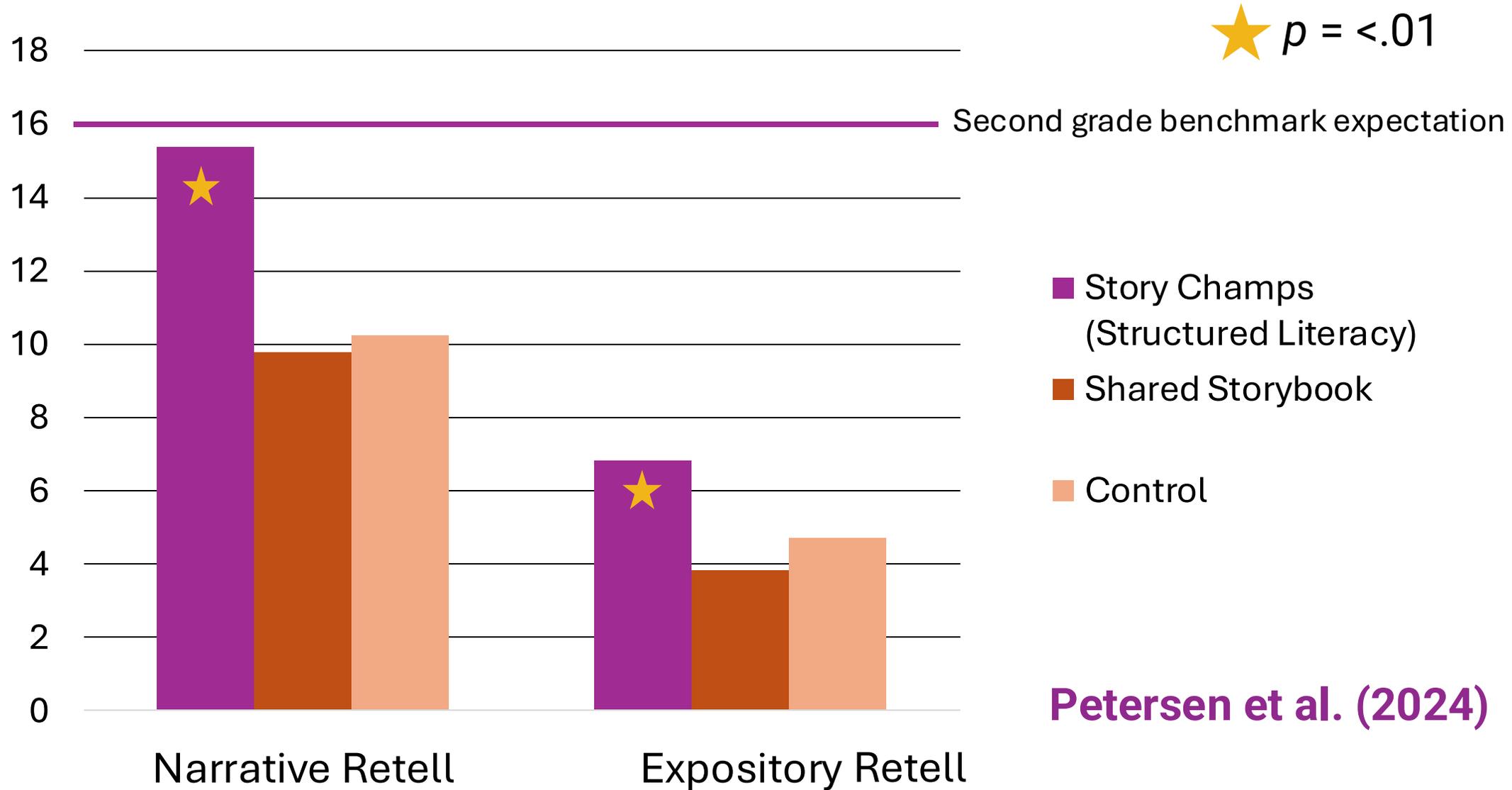
Research Article

The Effects of a Multitiered System of Language

Method: Participants were 686 kindergarten students from four school districts in the United States. Twenty-eight classrooms were randomly assigned to treatment ($n = 337$ students) or control ($n = 349$ students) conditions. The

Results: Results indicated that the students in the treatment group had significantly higher scores on all outcome measures compared to the students in the control group. Analyses of outcomes from the 49 students who received Tier 2 intervention compared to a matching sample of at-risk control students revealed that the treatment group had significantly higher scores on narrative retells, personal stories, and expository retells. When compared to matched average-performing and advanced-performing control peers, the students who received Tier 2 intervention had significantly higher narrative retell scores and no longer had significantly lower personal story, expository, or writing scores.

Effects of Story Champs on Kindergarten Narrative and Expository Outcomes





KINDERGARTEN
INTERVENTION
NEW DATA

CUBED-3 Scores were Significantly Different at PRETEST

High Risk



Kindergarten
4.76 (3.87)

$p < .001$

Advanced
Control



Kindergarten
16.62 (1.72)



KINDERGARTEN
INTERVENTION
NEW DATA

No Significant Difference at End of Fourth Grade on Reading Comprehension

High Risk



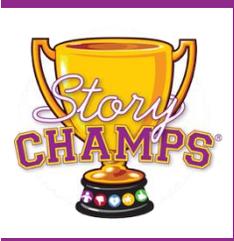
Fourth Grade
1394.88 (35.90)

$p = .90$

Advanced
Control



Fourth Grade
1393.23 (44.40)



WRITING RESEARCH

ES \geq 0.25 are educationally meaningful

LSHSS

Research Article

Bridging Oral and Written Language: An Oral Narrative Language Intervention Study With Writing Outcomes

Trina D. Spencer^a and Douglas B. Petersen^{a,b}

Examining the Effects of Multitiered Oral Narrative Language Instruction on Reading Comprehension and Writing

A Feasibility Study

$d = 1.24$ RC

$d = 1.69$ WR

Douglas B. Petersen, Meredith W. Mesquita, Trina D. Spencer, and Jessica Wald

READING & WRITING QUARTERLY
<https://doi.org/10.1080/10573569.2021.1879696>

 **Routledge**
Taylor & Francis Group

 OPEN ACCESS

 Check for updates

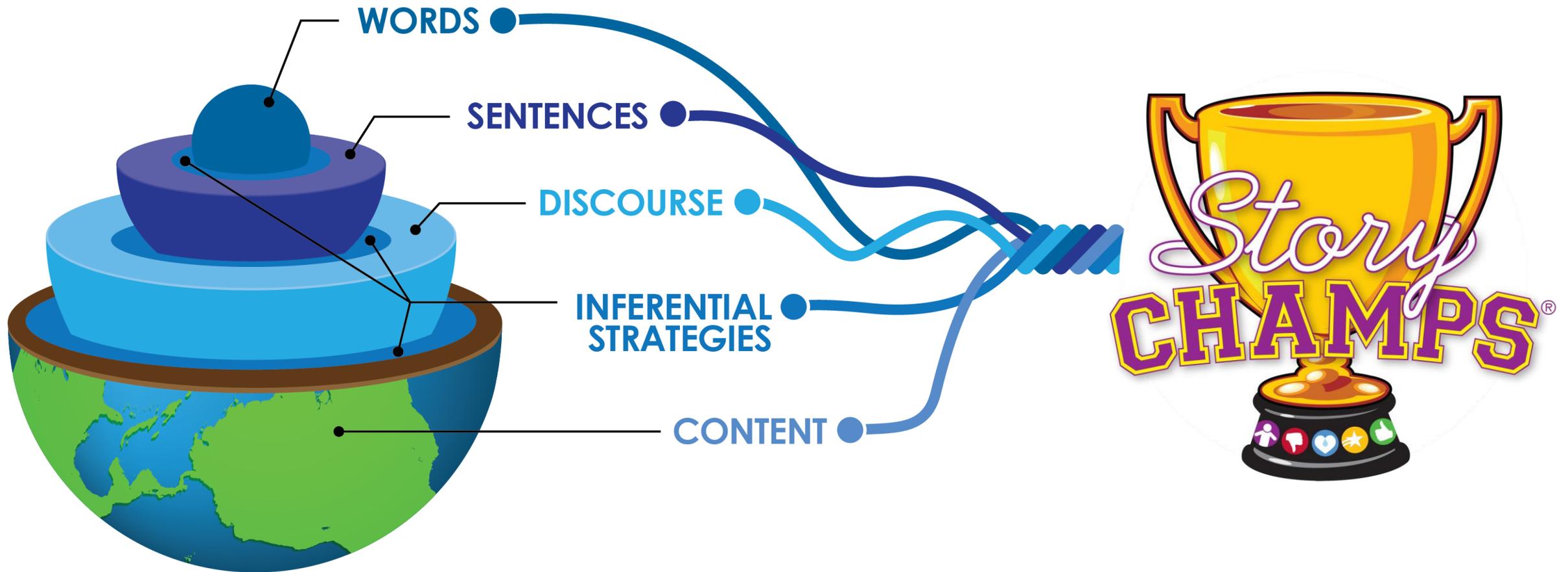
Oral Narrative Instruction Improves Kindergarten Writing

Megan S. Kirby , Trina D. Spencer , and Yi-Jui Iva Chen 

$Mean\ g = 2.23$

THE WHAT & HOW ARE INTEGRATED

SCC & SCI explicitly teach word, sentence, and discourse patterns and provide guided practice using several inferential strategies so that students will be prepared to acquire and express knowledge independently





ACADEMIC LANGUAGE STRANDS

(bold = targeted / unbold = included but not targeted)

NARRATIVE DISCOURSE

-  **character**
-  **setting**
-  **problem**
-  **feeling**
-  **action**
-  **ending**
-  **end feeling**

VOCABULARY

-  **construct** - to build
-  **misplace** - to lose

SENTENCE STRUCTURES

- causal connections - **so that**, **because** 
- temporal connections - **when**, **after**
- relative pronouns - **who**, **that**

OTHER

- figurative language - **happy as a clam**
- irregular past tense - **find/found**
- modifiers - **adjectives & adverbs**



FOCUS

- ✓ Retell story with seven elements
- ✓ Define and practice Sparkle Words
- ✓ Introduce Connection Words and Icons
- ✓ Teach figurative language



Focused
and
Efficient

- **construct** - to build
- **misplace** - to lose

SENTENCE STRUCTURES

- causal connections - *so that, because*
- temporal connections - *when, after*
- relative pronouns - *who, that*

VOCABULARY

- Determine the meaning of unknown words using context clues
- Identify real-life connections between words and their use

SENTENCE STRUCTURES

- Understand and use complex sentences

DIFFERENTIATION GUIDE

SPEED UP

During oral retells, encourage advanced students to use **happy as a clam** in addition to **Sparkle** and **Connection** Words.

SLOW DOWN

Some students may not be ready to include complex sentences and words in their oral retells. Do not over prompt these in a way that students become frustrated. Just focus on students including all discourse elements.



Differentiation

ACTIVITY 1: Read Story

Display the 5 STORY PICTURES.

Today I'm going to tell you a story about Jared. It's called "Jared Jumps His Trucks." Listen carefully for Sparkle Words. If you hear a word that you think is a Sparkle Word, make the Sparkle Gesture.

Hold hands up and out, then open and close hands repeatedly.

As you read each part of the story, put the corresponding icon(s) on or near the picture.



in the awesome, toy room. He was cleverly constructing a tall, colorful wall with his blocks so that he could jump his truck

truck.

person. Jared said, "I have misplaced my truck, but I've looked everywhere." Then Jared's father said, "Let's look in the living room. I think

Jared's father found several trucks that had been lost. Jared was excited because he found several trucks and jumped all of them

Personally-themed stories...

- activate young students'

Comprehension
Monitoring Strategy

ACTIVITY 2: Define Construct

One of our Sparkle Words is **construct**. Jared is constructing a wall with blocks. Place a SPARKLE ICON on or near STORY PICTURE 1.

Everyone say **construct**. Students say, **construct**. PRAISE

Listen for clues to figure out what **construct** means. Read the sentence(s) with the word and clue(s). Encourage students to use pictures, clue(s), and background knowledge to figure out the definition. If needed, talk aloud showing how to use the clue(s).

"He was **constructing** a wall with his blocks so that he could jump his truck over it. He jumped all the trucks over the wall he **built**."

Jared is building a wall with blocks. He's **constructing** it. **Construct** means to build.



Listening for clues to figure out the
meaning

ES \geq 0.25 are educationally meaningful

Research Article

Vocabulary Instruction Embedded in Narrative Intervention: A Repeated Acquisition Design Study With First Graders at Risk of Language-Based Reading Difficulty

Trina D. Spencer,^a  Megan S. Kirby,^a  and Douglas B. Petersen^b 



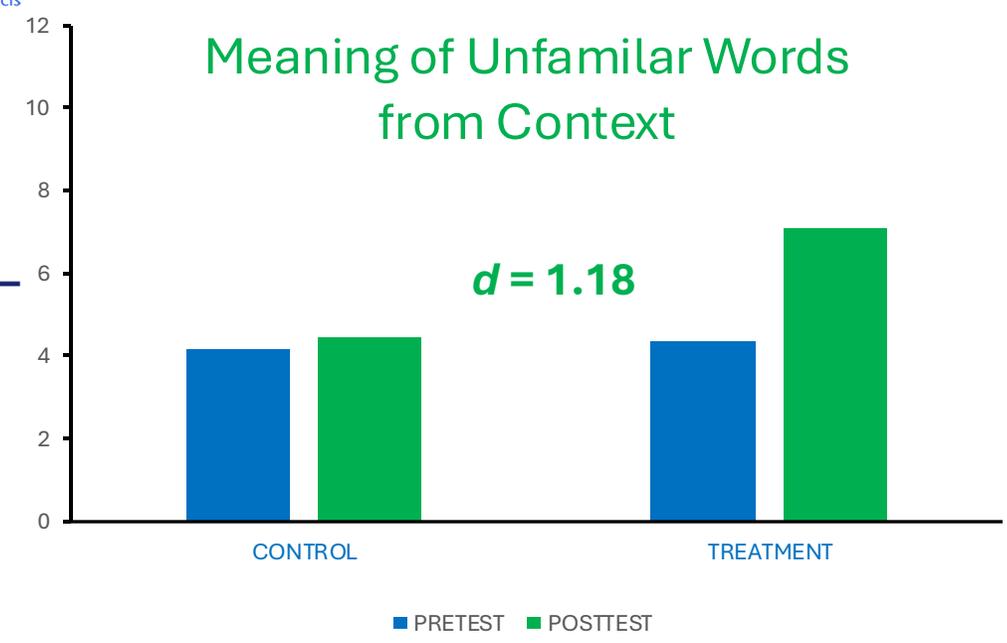
International Journal of Speech-Language Pathology



ISSN: 1754-9507 (Print) 1754-9515 (Online) Journal homepage: www.tandfonline.com/journals/iasl20

Effect of oral academic narrative language intervention on listening comprehension and generalised word learning: A proof of concept study

Trina D. Spencer, Megan S. Kirby, Chelsey Gardner & Douglas B. Petersen





I do, We do, You do

WORD



Direct Teaching

SENTENCE PATTERN

ACTIVITY 3: Define Misplace

Misplace is the other Sparkle Word for this story. Jared has **misplaced** his truck. Place a SPARKLE ICON on or near STORY PICTURE 2.

Everyone say **misplace**. Students say, **misplace**. PRAISE

Listen for clues to figure out what **misplace** means. Read the sentence(s) with the word and clue(s). Encourage students to use pictures, clue(s), and background knowledge to figure out the definition. If needed, talk aloud showing how to use the clue(s).

"When Jared went to get his truck, he **couldn't find** it. He was devastated he **misplaced** his truck."

Misplace means to lose. You use **misplace** when you put something somewhere other than where it goes. Listen again. **Misplace means to lose.** Say to lose with me. Students and teacher say, **to lose**. PRAISE

What does **misplace mean?** Students say, **to lose**. PRAISE

If students do not respond or respond incorrectly, say, "Misplace means to lose. Say to lose with me. To lose. Terrific! What does **misplace** mean?"




Corrective Feedback

ACTIVITY 4: Play Story Gestures

Re-read the story. Play Story Gestures with the students and help them play too. Name the parts of the story as needed. PRAISE the students for playing the game while listening to the story.

I'm going to read the story again. Listen for our Sparkle Words **construct** and **misplace**. While I read the story, you get to play Story Gestures.

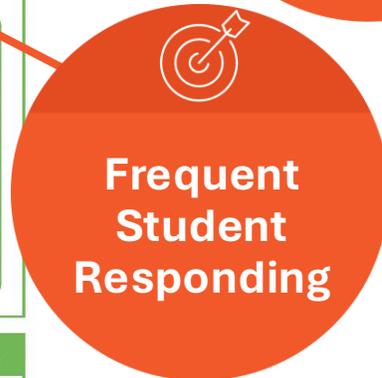
One morning, Jared was **happy as a clam**, playing in the awesome, toy room. He was cleverly **constructing** a tall, colorful wall with his blocks so th
cc
d

DISCOURSE PATTERN

"Let's look in the living room. I think I saw it there." After looking behind the couch in the living room, Jared's father found **several** trucks **that had been lost**. Jared was excited **because** he found **several** trucks and jumped all of them over the wall he **built**.

STORY GESTURES (quick reference guide)

- CHARACTER** (hand on top of head)
- SETTING** (finger tips form a roof)
- PROBLEM** (thumbs down)
- FEELING** (hand on heart)
- ACTION** (move open hand in an arc)
- ENDING** (thumbs up)
- END FEELING** (hand on heart)



Frequent Student Responding

ACTIVITY 5: Connection Words

Show the students the CONNECTION ICONS.

There are a few more special words in this story. We call them **Connection Words** because they connect two parts of the story together. Connection Words help the listener know how the story parts are related to each other. Listen.

He was devastated **because** he misplaced his truck. Place a CONNECTION ICON on or near STORY PICTURE 3.

Everyone say that sentence with me. Students and teacher say, **He was devastated because he misplaced his truck**. PRAISE

Jared was excited **because** he found several trucks. Place a CONNECTION ICON on or near STORY PICTURE 5.

Everyone say that sentence with me. Students and teacher say, **He was excited because he found several trucks**. PRAISE





Clear Language

Differentiation

WE DO

WE DO

YOU DO

Frequent Student Responding

YOU DO

I do, We do, You do

Within Lesson Sequence

Story Retelling
I Do = Activities 1 & 4

ACTIVITY 6: Teaching Individual Retell

4+ L **UP**

Ask Questions
Ask the STEP 1 questions one at a time. Refer to the STORY PROMPT cards to ensure every student should have a response.

Individual Student Retell
When the students have enough think time, call on one student to provide the answer to a specific story part. Make sure students use the **Sparkle** and **Connection** Words. Encourage other targets as appropriate.

Everyone Repeats
After an individual student retells a part, model (use STEP 2 sentences as a guide) what the students should say and have them repeat it all together. Continue until all the parts of the story are individually retold and repeated by the group.

2-3 SMA **UP**

Give Each Student 1

Individual Student Retell
Starting with the student's character icon and moving through the icons in order, students retell the part of the story that corresponds to the icon. Make sure students use the **Sparkle** and **Connection** Words. Encourage other targets as appropriate.

Everyone Repeats
After an individual student retells the part model (use STEP 2 sentences as a guide) what the students should say and have them repeat it all together. Continue until all the parts of the story are individually retold and repeated by the group.

4+ L **UP**

Divide the students into pairs and give each pair a Champ Character. While retelling, move around the room and listen to students' stories. Use the STORY PROMPT cards to ensure every student needed. Make sure students use the Sparkle and Connection Words. Encourage other targets as appropriate.

YOU DO

STEP PROMPT
Ask the student to retell the story using the Sparkle and Connection Words. Encourage other targets as appropriate.

2-3 SMA **UP**

Individual Student Retell
Each student retells the story using the Sparkle and Connection Words. Encourage other targets as appropriate. While one student retells the story, the other students use the Sparkle and Connection Words (or other targets) to provide feedback.

How to Use the Story Checkers
The first storyteller retells the story while the champ checker listens carefully. The champ checker helps as needed to ensure that the storyteller retells the story part and uses the Sparkle and Connection Words. When the first storyteller finishes, the roles switch and the champ checker retells the story.

Student 1
Student 1 retells the story with pictures & icons

Student 2
Student 2 retells the story with pictures & icons

Student 3
Student 3 retells the story without pictures or icons

Small Group Story Games
Story Sticks: Use the story sticks that corresponds to the part retold.
Story Dice: Use the story dice with the icon that corresponds to the part retold.
Story Cards: Use the story cards with the icon that corresponds to the part retold.

2-STEP PROMPTING **STEP 1:** When a prompt is necessary, first ask a **question**. **STEP 2:** When a question is not sufficient to help the student produce the part of the story, provide a **model**.

-  1: Who is the story about?
2: Jared was **happy as a clam**...
 -  1: Where were they in the beginning of the story?
2: ...**constructing** a wall in the toy room.
 -  1: What was their problem?
2: He **misplaced** his truck.
 -  1: How did they feel about their problem?
2: Jared was devastated **because** he couldn't find his truck.
 -  1: What did they do to fix their problem?
2: Jared asked his dad to help him look for the truck.
 -  1: How did the story end?
2: They found his truck behind the couch.
 -  1: How did they feel at the end of the story?
2: Jared was excited **because** he found several trucks and jumped them.
- Note: After students correctly answer the character and setting questions with just one or a few words, model a complete sentence describing the first picture and have students repeat it.



ACTIVITY 8: Figurative Language

In this story, **happy as a clam** means something different than the normal meaning of the words. Listen for clues. **Happy as a clam** means **very happy**. To understand this phrase, we have to **figure out** if clams are usually happy or unhappy.

Let's try to figure out what **happy as a clam** means in this context. Listen for clues.

Re-read the following sentences containing the phrase and clue (in italics).

*"Jared was **happy as a clam**, playing in the awesome, toy room."*

Allow students to try to figure out the meaning of the phrase. If necessary, model for the students how to figure it out by talking aloud while considering the phrase and the clue.

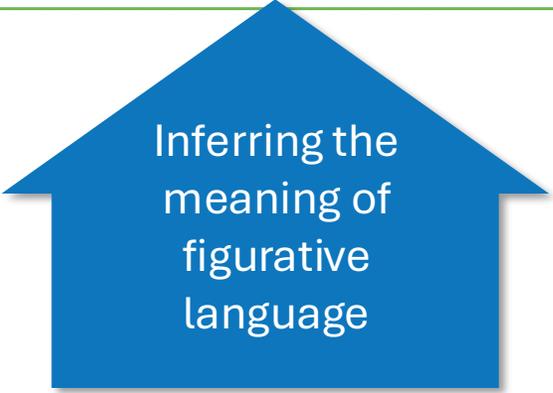
Happy as a clam means very happy. Listen again. Happy as a clam means very happy. Say very happy with me. Students and teacher say, **very happy. PRAISE**

What does happy as a clam mean? Students say, **very happy. PRAISE**

Because we have to figure out what these words actually mean, we call this type of phrase figurative language. Say figurative language. Students say, **figurative language. PRAISE**

Figurative language is phrasing that goes beyond the literal meaning to make a point.

Optional: elaborate on figurative language by explaining similes and metaphors.





I do, ~~We do,~~
You do

ACTIVITY 9: Practice Construct

Talk about PICTURES 27, 28, and 29.

Here are some pictures of people **constructing** something. Everyone say **construct**. Students say, **construct**. PRAISE

Construct means to build. What does **construct** mean? Students say, **to build**. PRAISE

Lead a **discussion** about other uses of the word **construct**. Ask students to think of a time they **constructed** something.

Give individual turns for students to **define construct** or to **use construct in a sentence**. See sample sentences below.

PICTURE 27 **Someone is constructing a wall.**

PICTURE 28 **The man constructed a snow fort.**

PICTURE 29 **The father and son are constructing a tree house.**



If students do not respond or respond incorrectly, say, "Construct means to build. Say to build with me. To build. Great! What does construct mean?"

ACTIVITY 10: Practice Misplace

Talk about PICTURES 30, 31 and 32.

Here are some pictures that show something that is **misplaced**. Everyone say **misplace**. Students say, **misplace**. PRAISE

Misplace means to lose. What does **misplace** mean? Students say, **to lose**. PRAISE



Vocabulary

Activities 9 and 10 are part of the within lesson fading that began with Activities 2 and 3.

Activity 11 generalizes the words (and semantically similar words), their meanings, and their use outside the lesson.

ACTIVITY 11: Generalization



Print and distribute two **Word Journal** pages for each student (one for each of the Sparkle Words), and give them time to complete.

Display the **Spot the Sparkle Cards** for **construct** and **misplaced** on a whiteboard and discuss the synonyms. When students use, see, or hear a Sparkle Word or a synonym, they put a tally mark next to the card.

Read aloud to students. Encourage students to monitor their comprehension and identify the meaning of unknown Sparkle Words. Help students identify narrative discourse elements and make text-to-text, text-to-self, and text-to-world connections.



Within
Lesson
Sequence





Specific & Comprehensive



Contextualized



Direct Teaching



Focused and Efficient



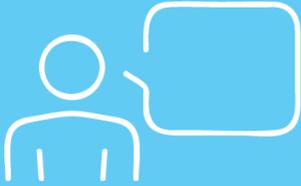
Narrative Retelling



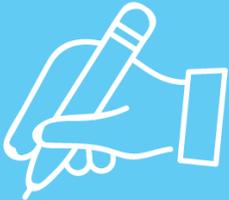
Narrative Writing



Expository Retelling



Expository Writing



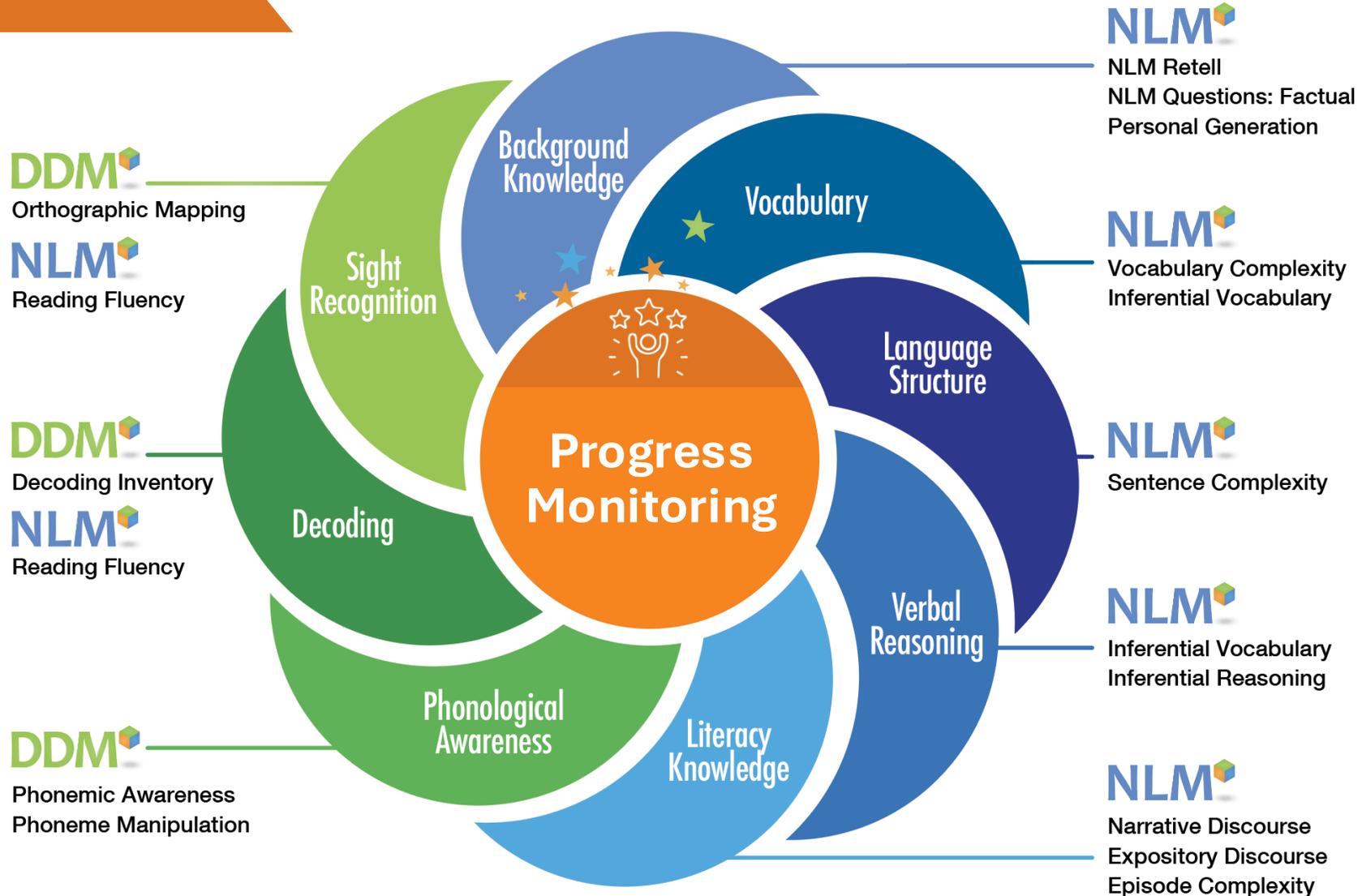
Flex

1. Narrative Retelling
2. Personal & Fictional
3. Content Knowledge & Emerging Expository Discourse Patterns



DIAGNOSTIC

CUBED³



Coming Soon!



**PRESCHOOL
CURRICULUM**



**KINDERGARTEN
CURRICULUM**



**FIRST GRADE
CURRICULUM**



**SECOND GRADE
CURRICULUM**

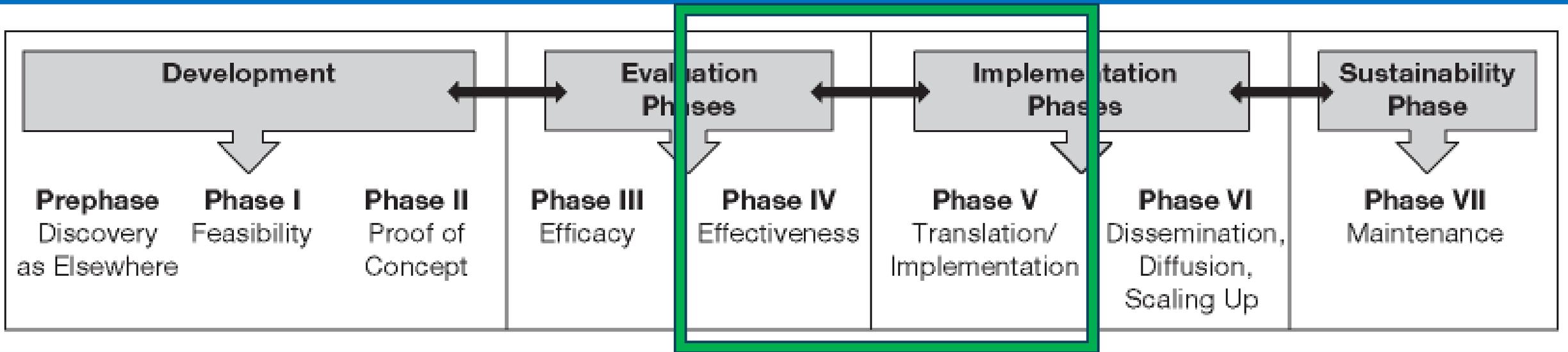


Early Efficacy of Multitiered Dual-Language Instruction: Promoting Preschoolers’ Spanish and English Oral Language

Measure	Posttest, ICC	^b Estimated $M_{adjT} - M_{adjC}, \gamma_{01}$ (95% CI)	p (for γ_{01})	Hedges g (effect size)	Improvement index
E NLM	.21	4.05 (2.06, 6.05)	<.01	.85	30%
S NLM	.02	3.01 (0.53, 5.50)	.02	.48	18%
E Vocab A	.13	1.99 (0.32, 3.67)	.02	.48	18%
E Vocab B	.26	2.25 (0.42, 4.09)	.02	.63	24%
E Vocab C	.25	2.02 (0.39, 3.66)	.02	.46	18%
S Vocab A	.08	2.58 (0.94, 4.22)	<.01	.46	24%
S Vocab B	.22	1.12 (−0.60, 2.85)	.19	.46	12%
S Vocab C	.26	1.80 (0.39, 3.22)	.02	.46	18%
ASC	.10	1.59 (0.18, 2.99)	.03	.49	19%
E SS CELF	.00	2.22 (0.60, 3.84)	.01	.55	21%
E WS CELF	.09	1.78 (−0.12, 3.69)	.07	.41	16%
E EV CELF	.09	−0.26 (−2.38, 1.86)	.80	−.05	−2%
S SS CELF	.25	2.91 (0.23, 5.60)	.03	.63	24%
S WS CELF	.05	2.50 (−0.27, 5.27)	.07	.41	16%
S EV CELF	.00	0.56 (−3.00, 4.11)	.75	.06	2%

**ES ≥ 0.25 are
educationally
meaningful**

NRTs



CURRICULUM

GRADE 1

Hybrid effectiveness-
implementation study

RE-AIM

REACH-EFFICACY-ADOPTION-IMPLEMENTATION-MAINTENANCE



FIRST GRADE
CURRICULUM
NEW DATA

Measures related to what was taught



POSTTEST



Inferential Vocabulary

large effect
(ES = 2.08*)



Narrative Retelling

large effect
(ES = 2.64*)



Narrative Writing

large effect
(ES = 0.93*)



Expository Retelling

small effect
(ES = 0.30*)

FOLLOW UP

small effect
(ES = 0.38)

small effect
(ES = 0.22)

large effect
(ES = 2.15)

large effect
(ES = 1.22*)

ES ≥ 0.25 are educationally meaningful



FIRST GRADE CURRICULUM NEW DATA

Norm-referenced Standardized Distal Measures



POSTTEST



Passage Comprehension

small effect
(ES = 0.21)



Listening Comprehension

neg effect
(ES = -.16)

FOLLOW UP

large effect
(ES = 1.0)

large effect
(ES = 0.63)

ES ≥ 0.25 are educationally meaningful



FIRST GRADE
CURRICULUM
NEW DATA

RE-AIM



REACH

What portion of students?

613 first grade students from 10 schools were screened

26% at risk

ADOPTION

What did they like and not like?

Intervention was well received, engaging, and effective; involvement of SLPs

Some content was too difficult, lack of understanding about language, and time

IMPLEMENTATION

How well?

Schools assigned to treatment were more likely to implement the MTSS ingredients

Treatment = 82%
Control = 72%

MAINTENANCE

5 years later

Treatment Group
During Study = 13
After 5 Years = 16

Control Group
After Study = 13
After 5 Years = 14

107%



STUDIES



Independently researched & published

40 completed studies

2 in progress

26 published by authors

2 investigated remote Story Champs® intervention



Participants

United States

- Preschoolers – 6th Graders
- White, Black, Hispanic, Native American, Asian American
- Typically developing children
- Children at risk for reading failure
- Children with autism
- Children with language disabilities
- Children with learning disabilities
- Children with challenging behavior
- English language learners
- Bilingual children

International

- Mexico: Spanish-speaking 5th and 6th Graders learning English
- India: Kindergartners & 1st Graders
- Israel: Hebrew and Arabic speakers



~2000 CHILDREN participated in the studies

Instructional Arrangements



Dose

TIME 10-45 min.

FREQUENCY 1-5x/week

LENGTH 2-72 weeks

Spencer et al. (2025), Spencer et al.(2024), Petersen et al. (2024), Petersen et al. (2022), Scadden Nelson et al.(2022), Raymond et al. (2021)

The Possible Reality

