



A linguistic awareness intervention program for older children struggling with reading and spelling:

Reference:

Kirk, C., & Gillon, G. (2009). Integrated morphological awareness intervention as a tool for improving literacy. *Language, Speech, and Hearing Services in Schools*, 40: 341–351.

1. Picture sort: Identification of long and short vowels

To encourage the identification of long and short vowels, pictures of monosyllabic words are sorted according to the length of the vowel. Sorting pictures allows the child to focus on the sound of the vowel without being distracted by the orthography. The accurate discrimination of vowel length is essential for learning many of the orthographic patterns included in the intervention program.

2. Word sort: Long vowels with silent 'e' versus short vowels

cut	cute
win	wine
rip	ripe
mat	mate
rob	robe
cub	cube
din	dine
pip	pipe
hat	hate
hop	hope

3. Word sort: Monosyllabic words ending in [k] (long vowels versus short vowels)

lick	like
clock	cloak
sack	sake
tack	take
trick	trike
sock	soak
stock	stoke
lack	lake
rack	rack
spick	spike

4. Word sort: Base words and suffixes with orthographically and semantically transparent words

To introduce the idea that some words are morphologically complex, base words and suffixes that are orthographically and semantically transparent are used. For example, the word *leader* is semantically transparent as it is the sum of the meaning of its two component morphemes. The agentive *-er* suffix means “someone who Xs” (where ‘X’ stands for the baseword). Thus, *leader* means someone who leads. The word *leader* is also orthographically transparent; there is no change to the spelling of the base word when the suffix is added. In addition, comparison of the agentive *-er* suffix and the comparative *-er* suffix (e.g., *helper* vs. *smaller*) helps to make the point that suffixes are more than just a collection of graphemes, and that they alter the meaning of the base word in predictable ways.

The purpose of this word sort is to allow participants to recognise the smaller word inside the larger word and to gain an understanding of how this smaller word (the base word) combines with the suffix to create a new word. Furthermore, participants should recognise that knowing the meaning of the individual morphemes that comprise the larger word can help them to work out the meaning of that larger (morphologically complex) word.

To encourage semantic awareness, ask participants to put these words into sentences. To create a deeper understanding of the meaning of the suffix, encourage participants to generate new words with a given suffix.

More ‘X’	Someone who ‘Xs’	the most X
fresher	farmer	meanest
neater	owner	freshest
cheaper	worker	quickest
smaller	leader	fastest
older	helper	faintest

5. Prompted spelling

After sorting words according to various criteria, participants are asked to spell some of these words. At first, participants receive a series of prompts from the clinician. Here is an example of the prompts used for eliciting a morphologically simple word.

1. I’d like you to spell the word *stock*. I’ll use *stock* in a sentence so that you can think about what it means: *The farmer lost almost all his stock in the storm.*
2. Before you write anything down, I want you to tell me the vowel sound in the base word. That’s right, the vowel sound is [ɒ].
3. Is [ɒ] long or short? You are correct, the vowel sound in *stock* is short.
4. How do you spell the [k] sound after a short vowel?
5. Now write down the word *stock*.

To get the child to check their work, ask them to read back what they have written.

The next step is to encourage self-prompting, that is, getting children to ask these questions for themselves. To make the task more difficult, words with different final sounds and different suffixes are presented in the same spelling list. Finally, children are asked to spell words that they had not been exposed to in the word sorts to see if they could use the

spelling prompts on new words.

6. Word sort: -ing suffix on base words with long and short vowels

This word sort focuses on the orthographic changes that occur to the base word when the suffix is added. These orthographic changes are:

1. deletion of word-final 'e' (e-drop) when the base word has a long vowel. When -ing comes to stay, 'e' goes away.
2. doubling of the final consonant of the base after short vowels. Note that there is no consonant doubling when the base word already ends with two consonants.

hoping	hopping
moping	mopping
baking	backing
canning	canning
filing	filling
sloping	slopping
robing	robbing
raking	racking
pinning	pinning
striping	stripping

Here is an example of the prompts used for eliciting a morphologically complex word.

1. I'd like you to spell the word *mopping*. I'll use *mopping* in a sentence so that you can think about what it means: *The boy was mopping the floor.*
2. Before you write anything down, I want you to tell me the vowel sound in the base word. That's right, the vowel sound is [ɒ].
3. Is [ɒ] long or short? You are correct, the vowel sound in *mop* is short.
4. Now spell the base word. Do you have to make any changes to the base word when you add the suffix? Yes, you do. Since the vowel sound in *mop* is short, you will have to double the final 'p' in *mop*.

7. Word sort: -y suffix on base words with long and short vowels

This word sort reinforces the orthographic changes that were introduced in the -ing word sort.

hazy	lazy
icy	spicy
creepy	sleepy
smoky	shiny
spotty	skinny
crabby	scrappy
flabby	floppy
foggy	boggy
crusty	dusty
misty	musty

8. Word sort: -ed suffix on base words with long and short vowels

To encourage the realization that suffixes have a constant orthographic shape and are not always spelled as they sound, words are sorted by the phonological shape of the suffix. For

example, *pinned* ends with a [d] sound, *picked* ends with [t], and *mated* ends with [ə d]. In spite of these different allophonic variants of the past tense morpheme, the regular past tense is always spelled with 'ed'. This particular word sort helps to reinforce the importance of thinking about the meaning of a word when attempting to spell that word, thus preventing confusion when spelling homophones like *missed* and *mist*, *allowed* and *aloud*, *discussed* and *disgust*.

sloped	slopped
robed	robbed
raked	racked
pined	pinned
striped	stripped
hoped	hopped
moped	mopped
baked	backed
caned	canned
filed	filled

9. Word sort: -tch vs. -ch

coach	catch
peach	patch
beach	batch
leach	latch
speech	stretch
reach	retch
screech	scritch
march	match
hooch	hutch

10. Word sort: -er and -est with consonant doubling and y → i

saddest	maddest
flattest	fattest
funniest	sunniest
sloppiest	happiest
fussiest	bossiest
sadder	madder
flatter	fatter
funnier	sunnier
sloppier	happier
fussier	bossier

11. Word sort: -ish (means 'sort of X' where X stands for the base word, e.g., *blackish*, or 'like an X', e.g., *kittenish*)

greenish	brownish
reddish	pinkish
warmish	coolish
biggish	smallish
fattish	flattish

boyish	kittenish
devilish	hawkish

12. Word sort: -en (means ‘to make something X’)

freshen	thicken
dampen	fatten
sadden	madden
tighten	lighten
brighten	frighten
deepen	sweeten
lengthen	strengthen

To make this task more difficult, add –ed to the words listed above, e.g., *freshened*.

13. Word sort: -ly (tells how something is done, or describes something)

sweetly	deeply
smoothly	weakly/weekly

no consonant doubling even though the vowel is short

sickly	thickly
madly	sadly
thinly	fondly

no word-final ‘e’ drop when suffix is added because suffix does not start with a vowel

lonely	lovely
stately	widely

these words have two suffixes –y, and -ly

messily	sloppily
thirstily	luckily
crazily	fussily

14. Word sort: -dge vs. –ge vs. –g

Note that this is the voiced version of the –tch and –ch alternation.

stage	stag
rage	rag
huge	hug
wage	wag
sage	sag
sludge	slug
budge	bug
fudge	fug
smudge	smug
ridge	rig

Notes

When the child reaches 80-90% accuracy any word list, you should make the task more difficult by mixing words from different lists.

In each session, you should aim to include the following:

1. Identification of long and short vowels
2. Sorting of one monomorphemic word list, e.g., words ending in –ke vs. –ck
3. Sorting of one multi-morphemic word list, e.g., words ending –ing. Be sure to talk about meaning of the word, including how the suffix changes the meaning of the base word.
4. Prompted spelling of the monomorphemic words and multi-morphemic used in the word sorts.
5. As the child gets more proficient at the tasks you can include more than one monomorphemic word list and more than one multi-morphemic word list in each session.

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