# Slide 1 Multisensory Strategies for Effective Written Language Missy Schraeder, Ph.D., CCC-SLP, CALT-QI Mississippi Speech-Language-Hearing Association Annual Conference September 2021 Slide 2 Disclosure Statement • Missy Schraeder is employed as director, DuBard School for Language Disorders; presentations are included in job responsibilities. • No other financial or non-financial relationships exist. Slide 3 **Session Outline** • Definitions of language and reading • The reading rope • Relationship between oral and written language • Characteristics of language disorders • Relationship between spoken and written language • Dyslexia Comorbidities • Strategies for instruction

Slide 4		
	Did You Know?	
	Oral and written language difficulties are the most common cause of academic failure and	
	underachievement.	
	• The National Center for Education Statistics (2011)	
	<ul> <li>The National Center for Education Statistics (2011)</li> <li>more than 30% of students in grade four read at a level that is "below basic"</li> </ul>	
	is "below basic"	
	language, including problems with expressive and receptive	
	almost 20% of students have significant difficulties with language, including problems with expressive and receptive vocabulary, difficulties in understanding morphology, and problems with syntax	
Slide 5		
3.146.3	Did You Know?	
	Did fou know.	
	<ul> <li>Early identification and early intervention using</li> </ul>	
	explicit multisensory teaching of both oral and written language is essential for remediation of the academic difficulties that these students	
	written language is essential for remediation of	
	have.	
	<ul> <li>The SLP has the language background to work with students with oral and written language</li> </ul>	
	disorders.	
Slide 6		
Silue o	What is Language?	
	What is Language?	
	•The American Speech-Language-Hearing	
	Association defines language as the	
	comprehension and/or use of spoken (listening	
	and speaking), written (reading and writing)	
	and/or other communication symbol system	
	(e.g., ASL).	

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Language includes receptive and expressive components.

- $\begin{tabular}{ll} \bullet \underline{Receptive} listening, \ understanding \ nonverbal \\ communication, reading. \end{tabular}$
- <u>Expressive</u>—speaking, using nonverbal communication, writing.

Fogle, P. T. (2008). Foundations of communication sciences and disorders. Clifton Park, NY: Delmar Learning.



# Slide 8

• Spoken language and written language and their associated components are each a <u>synergistic</u> system comprised of five individual language domains that form a dynamic integrative whole.

http://www.asha.org/Practice-Portal/Clinical-Topics/Spoken-Language-Disorders/Language-In--Brief/

# Slide 9



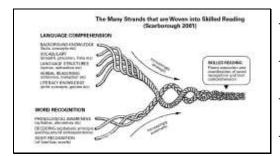

## What is Reading?

Reading is described as the product of word recognition and language comprehension. This is known as the Simple View of Reading.

(Gough & Tunmer, 1986; Hoover & Gough, 1990; Scarborough, 2001).

The ultimate goal of reading is comprehension of the written text. (Carreker, 2011; Scarborough, 2001)

# Slide 11



# Slide 12

# Relationship Between Oral and Written Language

- Reading is a language-based skill.
- The relationship between oral language and written language is reciprocal.
- Although related, oral language and written language are not the same.
- Learning to read and write (written language) is part of learning to speak and comprehend (oral language).

Soifer, L. H. (2018). Oral language development and its relationship to literacy. In J. Birsh & S. Carreker (eds.), Multisenso teaching of basic fonguage skills — Third edition (so. 49-91). Baltimore. MD: Paul H. Brookes Publishing Co.

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# Relationship Between Oral and Written Language

- The integration of word recognition, vocabulary, and ora language comprehension are important for the development of adequate reading comprehension skills. Softer, LH, (2013, onlinguage devidenment and its relictions to literacy, in. like A. Carneler (eds.).
  Multiconvy tracking of basic language skills – Third edition (pp. 49-91). Baltimore, MD: Paul H. Brooker.

  Philibithing Co.
- "...if print cannot be translated into language, then it cannot be understood."

Gough, P. B. & Tunmer, W. E. (1986). Decoding, reading, and reading disability. Remedial and Special Education

# Slide 14

# Relationship Between Oral and Written Language

- In using both oral and written language, one must recognize word patterns, word structure, and sentence forms. One must know word meanings and how words relate to one another. One must be able to use context to interpret intent
- Listening and speaking are part of typical development.
- $\bullet$  Reading and writing generally must be taught.

Soifer, L. H. (2018). Oral language development and its relationship to literacy. In J. Birsh & S. Carreker (eds.), Multisense teaching of basic language skills – Third edition (pp. 49-91). Baltimore, MD: Paul H. Brookes Publishing Co.

# Slide 15

# Characteristics of Language Disorders

- $\label{eq:poor attention} \checkmark \text{Poor attention, especially for language}$
- ✓ Poor memory and poor memory for sequences
- ✓ Poor predictability for language
- ✓ Performance and achievement below expectations
- ✓ Difficulty with phonological awareness including segmenting and blending

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Slide 16	Characteristics of Language Disorders  Difficulty with sound-symbol association  Poor spelling  Inaccurate or labored oral reading—lack of reading fluency  Difficulty with comprehension—oral and written  Difficulty in word finding and rapid naming  Poor written expression	
Slide 17	Characteristics of Language Disorders  Messy handwriting prone to size and spacing errors  Directional uncertainty  Poor organizational skills  Negativism and emotional upset indicative of unused learning ability  Family history of similar problems or history of speechlanguage problems	
Slide 18	Some Characteristics Specific to Written Language Disorders  • Difficulty with sound/symbol association fish fish  • Poor predictability for language • The can run. • The red was in the driveway	

# Slide 19 Poor spelling spelling is diffecole challageng hard. Slide 20 Poor spelling STATE PLANAR Slide 21 Messy handwriting prone to size and spacing errors

# Slide 22 genet a so mis hove est istem ? opt a movie had assess •Size your and locally and a man believe. Slide 23 Spacing Slide 24 **Directional Uncertainty**

Slide 25	Family history of similar problems or history of speech-language problems	
	of speech-language problems	
	States to mad from parameter and half from any and some found that the state of the	
	Property and new title to particulate to the	
כו: ל- סכ		
Slide 26	Poor organizational skills	
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	100	
	- Lux	
	"Think this is had? You should use the inside of my bend."	
Slide 27		
565	Difficulty with comprehension oral and <u>written</u>	
	The second second	
	4	
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# Slide 29

# What is Dyslexia?

 Dyslexia is a specific learning disability that is neurobiological in origin. It is characterized by difficulties with accurate and/or fluent word recognition and by poor spelling and decoding abilities.



www.eida.org
Adopted by the IDA Board of Directors, Nov. 12, 2002

# Slide 30

# What is Dyslexia?

 These difficulties typically result from a deficit in the phonological component of language that is often unexpected in relation to other cognitive abilities and the provision of effective classroom instruction.



www.eida.org Adopted by the IDA Board of Directors, Nov. 12, 2002

Slide 31		1
Silde 31	What is Dyslexia?	
	Secondary consequences may include problems in reading comprehension and reduced reading	
	experience that can impede growth of vocabulary and background knowledge.	
	background knowledge.	
	www.eida.org Adopted by the IDA Board of Directors, Nov. 12, 2002	
Slide 32		
	What is Dyslexia?	
	• <i>Dyslexia</i> has been used to refer to the specific learning	
	problem of reading. The term language-based	
	learning disability, or just learning disabilities, is	
	better because of the relationship between spoken	
	and written language. Many children with reading problems have spoken language problems.	
	American Speech-Language-Hearing Association http://asha.org/public/speech/disorders/J.B.I.D.htm	
Slide 33		
	What is Dyslexia?	
	•The child with dyslexia has trouble almost exclusively	
	with the written (or printed) word. The child who has	
	dyslexia as part of a larger language learning disability	
	has trouble with both the spoken and the written	
	word.	
	American Speech-Language-Hearing Association http://asha.org/public/speech/disorders/LBLD.htm	

## Comorbidities

- Many poor readers have additional language impairments.
  Cats, H.W., Kamhi, A.G., & Adiof. S.M. (2012)
- •Students with language impairments are more likely than typically developing children to develop reading difficulties because of language deficits.

  Catts, H.W., Kamhi, A.G., & Adlof, S.M. (2012)
- •Students with reading disabilities have impaired working memory.
  Swanson, H.L. & Zheng, X. (2013)

# Slide 35

- Language disorders and reading disorders are often comorbid conditions.
- Students with dyslexia may have both receptive and expressive oral language problems such as difficulty with phonological processing or problems with organizing language for expression.
- Children with early speech and language difficulties are at greater risk for reading difficulties.
   Ferrer, E., Shaywitt, B. A., Holahan, J. M., Marchione, K. E., Michaels, R., & Shaywitt, S. E. (2015)

# Slide 36

How do we teach children with oral and written language disorders?




Slide 37	

## **Multisensory Learning**

Multisensory learning involves the use of visual, auditory, motor-kinesthetic, and tactile pathways <u>simultaneously</u> to enhance memory and learning of written language.



# Slide 38

# International Multisensory Structured Language Education Council (IMSLEC)

•More than 30 courses in over 90 locations nationwide

- Alphabetic Phonics
   DuBard Association Method®
   Orton-Gillingham
- Slingerland
- Spalding
- And many others



# Slide 39

# What is taught

- Phonology and Phonological Awareness
- Sound-Symbol Association
- Syllable Instruction
- Morphology
- Syntax
- Semantics

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Slide 40	How it is taught  Simultaneous, Multisensory (VAKT) Systematic and Cumulative Direct Instruction Diagnostic Teaching Synthetic and Analytic Instruction	
Slide 41	Before decoding, phonological awareness skills will need to be in place  Rhyming  Identifying words that begin or end with the same sound  Identifying sounds in various positions in words  Manipulating sounds in a word (such as saying the word without the first or last sound)	
Slide 42	Ability to segment sentences into component words  Ability to segment words into component syllables  Ability to segment words into component sounds  Ability to blend phonemes into words	

Slide 43	Rhyming with Word Families	
	at	
	cat mat sat fat	
	c m s f	
Slide 44		
	I saw a red elephant.	
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	r <mark>e</mark> d	
Slide 45		1
Singe 15	State for Copyrigations  1 Selection Selected Selection select	
	E Offyreach of Tages who  I through the Stages with a  I throw white Stages with a	
	S. Tripper (M. pt. Trippe (M. n.	

Slide 46	Private counts of Winters a send that traggers with the county  of the County  of State  of Stat	
Slide 47	Deficient development of phonological awareness is a	
	critical diagnostic sign of dyslexia for two reasons:  1. When compared to typical readers, children with	
	dyslexia are consistently more impaired in phonological awareness than any other single ability.  2. Measures of phonological awareness administered in	
	kindergarten strongly predict rate of growth in word reading ability, which is the reading skill that is most problematic for children with dyslexia.	
Slide 48	200074404040427475	
	PHONEMIC AWARENESS  • Phonemic awareness is the ability to analyze the sound structure of the language at the level of the	
	individual speech sound.  Segmenting Blending	
	= /k/ + /-a-/ + /t/ /k/ + /-a-/ + /t/ =	

# Segmenting and Blending

Teaching phoneme manipulation, *specifically blending and segmenting*, is likely to produce the greatest benefits to students' reading.

(National Reading Panel, 2000)

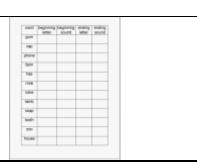
# Slide 50

# **PHONICS**

 Phonics is the knowledge of how the sounds of the language (phonemes) are represented in print and the patterns of letters are used to represent these sounds (graphemes).

/k/ + /-a-/ + /t/ = cat

# Slide 51




Slide 52	SOUND-SYMBOL ASSOCIATION  Sound-symbol association is also known as orthographic knowledge or the alphabetic principal.	
Slide 53	SOUND-SYMBOL ASSOCIATION  Could this SPELL a real word in English?  duv  hrouse  shub  mookh  pobe	
Slide 54	One way to work on phonemic awareness and phonics skills is through SPELLING ANALYZATION	

Slide 55	Second Grade Dolch Words	
	best	
	fast	
	first	
	found	
	sleep	
	right	
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Slide 56	Scott By Sout Bod Wille Rittle Scott State Colors	
	eria erake jurbe gaset	
	Thinky (a)	
	andiv sheet	
	Spaint State of State	
	garden audober alfricol	
	eindos.	
Slide 57	Syllabication	
	, me	
	The second second	

Slide 58		
	#1 reason for teaching syllables:	
	The syllable type determines HOW TO PRONOUNCE THE VOWEL	
	SOUND in that syllable.	
	Source in that symbols	
Slide 59		
	Why Teach Syllabication?	
	Redundant patterns in longer words can be much more quickly discerned.	
	Rules for adding suffixes and the ways syllables are combined into	
	longer words depend on syllable types.	
	Spellings become more predictable when types of syllables are taken into account.	
	Month   C   1991   Suither-disabilities subdiscreent and orbits in Biro & M. Ballel   1 and Month   C   1991   Writter (annuage Disorders: Theory in Incomplete from	
	Mostly, E.C. (2023). (Specific globality in adolescents and adults. In Earn, A.M., Ealer, L.L., and Mostly, L.C. (Eds.), Witten Language Disorders: Theory into practice (pp. 4575). Assists, Y.C. (Eds.), Witten Language Disorders: Theory into practice (pp. 4575). Assists, Y.C. (Eds.), Witten Language Disorders: Theory into practice (pp. 4575). Assists, Y.C. (Eds.), Witten Language Disorders: Theory into practice (pp. 4575). Assists, Y.C. (Eds.), Witten Language Disorders: Theory into practice (pp. 4575). Assists, Y.C. (Eds.), Witten Language Disorders: Theory into practice (pp. 4575). Assists, Y.C. (Eds.), Witten Language Disorders: Theory into practice (pp. 4575). Assists, Y.C. (Eds.), Witten Language Disorders: Theory into practice (pp. 4575). Assists, Y.C. (Eds.), Witten Language Disorders: Theory into practice (pp. 4575). Assists, Y.C. (Eds.), Witten Language Disorders: Theory into practice (pp. 4575). Assists, Y.C. (Eds.), Witten Language Disorders: Theory into practice (pp. 4575). Assists, Y.C. (Eds.), Witten Language Disorders: Theory into practice (pp. 4575). Assists, Y.C. (Eds.), Witten Language Disorders: Theory into practice (pp. 4575). Assists, Y.C. (Eds.), Witten Language Disorders: Theory into practice (pp. 4575). Assists, Y.C. (Eds.), Witten Language Disorders: Theory into practice (pp. 4575). Assists, Y.C. (Eds.), Witten Language Disorders: The Practice (pp. 4575). Assists of the Practice (pp. 45	
Slide 60	Types of Syllables	
	Type Name of Syllable <u>Example</u>	
	R R-controlled tar, arm, earth, bird	
	E Magic E ate, quake, rhyme	
	V Vowel Team tea, train, boil, tray	
	L Consonant + le ma <u>ple</u> , ap <u>ple</u> , beag <u>le</u>	
	O Open me, go, <u>ta</u> ble	
	C Closed rob, snap, milk	

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Slide 61	Types of Syllables	
	R Controlled—A syllable that has an R right after the vowel. The vowel sound is neither	
	long nor short.	
	Magic E—Always at the end of a word. Magic E jumps over the consonant to make the previous vowel long.	
	$\underline{V}$ owel team—Two vowels together usually make one sound.	
Slide 62	Consonant + <u>le</u> —This syllable is always at the	
	end of a word.	
	Open—A syllable ending in a vowel is OPEN and the vowel is LONG and says its own name. Check for Magic E or Consonant +le first. A	
	vowel at the end of an accented syllable is long.	
	<u>Closed—A syllable where a vowel is followed by</u> most consonants is CLOSED. The vowel gives	
	its SHORT sound. Check for R-controlled or Vowel Team first.	
Slide 63	When labeling syllables, follow	
	these steps:	
	1.Always look for <u>R</u> first.	
	2.Then look for <u>E</u> , <u>V</u> , <u>L</u> next.	
	3.Last, look for <u>O</u> and <u>C</u> .	

bird	apple	milk
pur <u>pé</u> g	beach	phone
cheese	she	star
glass	whale	table
letter	coke	wheel
nnako	рары	cut
cel	jer.	plane

# Slide 65

# REMEMBER:

Adding the multisensory components (visual, auditory, motor-kinesthetic, tactile) are what makes these activities multisensory!

# Slide 66

# Written Expression



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Slide 67	Morphology  Teaching students to use  morphology  (study of prefixes, roots and suffixes)  is a way to provide explicit vocabulary instruction and to teach them to become independent vocabulary learners.	
Slide 68	The four most frequent prefixes account for 97% of prefixed words in printed school English  •dis- (not, opposite of)  •in-, im-, il-, ir- (not or in)  •re- (again)  •un- (not)	
Slide 69	Other common prefixes: anti—against inter—between pre—before sub—under trans—across	

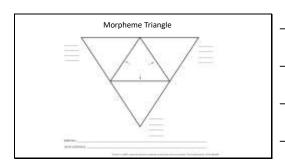
Slide 70	The four most frequent suffixes account for	
onde 70	97% of suffixed words in printed school English	
	•-ed (past tense verb)	
	•-ing (present tense verb)	
	•-ly (characteristic of)	
	•-s, -es (more than one)	
		<del></del>
Slide 71	Other common suffixes:	
51146 7 1	-able, -ible—can be done	
	-ion, -tion—act or process	
	-less—without	
	-ment—action or process	
	•	
		_
Slide 72	Beginning in 3 <sup>rd</sup> grade, students are expected to build vocabulary using Greek and Latin roots	
	Greek combining forms:  •auto—self (autobiography)	
	•bio—life (biology, antibiotic)	
	•graph—write (autograph, photograph)	
	•phone—sound (telephone, microphone)	

Beginning in 3<sup>rd</sup> grade, students are expected to build vocabulary using Greek and Latin roots

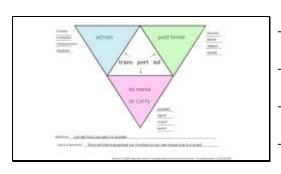
Latin roots:

- •aud—to hear
- •flect, flex—to bend
- •port—to carry
- •rupt—to break

# Slide 74



# Slide 75



Slide 76	supervisor	
	• super—above	
	• vise—to see	
	• or—one who	
	person who oversees	
	My supervisor gave some suggestions for improvement.	
	interrupt	
	• interbetween	
	• rupt—to break	
	to break into or to break in upon	
	It is rude to interrupt when others are talking.	
Slide 77	For more information:	
	DuBard School for Language Disorders	
	The University of Southern Mississippi	
	www.usm.edu/dubard	
	601-266-5223	
	WE	