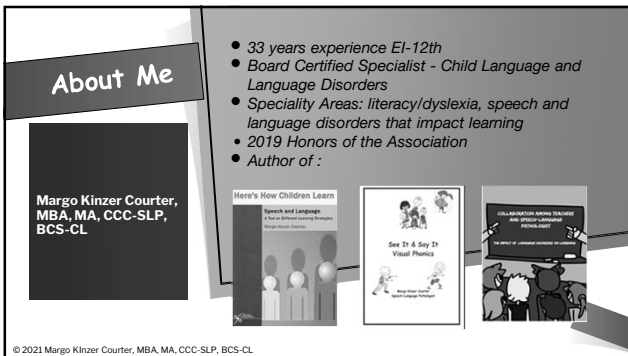
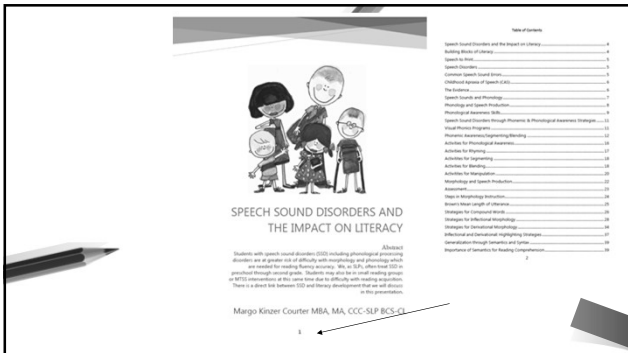




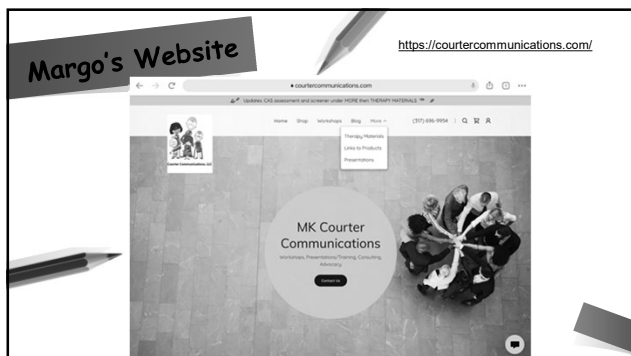
1



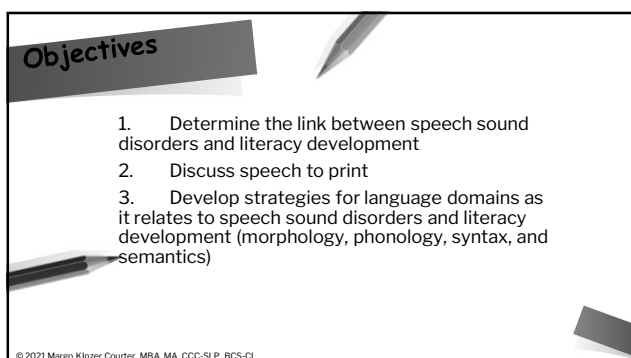
2



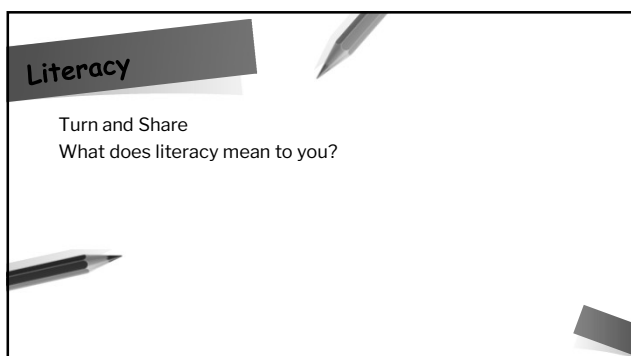
3



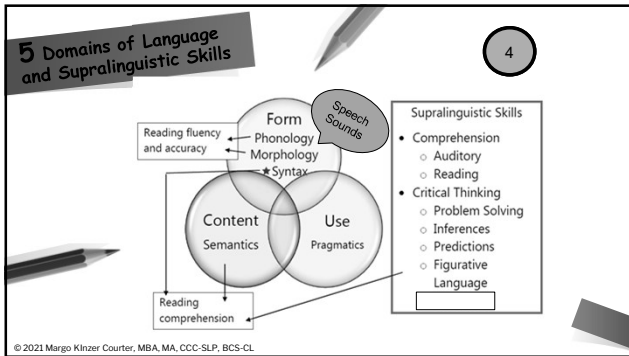
4



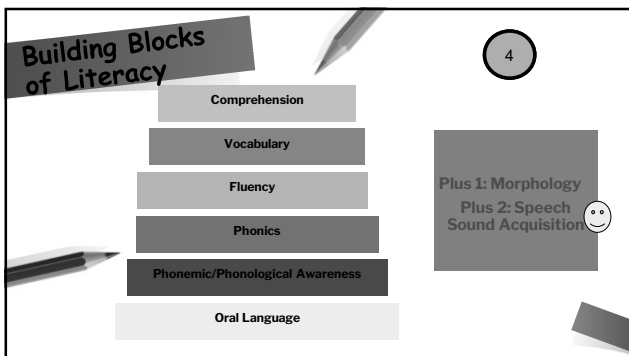
5



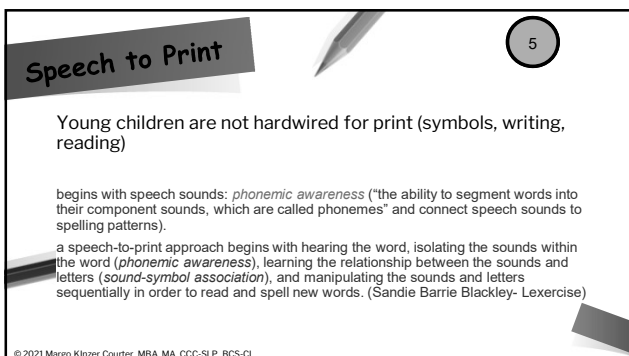
6



7



8



9

Importance of Oral Language: Speech to Print

Young children are hardwired for language. They can discriminate sounds as they listen to words.

rip
milk
flip
sit
kitten

met
fed
leg
vet
check

cat
sat
cap
rat
apple

10

Speech Disorders

Speech Sound Disorders
K-2

Testing for Reading Difficulties
3rd grade

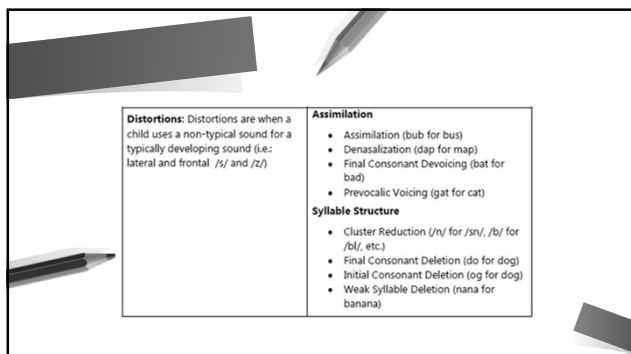
Universal Screener Information Revised July 2021 (Indiana)
https://content.govdelivery.com/attachments/INDOE/2021/07/22/file_attachments/1886010/Universal%20Screener%20List%207.22_final%20for%20sams.pdf

11

Common Speech Sound Errors

Speech Sound Errors (Articulation)	Phonological Process
<p>Omissions: Doesn't produce a sound in a word (ub for tub)</p> <p>Substitutions: A very common speech sound error is the substitution (tun for sun)'</p>	<p>Substitutions</p> <ul style="list-style-type: none"> Backing (/k/ and /g/ for /t/ and /d/) Fronting (/r/ and /d/ for /k/ and /g/) Gliding (/r/ or /l/ becomes a /w/ or /l/ becomes a /y/ sound) Stopping (fricatives and affricates are produced with a stopped consonant like /p/, /b/, /t/, /d/)

12



Distortions: Distortions are when a child uses a non-typical sound for a typically developing sound (i.e.: lateral and frontal /s/ and /z/)

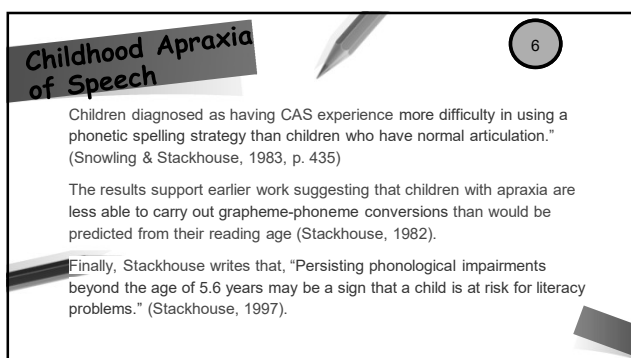
Assimilation

- Assimilation (bub for bus)
- Denasalization (dap for map)
- Final Consonant Devoicing (bat for bad)
- Prevocalic Voicing (gat for cat)

Syllable Structure

- Cluster Reduction (/n/ for /sn/, /b/ for /bl/, etc.)
- Final Consonant Deletion (do for dog)
- Initial Consonant Deletion (og for dog)
- Weak Syllable Deletion (nana for banana)

13



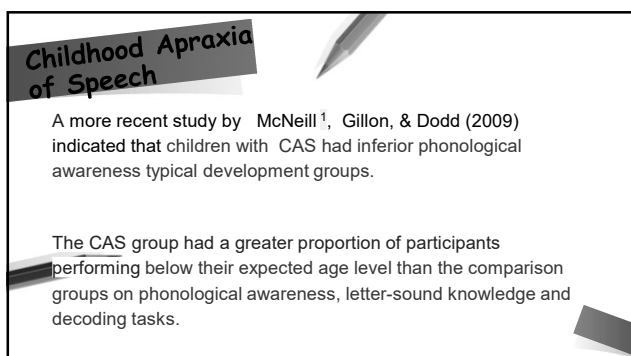
Childhood Apraxia of Speech 6

Children diagnosed as having CAS experience more difficulty in using a phonetic spelling strategy than children who have normal articulation." (Snowling & Stackhouse, 1983, p. 435)

The results support earlier work suggesting that children with apraxia are less able to carry out grapheme-phoneme conversions than would be predicted from their reading age (Stackhouse, 1982).

Finally, Stackhouse writes that, "Persisting phonological impairments beyond the age of 5.6 years may be a sign that a child is at risk for literacy problems." (Stackhouse, 1997).

14

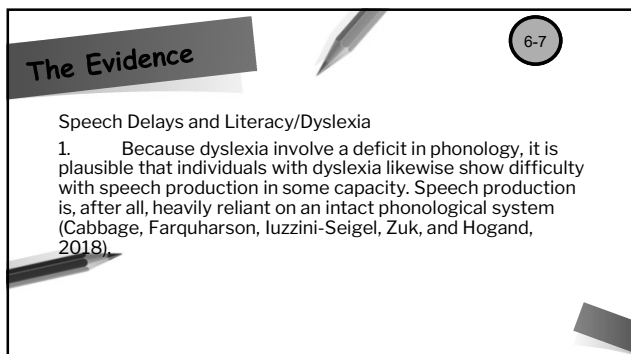


Childhood Apraxia of Speech

A more recent study by McNeill¹, Gillon, & Dodd (2009) indicated that children with CAS had inferior phonological awareness typical development groups.

The CAS group had a greater proportion of participants performing below their expected age level than the comparison groups on phonological awareness, letter-sound knowledge and decoding tasks.

15

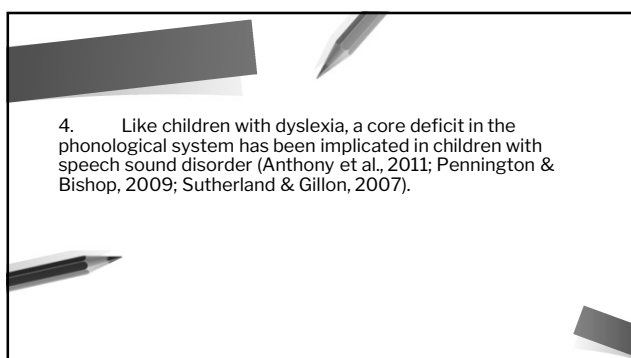


The Evidence 6-7

Speech Delays and Literacy/Dyslexia

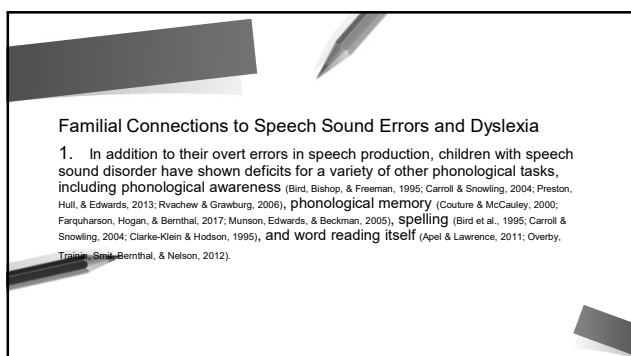
1. Because dyslexia involve a deficit in phonology, it is plausible that individuals with dyslexia likewise show difficulty with speech production in some capacity. Speech production is, after all, heavily reliant on an intact phonological system (Cabbage, Farquharson, Iuzzini-Seigel, Zuk, and Hogand, 2018).

16



4. Like children with dyslexia, a core deficit in the phonological system has been implicated in children with speech sound disorder (Anthony et al., 2011; Pennington & Bishop, 2009; Sutherland & Gillon, 2007).

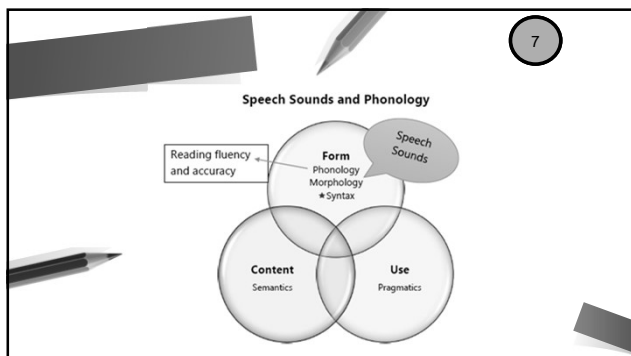
17



Familial Connections to Speech Sound Errors and Dyslexia 6-7

1. In addition to their overt errors in speech production, children with speech sound disorder have shown deficits for a variety of other phonological tasks, including phonological awareness (Bird, Bishop, & Freeman, 1995; Carroll & Snowling, 2004; Preston, Hull, & Edwards, 2013; Ryachew & Grawburg, 2006), phonological memory (Couture & McCauley, 2000; Farquharson, Hogan, & Bernthal, 2017; Munson, Edwards, & Beckman, 2005), spelling (Bird et al., 1995; Carroll & Snowling, 2004; Clarke-Klein & Hodson, 1995), and word reading itself (Apel & Lawrence, 2011; Overby, Trainin, Smith, Bernthal, & Nelson, 2012).

18



19

Phonology and Speech

1. Numerous studies have documented that children with SSD are more likely to display lower performance on measures of reading and spelling than are children with typical speech abilities (Bishop & Adams, 1990; Catts, 1993; Peterson, Pennington, Shriberg, & Boada, 2009)
2. Studies indicate that at age 4, children with speech delay are at higher risk for impaired phonological awareness skills

20

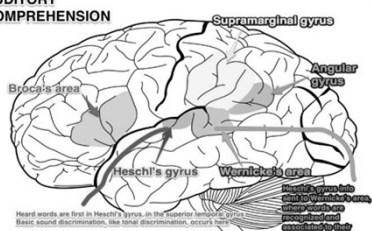
3. Children whose speech production problems persist until **age 6; 9** perform worse on tests of reading, spelling, and phonological awareness than controls matched for age and performance IQ (Nathan et al., 2004).

21

5. The SSE group was found to have significantly greater gray matter volume than the TS group in two regions: left mid and posterior Superior Temporal Gyrus (STG) (including Heschl's gyrus and planum temporale, as well as inferior aspect of the supramarginal gyrus) and right STG (planum polare, transverse temporal gyrus [Heschl's gyrus] and planum temporale). The **planum temporale** is the cortical area just posterior to the auditory cortex (Heschl's gyrus) within the **Sylvian fissure**.^[1] It is a triangular region which forms the heart of **Wernicke's area**. (Jonathan L. Preston, Peter J. Molfese, W. Einar Mencl, Stephen J. Frost, Fumiko Hoelt, Robert K. Fulbright, Nicole Landi, Elena L. Grigorenko, Ayumi Seki, Susan Felsenfeld, Kenneth R. Pugh,

22

AUDITORY COMPREHENSION

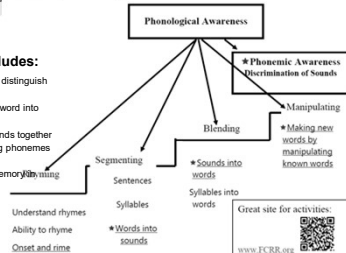


23

Breakdown PA Skills

Phonemic Awareness includes:

- Auditory discrimination (ability to distinguish specific sounds)
- Auditory analysis (segmenting a word into sounds)
- Auditory synthesis (blending sounds together)
- Auditory manipulation (perceiving phonemes correctly to distinguish changes)
- Auditory sequencing (auditory memory using phonemic order)



© 2021 Margo Kinzer Courter, MBA, MA, CCC-SLP, BCS-CL

24

Mastery of Skills 10

From David Kilpatrick, author of Phonological Awareness Screening Test
<https://thepasttest.com/>
<https://www.readingrockets.org/article/develop-phonological-skills>

When Skills Are Typically Mastered
 Although children develop their PA skills at different rates, it is helpful to have a general window of when specific skills are typically mastered. The following is a suggested timeline.

Skill	Typically mastered
Concept of spoken word (sentence segmentation)	Preschool
Rhyme recognition	Preschool
Rhyme completion	Preschool/kindergarten
Rhyme production	Kindergarten
Syllable blending	Preschool/kindergarten
Syllable segmentation	Kindergarten
Syllable deletion	Kindergarten
Phoneme isolation of initial sound	Kindergarten
Phoneme isolation of final sound	Kindergarten/first grade
Phoneme blending (onset and rime)	First grade
Phoneme blending (all phonemes)	First grade
Phoneme segmentation	First grade
Phoneme deletion of initial sound	First grade
Phoneme deletion of final sound	First grade
Phoneme deletion of first sound in consonant blend	Second grade
Phoneme substitution	Second grade (some first)

© 2021 Margo Kinzer Courter, MBA, MA, CCC-SLP, BCS-CL

25

General Ideas 10

Speech to Print

- When targeting speech sound disorders, always check for discrimination of ALL English phonemes.
- To support phonemic awareness skills, segment the sounds in the words and have the student say each sound and figure out the spelling pattern.
- By having the student say the sounds in words or the word, we can better judge the discrimination of each sound.
- Keep sounds very pure. For example, /b/ does not say /ba/.

© 2021 Margo Kinzer Courter, MBA, MA, CCC-SLP, BCS-CL

26

Strategies for Phonemic and Phonological Awareness

27

Strategies

Phonemic Awareness and Sound/Symbol

Visual Phonics program

- Visual Phonics program used by your school if it has gestures to go with the sounds.

Examples

- Lively Letters
- Zoo Phonics <https://zoo-phonics.com/>
- See It & Say It Visual Phonics Program

https://drive.google.com/drive/folders/1_20JY0YYQ1v2z8ZuYumHa2sW4yShoEZf



28

Visual Phonics to Support Speech

Speech Sound Errors (Articulation)

Omissions: Visual Phonics will provide visual feedback as to where the student is missing a sound. Only the missing sound should be cued. The student can then use the visual cue as their own tactile cue in order to determine where the missing sound is. A visual phonics program can be used as a visual cue to show students where an error is occurring in their production. The student can then use the cue to attempt correct production.

Distortions: Visual phonics cues, when the student uses the cue to self cue, may lead to clearer production. For example, the /r/ cue appears to increase some oral tension which may pull the tongue to the correct position.

Phonological Process

Substitutions: A visual cue can show the student the correct place of production and may support correct placement when the student uses the cue as their own tactile cue.

Assimilation: Since there are different sound for each phoneme, the visual cues can be used to demonstrate the correct placement as well as voicing.

Syllable Structure: Visual cues that a student can use as a tactile cue, can support producing both members of a blend, showing where sounds should be, and be used to cue the first sound in each part of a syllable.

29

Phonemic Awareness/Segmenting/Blending

Phonemic awareness, or discrimination tasks, will ensure that your student can correctly perceive speech sounds that are in error. Discrimination tasks will also support rhyming, blending, segmenting, and manipulating phonemes for literacy development.

30

Phonemic Awareness/Segmenting/Blending

13

© 2021 Margo Klinzer Courter, MBA, MA, CCC-SLP, BCS-CL

31

Supporting Speech Sounds

Use the words that are being targeted in speech therapy for the words that the student will discriminate and segment. Begin with VC, CV, VCV, or CVC first. For medial sounds, start with simple VCVC or CVCV words. Once the student can discriminate and segment these, move to CCVC or CVCC. Then move to 2 syllable words

32

Example for /s/ and /z/.

s/z CV, VC, CVC	s/z CVCV VCVC	s blends	s/z syllables
CV zoo Zoe see sigh say VC is as eyes ooze	seesaw city zany zero busy tacos pillows commas pizza	fence lips class dress soft scout scale skill skip skull sleep slip slide slap skinny	address surprise seven music Tuesday zip code
CVC zap zone knees nose hose boys bees bows shoes keys	VC us ice CVC sit soup yes bus face seal sick sun		

33

Supporting Speech Sounds for Phonological Processing Therapy

Initial or Final Consonant Deletion		Fronting or Backing		Cluster Reduction
cab	ban	at	bag	flag
fab	can	cat	gag	drag
gab	San	bat	lag	brag
lab	fan	fat	rag	glad
tab	man	hat	sag	plan
bam	pan	mat	tag	slab
dam	ran	gnat	wag	crab
ham	tan	pat	flag	sped
lamb	van	rat	brag	sled
mam		sat	back	black

13

34

Minimal Pairs

15

- A phoneme pair such as the /f/ and voiceless /th/ are articulated in similar (yet different) ways, and so they sound similar, but they are, in fact, acoustically different.
- These sound pairs are more difficult to distinguish than other sound pairs because the way they are spoken (articulated).
- They should be perceived and recognized by listeners as two different phonemes, even in the absence of visual cues, i.e., by listening alone" (Wasowicz, J. via SPELLTalk, On Dec 22, 2020).

35

Minimal Pairs

Articulation

/s/ /z/	Fronting/backing
face/phase race/raise bus/buzz fuss/fuzz ice/eyes place/plays	peace/peas once/ones dose/does foes/toes base/bays

Phonological Processing

face race bus fuss ice place	bud mud knot tap key	but mud knot tap key	buck muck mod gap tea
---	----------------------------------	----------------------------------	-----------------------------------

36

Activities for PA


Twister

1. Use a Twister game board.

2. Place words with the pattern you are targeting on each circle.

3. Spin the spinner.

4. The student has to segment and blend the word before he/she places hand or foot on the circle.




sit sis sat set zap buzz


kick cat cap tick tock gag

© 2021 Margo Kinzer Courter, MBA, MA, CCC-SLP, BCS-CL

37

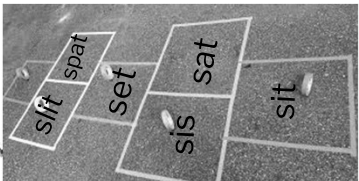
Beach Balls





38

Hopscotch




39

13

Mystery Object

Place several small objects in a covered basket. The teacher continues to pull mystery objects out and give rhyming clues. As the children become more experienced, they may be able to give the clues to their peers.

Starts with and rhymes with /z/	Starts with and rhymes with cluster reduction
Starts with /z/ and rhymes with cone	Starts with /f/ and rhymes with tag
Starts with /z/ and rhymes with tea	Starts with /br/ and rhymes with bag
Starts with /z/ and rhymes with pay	Starts with /ce/ and rhymes with cab
Starts with /s/ and rhymes with my	Starts with /pl/ and rhymes with pan
Starts with /s/ and rhymes with boy	Starts with /sl/ and rhymes with gab
Starts with /s/ and rhymes with mitt	Starts with /sl/ or can use /br/ and rhymes with sled
Starts with /h/ and rhymes with nose	Starts with /bl/ and rhymes with back
Starts with /b/ and rhymes with toys	Starts with /bl/ and rhymes with tame



40

Segmenting

Syllables in Words - caterpillar (4), cowboy (2), cat (1)
Sounds in Words - cat (3), brick (4), sticks (5)

41

Blending


18

Hear It and Write It

Give words in writing of increasing complexity (VC, CV, CVC, CCVC, CVCC, and CCVCC) and have the student say each sound then blend the word together.

Mystery Card/Object

Place a set of picture cards or small objects in a bag. Have the children take turns drawing an item from the bag; you may choose to have them keep the card or object hidden from the others. Have the child say the word in its sounds while the others guess what the word is. When the word is guessed correctly, the item is shown.



42

Scene It

Provide each child with paper and drawing utensils. Explain to them that you will be naming several things for them to draw on their paper. With a list of objects, say each object's name broken down into its sounds. The children will then identify what object you named by blending the sounds into the word. Scenic themes are provided here.

I S-P-Y

Play the familiar game "I Spy" with a different twist. For example, using the names of objects in the room, tell the children "I spy a p-e-n" and see if they can guess what it is. If the children can segment words, have them take turns choosing things to spy.

43

Silly Words

Provide each child with four connector pieces of a toy or game (e.g., Legos, pop-beads, trains). These connected pieces will represent each syllable in a four syllable word. Take off the first or last connector piece while also removing the first or last syllable of the word (e.g., kindergarten (4 syllables) becomes kindergarten (3 syllables) when you take off the last connector piece).

44

Manipulation

20

Substitute Syllables in Words**Snack Talk**

At snack time, choose a special syllable to use. All the snacks (and conversations about them) must contain that syllable at the beginning of each word. For example, if the snack were apple juice and graham crackers, they could be zoo-ple juice and graham zoo-kers. Encourage the children to talk in this new "language" during the entire snack time. Initiate several questions and conversations about the snacks to give them numerous opportunities.

45

Letter Tiles:
Example /k/ /g/

20

Step 1: Spell "ap"

a	p
---	---

Next: If you can spell "ap", you can spell "gap"

g	a	p
---	---	---

Next: If you can spell "gap", you can spell "cap"

c	a	p
---	---	---

© 2021 Margo Kinzer Courter, MBA, MA, CCC-SLP, BCS-CL

46

Student continues to manipulate the beginning phoneme until they are consistent. Then, manipulate the ending sound.

Step 3: Manipulate ending sound "If you can spell cap, you can spell cat."

c	a	t
---	---	---

Step 3: Manipulate ending sound "If you can spell cap, you can spell cat."

c	a	d
---	---	---

Continue with manipulating the final sound until the student is accurate.

© 2021 Margo Kinzer Courter, MBA, MA, CCC-SLP, BCS-CL

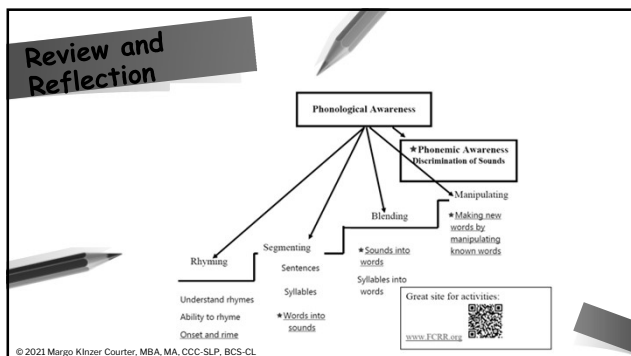
47

Step 4: Manipulate the vowel in the middle. "If you can spell cad, you can spell kid."

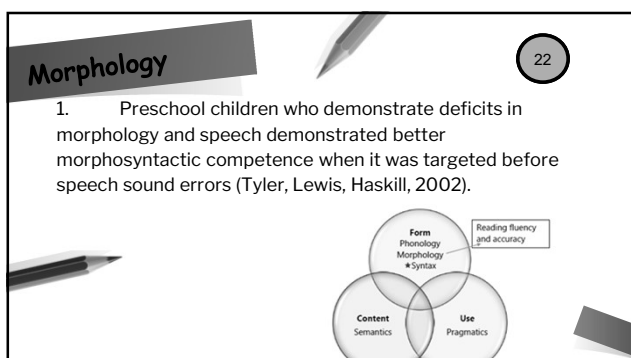
k	i	d
---	---	---

© 2021 Margo Kinzer Courter, MBA, MA, CCC-SLP, BCS-CL

48



49



50

2. Children with SSD scored significantly lower than did their counterparts on the morphological awareness measures as well as on phonemic awareness, word-level reading, and spelling tasks (Apel and Lawrence, 2011).
3. Morphological awareness was a unique predictor of spelling abilities of children with speech sound disorders (Apel and Lawrence, 2011).

51

4. While children are developing lexical, phonemic, and morphologic representations, motor control for speech production is developing (Tyler, 2016).

5. Final consonant deletion or cluster reduction errors may prevent accurate production of grammatical morphemes (Tyler, 2016).

52

Morphology

Basic Definition: Using word parts
Compound words and inflections are understood and used at a very young age

Derivations: prefixes and suffixes applied to roots are found in curriculum based information

Pairing morphology with SSD can impact overall literacy

53

Compound, Inflectional and Derivational Morphology

23

Compound - two free morphemes joined together to make a new word

Inflectional - Affixes that serve as grammatical markers and indicate some grammatical information about a word

Derivational Morphemes - Affixes that change the meaning or the grammatical category of the word

By pairing these with targeting speech sound errors, we can impact literacy development. Targeting morphology also supports phonological awareness skills, semantics, and syntax.

© 2020 Margo Kintner Courtier, MBA, MA, CCC-SLP, BCS-CL

54

Assessment

23

Informal (can be used for Dynamic Assessment)

Inflectional Morphology

- file:///C:/Users/court/Downloads/FREEMorphologicalAwarenessAssessmentK1-1.pdf

Derivational

- Supplemental Digital Content for Wolter, J.A. & Green, L. (2013) Morphological Awareness in School-age Children with Language and Literacy Deficits. Topics in Language Disorders, 33(1). (copy on Margo's website)

Inflectional and Derivational

- Use activities listed below for dynamic assessment.

55

Steps in Morphology Instruction

Step 1
Discuss the importance
Explain target patterns (inflectional/derivational)

Step 2
Intervene

56

Intervene

Compound
When two words are used together to yield a new meaning, a compound is formed. Compound words can be written in three ways: as open compounds (spelled as two words, e.g., ice cream), closed compounds (joined to form a single word, e.g., doorknob), or hyphenated compounds (two words joined by a hyphen, e.g., long-term). Sometimes, more than two words can form a compound (e.g., mother-in-law).

57

Inflectional Morphology

Brown's Mean Length of Utterance

Based on Brown (1973) the following is the order of acquisition of the first five inflectional morphemes. Brown states that all of these should develop by four years of age.

© 2020 Margo Kinzer Courter, MBA, MA, CCC-SLP, BCS-CL

58

Inflectional

Inflectional Morpheme	Age of Acquisition	Example	CCSS
Present progressive (-ing)	27-30 months	Baby crying.	1 st grade
Plural regular (-s)	27-30 months	I want cars.	Kindergarten
Possessive ('s)	31-34 months	Sam's ball.	1 st grade
Past regular (-ed)	35-40 months	She walked home.	Kindergarten-1st
Third person regular (-s)	35-40 months	Malcolm plays.	1 st grade
Past participle (-en) (uncontractible and contractible aux. verbs)	41-46 months	She has spoken. It is written.	2 nd grade (irregular past tense)

© 2020 Margo Kinzer Courter

59

Brown (1973) does not include comparative and superlative. The Common Core State Standards (2019) lists these inflectional morphemes in the following standards.

Inflectional Morpheme	Examples	Grade Level Standard
Comparative (-er) and Superlative (-est)	Big, bigger, biggest Small, smaller, smallest	3 rd grade

60

Derivational

Derivational morphology involves the addition of a prefix, suffix, or both to a root word (Greek and Latin). Meyerson (1978) found that children as young as 8 years could apply suffix addition rules to aid in the oral generation and recall of nonsense words containing complex morphemes. Derwing (1976), relying on a strategy designed by Berko (1958), documented a developmental trend in morpheme acquisition in subjects between the ages of 8 and 21.

61

Strategies for Compound Words

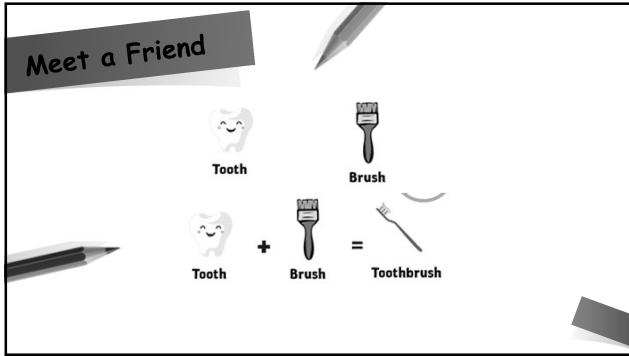
62

Compound

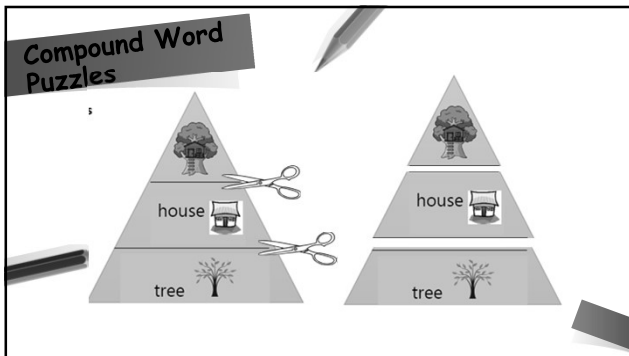
Compound Creations
Example: /l/

angel	fish
ball	park
beach	ball

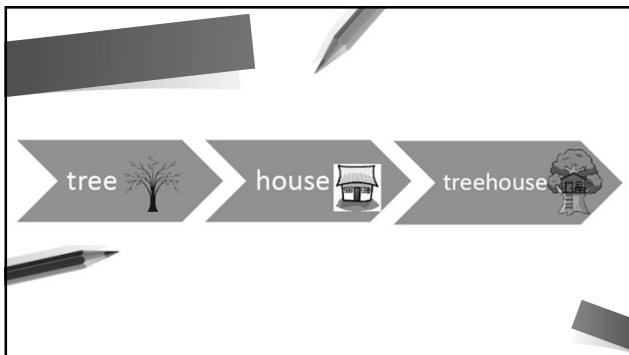
63



64



65



66

Resources

Books

- [Cloudy with a Chance of Meatballs](#) by Judi Barrett
- [If You Were a Compound Word](#) by Trisha Speed Shaskan
- [Thumbtacks, Earwax, Lipstick, Dipstick: What Is a Compound Word?](#) By Brian P. Cleary
- [Once There Was a Bull...Frog](#) by Rick Walton

Youtube videos

- Guess the Word Challenge: Brain Riddles for Kids with Answers <https://youtu.be/dt3iFD-xfl>
- The Compound Word Game <https://youtu.be/N8uMGPAWllw>

67

Strategies for Inflectional Morphology

68

Examples

28

Examples of Possible Targets

s/z CV, VC, CVC	s/z CVCV VCVC	s blends	s/z syllables
CV zoos Zoe's	CV sews sewed sees	VCVCV VCVC seesaws cities tacos pillows commas pizzas busy busier busiest	s blends fences lips spoken addresses classes dresses scouting scales scaling skills skips skipped skulls sleeping sleeps sleepier sleepiest slips slipping slips slide slides
VC eyes oozes oozing oozed	CVC zap zone knees nose hose boys boy's soups buses bees bee's	s/z syllables addresses surprises surprised surprising Tuesday's zip codes chosen frozen	

69

Initial or Final Consonant	Deletion	Fronting or Backing	Cluster Reduction
cabs	fan	at	bags
gibbing	fans	cats	gaps
gibbed	fans	cars	lags
labs	man	bats	rags
tabs	man's	fatter	sags
dams	pans	fattest	tags
hams	pans	hat	tagging
lamb's	rans	hats	tagged
Sam's	vans	hats	wagging
		hats	wagged
		gnats	flags
		gnats	flag's
		gnat's	brags
		pats	bragging
		rats	bragged
		rat's	hacks
		sat	lacks
		chats	lacks
		chatting	pack
		brat	packs
		flat	packing
		beaten	pack's
		bitten	sacks
		eaten	racks
		gotten	tacks
		hidden	clacks
		ridden	broken
			awoken
			forgotten

70

Strategies for Inflectional Morphology

General Ideas

- Have the students perform movements as the educator gives a word. For example, the teacher says, "Jump!" While the students are jumping, the teacher says, "We are jumping!" Teacher then says, "Stop!" Then she states, "You jumped!"

71

Strategies for Inflectional Morphology

General Ideas continued




- Play with objects to demonstrate singular and plural nouns (e.g., car/cars, box/boxes, block/blocks).
- Use scenes from a book in the classroom or make cards to demonstrate subject, verb, and direct object or prepositional phrase to elicit early developing morphology
- Read books loaded with inflectional morphemes

72

Common Everyday Objects

30

Example: /k/ /g/ and /s/ and /z/

Right now
The dinosaur cooks the vegetables.

What is the dinosaur doing?
The dinosaur is cooking the vegetables.

What did the dinosaur do yesterday?
The dinosaur cooked the vegetables.

Whose vegetables are they?
They are the dinosaur's.


73

Cluster Reduction or /s/ Blends

skinny
sleep
slim
slow
small
smart
smelly
smooth

/R/

angry
bitter
brave
brief
bright
broad
dirty
dry



-est

-er


-est

-er


74

Describe the picture using inflectional endings and early developing morphology (also SSD)

31

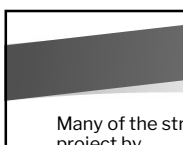


75



/r/ and /z/		Phonological process stopping
birds	skips	(see /r/ and /z/ list)
grass	skipped	four leaves (how many did i color)
boots	sleeping	five
coats	sleeps	flowers
rabbits	sleepier	the bird's worm
girls	sleepiest	the bird's next
girl's	slips	the boy's boots
sing	slipping	the girl's coats
singing	slide	this flower
sways	slides	them
swaying	sliding	then
leaves		those
trees		thick
glasses		thin
flies		hot
flying		hotter
nest		hottest
splashes		the girl's chin (cheek, chapped)
splashing		jump
flowers		jumps
		jumping


76



Many of the strategies below are presented in a research project by
 Wolter, J. A., & Green, L. (2013). Morphological awareness intervention in school-age children with language and literacy deficits. *Topics in Language Disorders*, 33 (1), 27-41. doi: 10.1097/tld.0b013e318280f5aa

© 2020 Margo Kinzer Courter, MBA, MA, CCC-SLP, BCS-CL

77



Say It & Write It

-ing	-s	Plural -s	-ez
playing	fruits	girls	buses
running	cats	boys	houses
walking	ducks	friends	kisses
seeing	trucks	teachers	watches
eating	books	balls	noses
drinking	cliffs	crayons	dresses
jumping	chefs	cars	bridges
smiling		airplanes	
crying			

Possessive -s	-s	-d	-t	-ed
girl's	cat's	played	jumped	added
boy's	duck's	smiled	walked	subtracted
teacher's	truck's	cried	practiced	batted
mother's	chef's	brushed	baked	competed
mom's	elephant's	combed	blinked	concentrated
father's	rocket's	allowed	bounced	
dad's		answered		
dog's				

78

3rd Person Singular Verbs

-s	-es	-er, -est
walks	plays	bigger biggest
eats	runs	brighter brightest
drinks	sees	smaller smallest
jumps	smiles	littlest
hikes	cries	happier happiest
kicks		crazier craziest
		angrier angriest
		smoother smoothest

Past Participle -en

broken	forgotten	chosen
hidden	chosen	driven
ridden	frozen	eaten
spoken	awoken	fallen
written	bitten	given

79

Sort by Sound for Past Tense -ed

Instructions: All the words below are in the past tense. How do you know? Say each word and sort the words into 3 columns based on how the "ed" is pronounced. Even though it can sound different, how is the "ed" always spelled?

Rules:

- If the last sound in the infinitive verb is unvoiced, the past tense is unvoiced (i.e.: to kick, kicked)
- If the last sound in the infinitive verb is voiced, the past tense is voiced (i.e.: to tag, tagged)
- If the word ends in /t/ or /d/ it is spelled with -ed and produces an extra syllable.

acted	tagged	lasted	played	walked	crawled
jumped	called	fixed	brushed	combed	washed
passed	landed	canned	surprised	sifted	bolled
/t/		/d/		/ed/	

Target fronting or backing

32-33

80

Sort by Sound Plural -s (possessive or 3rd person singular)

Rules:

- If the last sound in the singular form of the word is unvoiced, the /s/ is unvoiced.
- If the last sound in the singular form of the word is voiced, the /s/ is pronounced /z/.
- If the word ends in /ch/, /sh/, /s/, /ss/, /x/, or /z/, it is spelled with -es and pronounced -ez.

fruits	cats	teachers	balls	ducks	books
trucks	cars	kisses	cliffs	chiefs	boys
girls	friends	houses	balls	crayons	buses airplanes
/s/		/z/		/ez/	

81

Resources

34

Resources
The following books and videos can be used to target inflectional morphology.

Plural -s
The Peaches on the Beaches (Cleary & Miskimins, 2009)
The Very Hungry Caterpillar (Carle, 1969)

-ing
Brown Bear Brown Bear, What Do You See? (Martin, Jr., & Carle, 1967/1984)
Puddles are for Jumping (Junston, 2015)

Possessive -s
Harriet's Horrible Hair Day (Stewart and White, 2018)

Past tense -ed
Froggy Plays Soccer (London and Remkiewicz, 2001)
Nouns and Verbs Have a Field Day (Pulver, 2013)

Videos (YouTube.com)

-ed
S.B. the King of Beasts Sings "It's Over Now" (2009)

-ing
Electric Company -ing Song (2007)

Possessive -s
Daniel Tiger's Neighborhood (Santomero, 2012)

82

Resources

34

Strategies for Derivational Morphology

83

Most Common 1st

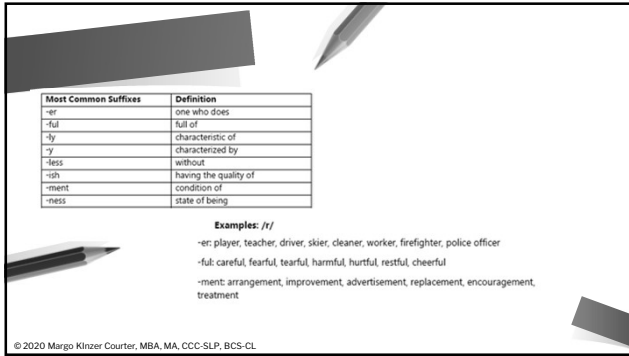
34

Most Common Prefixes	Definition
re	again
un	not
dis	not, opposite of
in, im, il, ir	not
de	down, away
ante	before
anti	against
co	with

Example: /r/
Re: redo, remake, remember, restart, repeat, reuse, revise, refresh, return, revenge, recycle
Un: unclear, unfriendly, untruth, unoriginal, unwrap, unwrapping, unwrapped
Dis: disregard, distract, disrupt, disorder, disappear

© 2020 Margo Kinzer Courter, MBA, MA, CCC-SLP, BCS-CL

84



Most Common Suffixes

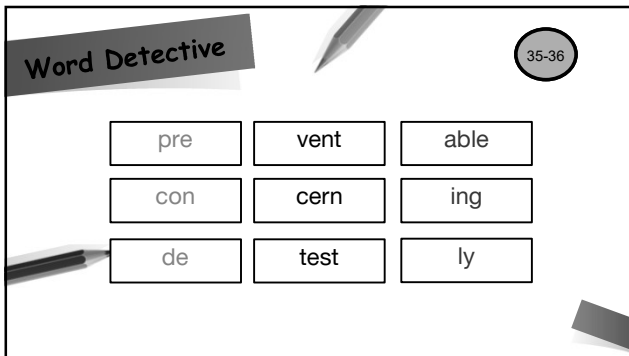
Suffix	Definition
-er	one who does
-ful	full of
-ly	characteristic of
-y	characterized by
-less	without
-ish	having the quality of
-ment	condition of
-ness	state of being

Examples: /r/

- er: player, teacher, driver, skier, cleaner, worker, firefighter, police officer
- ful: careful, fearful, tearful, harmful, hurtful, restful, cheerful
- ment: arrangement, improvement, advertisement, replacement, encouragement, treatment

© 2020 Margo Klinzer Courter, MBA, MA, CCC-SLP, BCS-CL

85

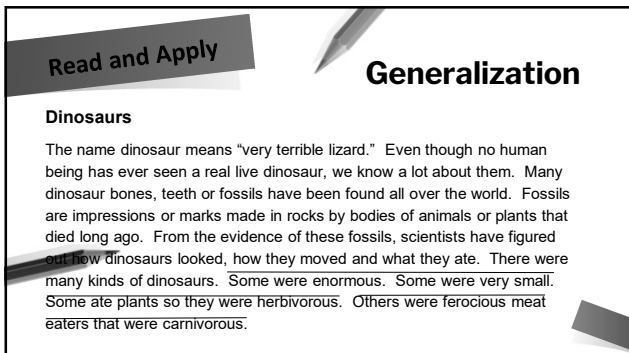


Word Detective

35-36

pre	vent	able
con	cern	ing
de	test	ly

86



Read and Apply

Generalization

Dinosaurs

The name dinosaur means "very terrible lizard." Even though no human being has ever seen a real live dinosaur, we know a lot about them. Many dinosaur bones, teeth or fossils have been found all over the world. Fossils are impressions or marks made in rocks by bodies of animals or plants that died long ago. From the evidence of these fossils, scientists have figured out how dinosaurs looked, how they moved and what they ate. There were many kinds of dinosaurs. Some were enormous. Some were very small. Some ate plants so they were herbivorous. Others were ferocious meat eaters that were carnivorous.

87

Fill It and Fix It

The _____ was very talented. (paint)

He is _____ (paint)

That is the _____ orange. (juicy)

He has a college _____ (educate)

The _____ sketched a picture. (art)

The teacher will give an _____ on Friday. (assess)

The _____ was stored in the garage. (equip)

It was a _____ day. (snow)

The girl had long _____ hair. (curl)

88

Morph It

Instructions: Given a base word, "morph" the word into as many word forms as possible using previously taught prefixes and suffixes. Label each word according to its part of speech.

Affricate and/or /r/ Heat Heater Preheat Reheat Heated
Heatedly Heating

Gliding or /l/ Learn Relearn Learner Unlearn Learning
Learned

Cluster Reduction or /l/ blends Play Played Player Playing Replayed

Stopping or /f/ Fold Folding Refold Unfold Folded Folder

Noun	Verb	Adjective	Adverb

89

Inflectional and Derivational: Highlight

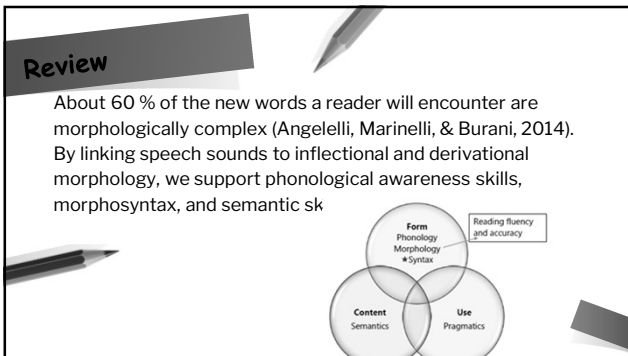
35

The name dinosaur means "very terrible lizard." Even though no human being has ever seen a real live dinosaur, we know a lot about them. Many dinosaur bones, teeth or fossils have been found all over the world. Fossils are impressions or marks made in rocks by bodies of animals or plants that died long ago. From the evidence of these fossils, scientists have figured out how dinosaurs looked, how they moved and what they ate. There were many kinds of dinosaurs. Some were enormous. Some were very small. Some ate plants so they were herbivorous. Others were ferocious meat eaters that were carnivorous.

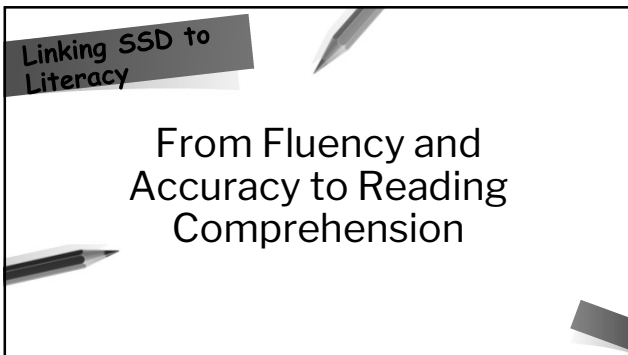
90



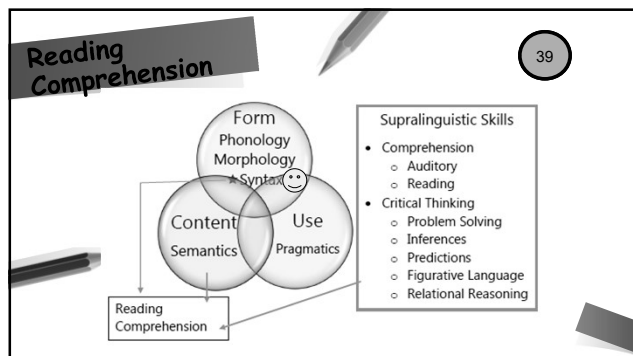
91



92



93

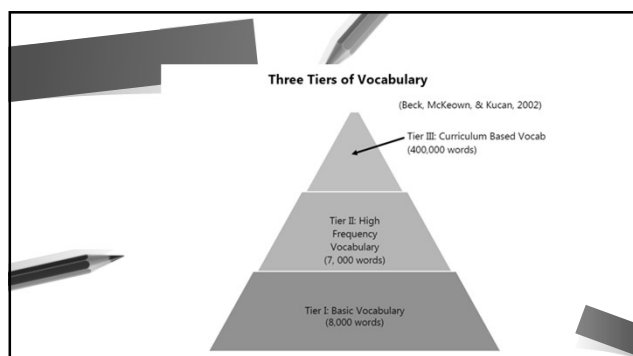


94

Semantics & Reading Comprehension

There is strong evidence to support providing vocabulary instruction not only to improve students' reading comprehension and writing quality, but also their listening vocabulary and their speaking vocabulary (Joshi, 2006; Kame'enui & Baumann, 2012).

95



96

The Evidence

2. Most children begin first grade with about 6,000 words of spoken vocabulary. They will learn 3,000 more words per year through third grade with only about 400 of those words directly taught. They gain approximately 36,000 more by 12th grade. (Chall, 1987; Gunning, 2004; Stahl & Stahl, 1999)

4. Because children with weaker vocabularies are less likely to learn new words from incidental exposure than children with larger vocabularies, "teachers" need to provide more explicit vocabulary instruction for children with smaller vocabularies (Nicholson and White, 1992; Robbins and Ehrin, 1994; Senechal, Thomas, and Monker, 1995).

97

Number of Exposures Needed to Learn a New Word

Gates (1931) and McCormick (1999) researched the number of exposures that a student requires to acquire new vocabulary based on IQ. These unchanged results can support our goals regarding the number of vocabulary words we expect a student to acquire based on how many exposures are needed based on IQ.

Level of Intelligence IQ Required Exposures

Significantly Above average 120-129	20
Above average 110-119	30
Average 90-109	35
Slow learner 80-89	40
Mild cognitive impairment 70-79	45
Moderate cog impairment 60-69	55

(Gates, 1931; McCormick, 1999)

98

Vocabulary Instruction

41

In review of the literature by Marzano, Pickering, and Pollack (2001), students require explicit instruction to learn new vocabulary. The following guidelines are offered.

1. Students must encounter words in context more than once to learn them.
2. Instruction in new words enhances learning those words in context.
3. Dictionary definition does not typically support learning new words for students with language impairments. They will often copy words that they do not know within the definition.
4. One of the best ways to learn a new word is to associate an image with it.
5. Direct vocabulary instruction works.
6. Direct instruction on words that are critical to new content produces the most powerful learning.

99

Six Step Approach

*****Students keep a vocabulary notebook

1. Provide a description, explanation, or example of the new term.
2. Ask students to restate the description, explanation, or example in their own words (linguistic).
3. Ask students to construct a picture, symbol, or graphic representing the term (nonlinguistic).
 - a) Nonlinguistic representations include graphic organizers, physical models, mental images, pictures and pictographs, and kinesthetic activity.

100

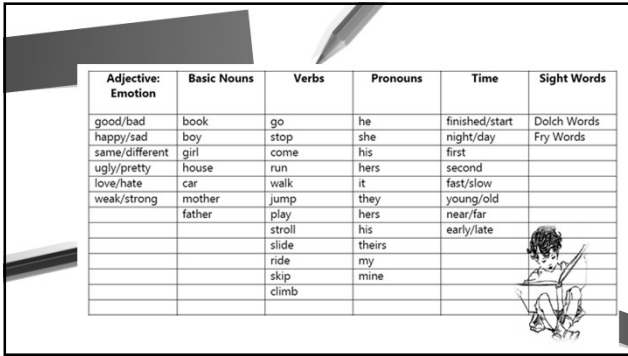
4. Engage students periodically in activities that help them add to their knowledge of terms in their notebooks.
5. Periodically ask students to discuss the terms with one another.
6. Involve students periodically in games that allow them to play with terms. (Marzano & Pickering 2005, pp. 14-15)

101

Tier I

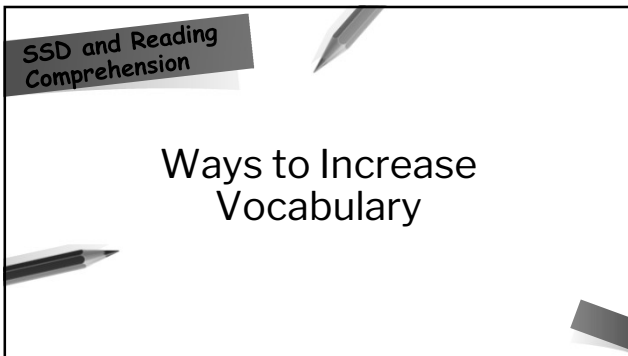
Colors	Spatial Concepts	Adjectives		Shape	Weight/volume	Location
		Quantity	Quality			
orange	on			square	empty/full	top/bottom
green	off	two	open/closed	round	big/little	outside/inside
yellow	under	three	dirty/clean	oval	tall/short	in front/behind
blue	over	all/none	hard/soft	rectangle	fat/thin	heavy/light
black	next to	one/1 more	old/new	octagon	large/small	up/down
white	behind	full/empty	wet/dry	hexagon	wide/narrow	there/here
orange	beside	half/whole	used/new	heptagon	thick/thin	top/bottom
pink	above	less/more	rough/smooth		heavy/light	under/over
purple	below		messy/neat			first/last
red	around		noisy/quiet			above/below
beige	through		weak/strong			second/third
tan			dark/light			through/around
turquoise			straight/crooked			left/right

102



Adjective: Emotion	Basic Nouns	Verbs	Pronouns	Time	Sight Words
good/bad	book	go	he	finished/start	Dolch Words
happy/sad	boy	stop	she	night/day	Fry Words
same/different	girl	come	his	first	
ugly/pretty	house	run	hers	second	
love/hate	car	walk	it	fast/slow	
weak/strong	mother	jump	they	young/old	
	father	play	hers	near/far	
		stroll	his	early/late	
		slide	theirs		
		ride	my		
		skip	mine		
		climb			

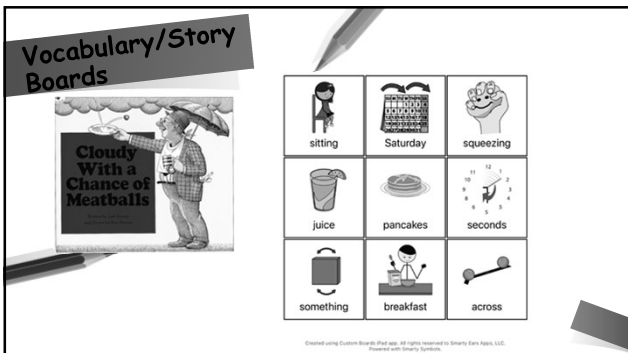
103





SSD and Reading Comprehension

Ways to Increase Vocabulary

104



Vocabulary/Story Boards



Created using Custom Boards iPad app. All rights reserved to Sonnet Early Apps, LLC. Powered with Sonnet's SwiftDraw.

105

Draw a Picture

After story time, ask children to draw pictures to go along with the book. These would include words with the specific speech sound or phonological process. Discuss the picture including any targeted vocabulary.

106

Dolch and Fry Words

There are categories of words scattered throughout the Dolch and Fry lists. Put together boards of Dolch or Fry words that are in the same category (i.e.: colors, prepositions, pronouns, verbs). Pick categories of words that also have the targeted speech sounds or phonological processing.

Example: Cluster reduction

107

Tier II & Tier III

Tier II High Frequency Words	Tier III Low Frequency Content Specific
<ul style="list-style-type: none"> Approximately 7,000 words that occur in mature language situations and literature Important for reading comprehension Contains multiple meaning words Used across a variety of environments Descriptive words Our speaking and reading vocabulary 	<ul style="list-style-type: none"> Approximately 400,000 words Academic subjects Hobbies Occupations Geographic regions Technology

108

Knowledge Rating Scale

Word	Know It Well	Have Seen or Heard It	Have No Clue	Recognize it in context as having something to do with ...	What It Means

Blachowicz & Fisher, 2004
<https://devotedtovocabulary.files.wordpress.com/2012/07/know-or-no.png>

109

Building Vocabulary Connections

Around the House (example /f/ and /v/)

oven	stove	refrigerator
microwave	toaster oven	blender
dishwasher	blender	toaster oven

Example /f/ and /v/
fork, knife, avocado slicer, vegetable peeler, food processor, food scale, oven mitts, serving bowls

Example /v/ blends
Spatula, scraper, spoon, food scale, skillet, roasting pan

110

Around the School

classroom	dry erase board	eraser
dry erase markers	marker	color pencil
chair	classroom coat	teacher

Copyright © 2010 by Linda Ward Beech, All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or by any information storage and retrieval system, without permission in writing from Linda Ward Beech.

111

Vocabulary Analysis: Frayer


Step 1: User friendly definition
Step 2: Student restates (If you were to draw a picture)
Step 3: Make sure definitions match
Step 4: Write a sentence

112

Example

Vocabulary Worksheet

Name: _____ Class: _____ Score: ____/____

Definition facty/characteristics the main events of a play, novel, movie, or similar work	Picture 
Synonym storyline	Antonym

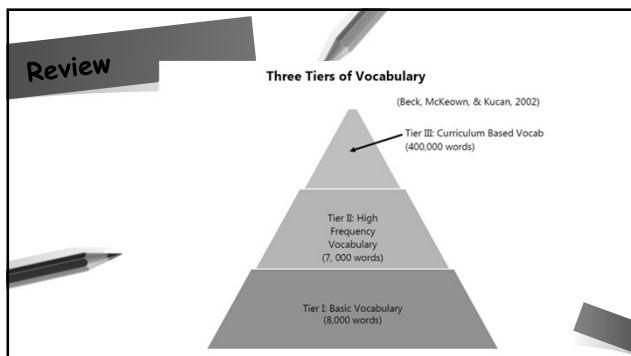
Sentence:
The plot of Real Friends is about Shannon figuring out what makes real friendships.

113

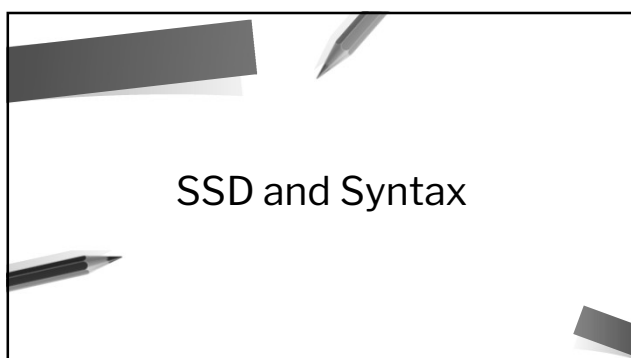
Single Words to Generalization

Place words in:
Phrases
Sentences
Paragraphs
Stories

114



115



116

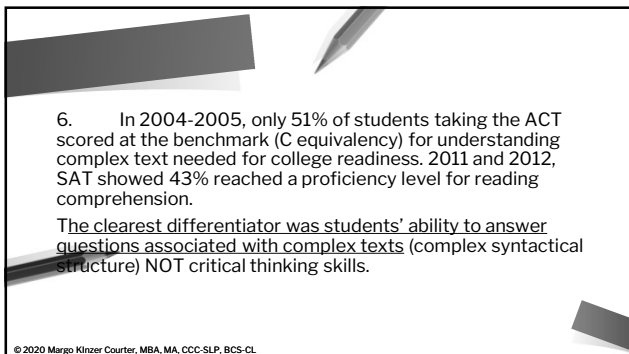
Syntax

49

3.- 5. In addition to verb voice, clause structures (ie: relative clauses).—structures that contain a subject and a verb—affect comprehension and recall. Readers recall independent clauses (“He used the help system”) faster than dependent clauses—clauses containing a subordinating conjunction

© 2020 Margo Kinzer Courter, MBA, MA, CCC-SLP, BCS-CL

117

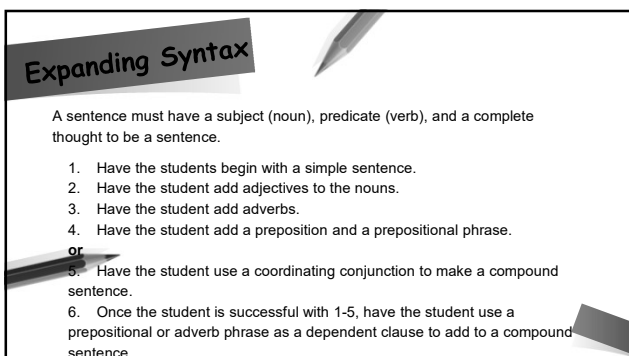


6. In 2004-2005, only 51% of students taking the ACT scored at the benchmark (C equivalency) for understanding complex text needed for college readiness. 2011 and 2012, SAT showed 43% reached a proficiency level for reading comprehension.

The clearest differentiator was students' ability to answer questions associated with complex texts (complex syntactical structure) NOT critical thinking skills.

© 2020 Margo Kinzer Courter, MBA, MA, CCC-SLP, BC5-CL

118



Expanding Syntax

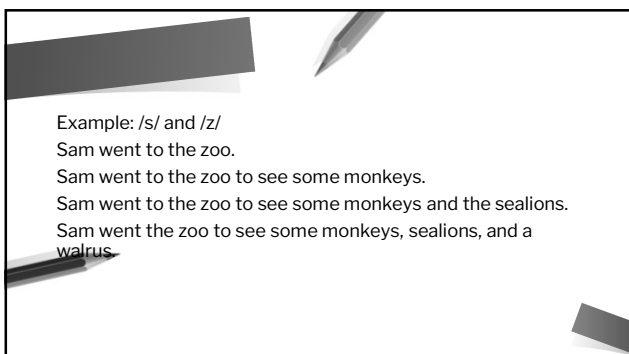
A sentence must have a subject (noun), predicate (verb), and a complete thought to be a sentence.

1. Have the students begin with a simple sentence.
2. Have the student add adjectives to the nouns.
3. Have the student add adverbs.
4. Have the student add a preposition and a prepositional phrase.

or

5. Have the student use a coordinating conjunction to make a compound sentence.
6. Once the student is successful with 1-5, have the student use a prepositional or adverb phrase as a dependent clause to add to a compound sentence.

119



Example: /s/ and /z/

Sam went to the zoo.

Sam went to the zoo to see some monkeys.

Sam went to the zoo to see some monkeys and the sealions.

Sam went the zoo to see some monkeys, sealions, and a walrus.

120

Expanding a Sentence through Questioning

Example: /s/





The sealion races.

The sealion will race.

The sealion will be racing.

The sealion would race.

The sealion would be racing.

Who	The sealion	
What	The biggest sealion races.	
Where	The sealion races in the sea.	
When	At sunset, the sealion races in the sea.	
Why	At sunset, the sealion races in the sea because he is the fastest sea animal.	

121

Write a Story

Example: /r/

Fall


Ryan is raking the rustling leaves by the tree.

Rhianna and Russ are sister and brother, and they are roasting marshmallows in the fire.

Fall brings us rapidly changing and refreshing weather.

Rachel and Robert are throwing the slippery football.


Fall brings wonderful adventures with friends.



122

It's Fall

Fall brings us rapidly changing and refreshing weather. It is a great time to be outdoors. Ryan is raking the rustling leaves by the tree. Rhianna and Russ are sister and brother, and they are roasting marshmallows in the fire. Rachel and Robert are throwing the slippery football. Fall brings wonderful adventures with friends!



123

Let's Revisit

What will you do to target speech sounds and phonological processes through the domains of language to support literacy development?

Speech Sounds & 5 Domains of Language • Supralinguistics

The diagram illustrates the relationship between four domains of language: Form, Content, Use, and Speech Sounds. Form (Phonology, Morphology, Syntax) is linked to Reading fluency and accuracy. Content (Semantics) is linked to Reading comprehension. Use (Pragmatics) is linked to Reading comprehension. Speech Sounds is linked to Supralinguistic Skills. The domains are interconnected in a Venn-like structure.

- Form: Phonology, Morphology, Syntax
- Content: Semantics
- Use: Pragmatics
- Speech Sounds
- Supralinguistic Skills: Comprehension, Auditory, Reading, Critical Thinking, Problem Solving, Inferences, Predictions, Figurative Language, Relational

© 2020 Margo Klinzer Courter, MBA, MA, CCC-SLP, BCS-CL

124

SSD and Literacy

From Cover to Cover: SLPs Play a Vital Role in Literacy Development when Pairing Speech Sound Disorders with the Domains of Language

The illustration shows an open book with the text 'The End' on the left page, 'SSD & The Impact on Literacy' on the spine, and 'Thanks for Joining Me!' on the right page. A pencil is visible on the left and a paperclip on the right.

125
