

FROM PAGE TO PEN

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1



Agenda:

- Why writing matters and how to leverage reading instruction to improve both
- Handwriting
- Spelling
- Morphology
- Text Type Instruction
- Assessment

Page to Pen - Powerful Points

- Better writers are better readers, skills in both areas are dependent on the mastery of language
- Places the greatest demand on executive functions
- Reading comprehension is enhanced when students write a response to something they have read
- Learning to pronounce and spell words simultaneously helps to increase decoding automaticity



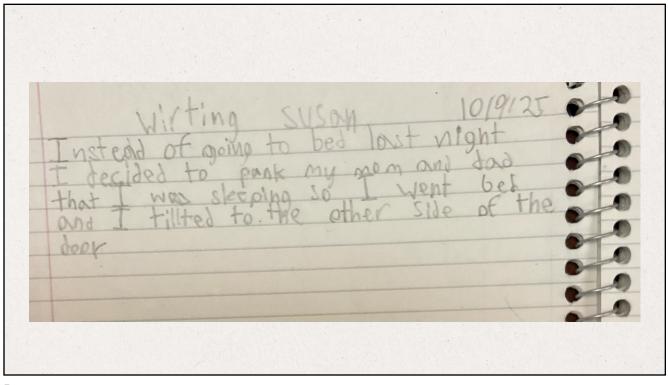
3

COMPARISON OF DATA from **IREADY READING** DIAGNOSTIC and **CBM of WRITING**

Fall iReady Literacy	Fall CBM Writing	
Below Benchmark	Below Benchmark	

5th grade student classified with SLD in Basic Reading Skills/Fluency (Dyslexia)

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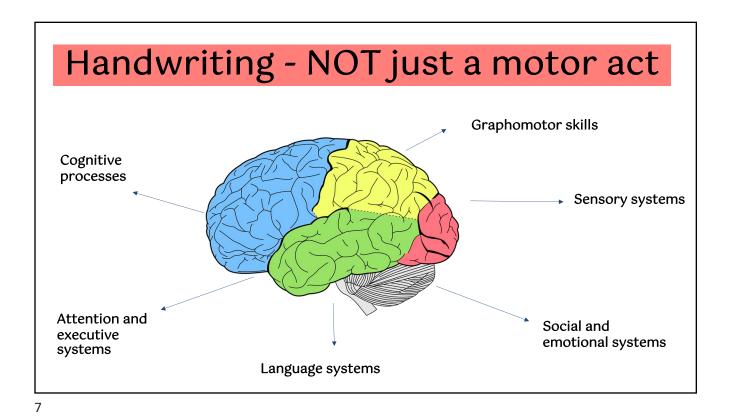


Page to Pen - Powerful Points

Letter recognition in Kindergarten predicts later reading achievement

Forming a letter using either big muscle groups (skywriting with arm outstretched) or small muscles while holding a marker engages the same regions of the brain used while reading, specifically the phonological (sound box) and orthographic (letter box) processors.

The act of handwriting **activates** neural networks used when reading, and results in more brain activity than using a keyboard.



"Handwriting interferes with...

other writing processes and consumes an inordinate amount of cognitive resources, at least until handwriting becomes automatic and fluent...



Santiago & Graham, A Comprehensive Meta-Analysis of Handwriting Instruction, 2016, p. 226

Good Writers Peccentral Postcontral Indicator Parietal Postcontral Indicator Parietal Postcontral Indicator Parietal Postcontral Indicator Parietal Indicator Pariet

9

"...handwriting is not a mechanical skill but rather a written language skill at the subword level of language that enables the transcription of sound and morpheme units into spelling written words, which, alone and with other words, enables the translation of ideas into written sentences." LOWER CASE CURSIVE LETTERS GROUPED BY APPROACH STROKES Swing up. atop. Puth up. over. down. Under, over. stop. Curve way up. loop left. Curve way up. loop left.

The Dyslexia – Dysgraphia Connection

Decades of research has shown that weak letter recognition ability is one of several early indicators of Dyslexia.

Being exposed to letters through shared book reading and unstructured independent reading centers is *NOT* enough for most students, much less our Dyslexic students, to learn letter names, their sounds, and their physical representations.

Research has shown that letter knowledge weaknesses overall are a robust predictor of later struggles in reading and writing. (Gallagher, Frith, & Snowling, 2000)

11

11

Writing Fluency

Grade Level	Letters per minute (Pollock)	Girls (Graham)	Boys (Graham)	Letter below mean for screening
1	15-32	21	17	7
2	20-35	36	32	13
3	25-47	50	45	14
4	34-70	66	61	
5	38-83	75	71	
6	46-91	91	78	
7		109	91	
8		118	112	
9		121	114	

Is 3rd grade or older too late for handwriting instruction?

• Limpo, et al, 2018

Handwriting intervention for 5th graders identified with slow handwriting fluency

cursive letters

cursive words

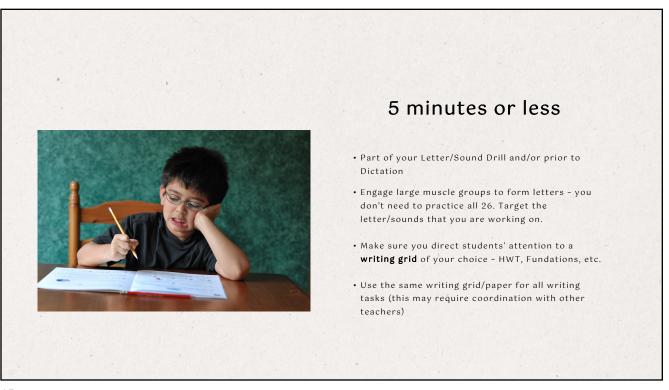
cursive phrases

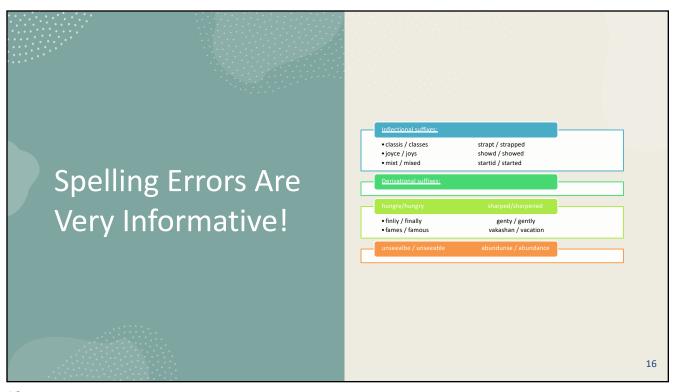
RESULTS:

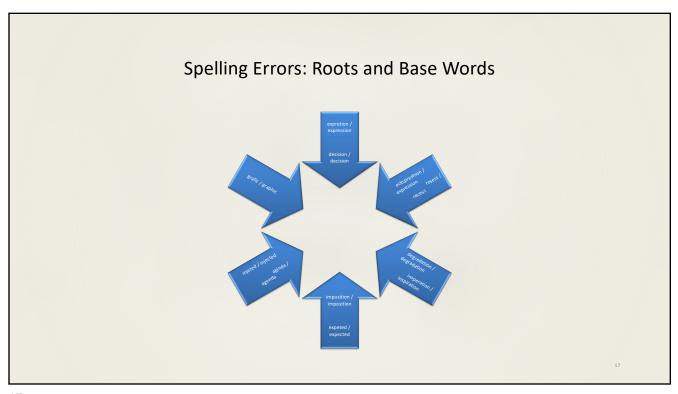
After 5 hours of intervention (20 minutes, 3x weekly), the student's handwriting fluency increased to that of their peers. And there's more.....

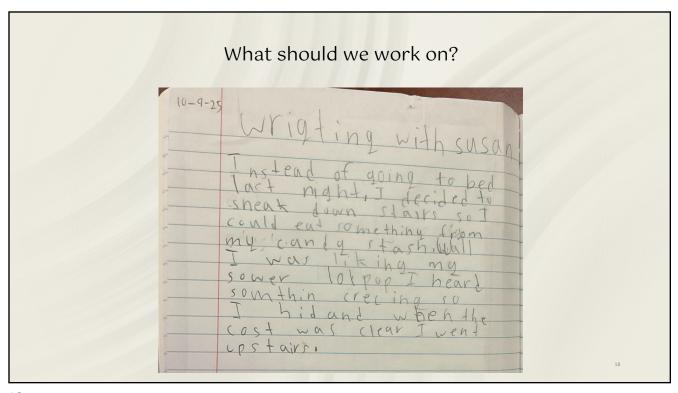
13











Why Study Morphology?

Morphological knowledge enhances vocabulary development, word recognition, spelling, and reading comprehension.

Morphological knowledge is associated with overall language proficiency.

Recognition of morpheme structure helps us distinguish the meanings and spellings of words that sound very much alike:

elicit, illicit cite, site precedent, president

• affect, effect illusion, allusion dependence, dependents

19

WHAT IS A MORPHEME?

The smallest meaningful unit of language

- "morph" means form
- "ology" means the study of

Words can be one or more morphemes

- teacher = 2 morphemes (teach + er)
- teachers = 3 morphemes (teach + er + s)
- water = 1 morpheme (water)
- watered = 2 morphemes (water + ed)

What Is a Morpheme

Morphology Instruction

During explicit instruction of morphology:

Follow a progression from easier to more complex word forms.

Teach the meaning, spelling, and pronunciation of each morpheme.

Practice decoding, reading, and using sets of morphemically related words.

Use the new words in sentence and passage context, practicing as much as necessary.

Speech to Print: Language Essentials for Teachers, Third Edition by Louisa Cook Moats, Copyright © 2020 by Paul H. Brookes Publishing Co., Inc. All rights reserved.

2

21

Why Study Morphology?

Proficient readers and spellers use morphology.

Difficulty at a more advanced level of vocabulary especially science and math.

Morphological Awareness training significantly increased spelling in dyslexic children (Garcia, 2007)

Added morphological awareness treatment more effective than PA in normality chemical activation in the brain and improving decoding rate (Berringer, 2008)

Comprehension improves

22

Morphemic Analysis

Learning about morphemes increases meaning

Effective word strategy in content areas

Directly teach:

- Meaning of word parts
- How to dissemble words into parts
- How to reassemble them again

23

23

When Should We Begin?

1st and 2nd grade-adding afffixes that do not require changing base forms (walk - walking)

2nd grade - closed and open syllable prefixes (un, dis, re, pro)

2nd and 3rd grade need to begin to study words that change base forms (silent e or y) blame, blaming, baby, babies)

3rd grade introduce Latin roots and Greek combining forms (form, port)

Additional prefixes and suffixes -in, ity, -ex, - chameleons

General Progression from Easier to More Complex

Anglo-Saxon compounds

High frequency and transparent prefixes, Anglo-Saxon and Latin (un, re, mis, pre, sub)

Inflectional suffixes (-ed, -ing, -er), no spelling change to the base word

Common suffixes beginning with a consonant

Common suffixes beginning with a vowel, with orthographic change rules

Latin prefixes: closed, open, vowel-r, and two-syllable forms

Latin roots and derivational suffixes

Assimilated prefixes, Latin plurals

Greek combining forms, with special spelling correspondences

25

25

Let's practice – break down the following words

Divide by:	Base Word(s)	Morphemes (roots/affixes)
loathsome		
happiness		
slippers		
dodgers		
watchdog		
mistletoe		
biodegradable		

Assessment of Morphological Knowledge

Specific tests for educators' use are still in development

Researchers have used a variety of formats, especially cloze tasks:

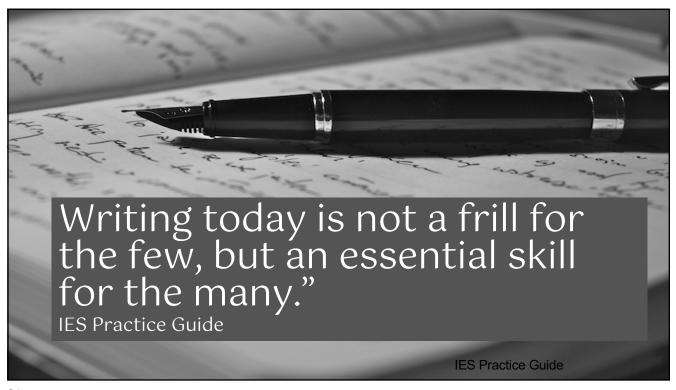
- Farm. A person who raises crops is a ______.
- Watch. The family is _____ the game together.
 Deep. Crater Lake is the _____ of all mountain lakes.
- Skillful. With his tools, the mechanic ______ assembled the engine.

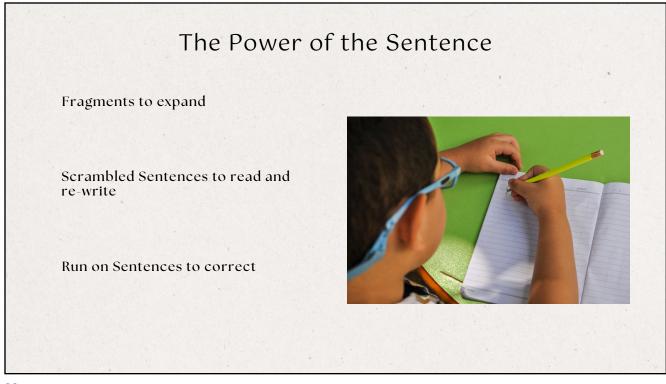
27

Using Words in Meaningful Context

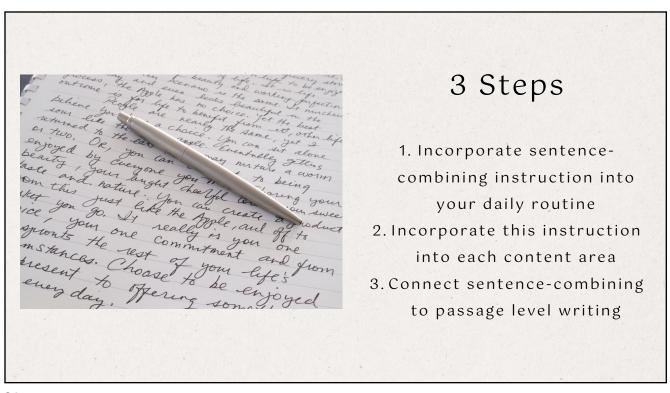
"When I was (frighting, frighten, frightened), I was (watched, watching, watches) a (scary, scared, scaring) movie. It was so (frighted, frighten, frightening) that I (jumped, jumps, jumping) out of my seat. I do not like to (frighting, frighten, frightening) my little sister, so I (prevent, prevented, prevents) her from watching."

(shelf, shelving, shelved) the soup "The storekeeper cans on the top. We reached (careful, carefully, caring) to prevent them from falling down."





Where to I	begin?	
	Sentence Combining Assessment	
	Name: Date: Grade:	
	Part 1: Identifying Sentence Types (1 point each)	
	$\textbf{Directions:} \ \text{Read each sentence.} \ \text{Write} \ \textbf{S} \ \text{for simple,} \ \textbf{CD} \ \text{for compound, or } \ \textbf{CX} \ \text{for complex.}$	
	The dog barked at the mailman. Wanted to play outside, but it started raining.	
	3 Because I studied hard, I got an A on my test.	
	4 My sister loves soccer, and my brother enjoys basketball.	
	5 When the bell rang, all the students lined up.	
	6 The cat climbed the tree and watched the birds.	
	Part 2: Combining with Conjunctions (2 points each)	
	Directions: Combine each pair of sentences using the conjunction in parentheses. Remember to use a comma when needed!	
	7.1 like pizza. I don't like pepperoni. (but)	
	8. We can go to the park. We can go to the library. (or)	
	9. Sara finished her homework. She played video games. (and)	
		33



Step One:

A New Look at the OG lesson plan

K-3rd

Dictate 2-3 decodable sentences

(closed syllable)

Jack has a cap. The cap is red.

("ee" vowel team)

The sheep are in the jeep. The jeep is red and green.

35

Step Two:

Student(s) orally read the sentences.

"Jack has a cap."

"The cap is red."

Teacher directs the student(s) to notice which words are repeated - answer "cap." Student(s) circle the word that it repeated.

Teacher models how the two sentences can be combined - "Jack has a red cap."

Student(s) then writes the new sentence and reads it aloud.

Gradual release model - continue to dictate two short sentences during each OG lesson, provide oral modeling, until students can independently combine the two sentences.

Examples:

The students played during recess. The students were happy.

Miss Susan spilled coffee on her shirt. She forgot to put the lid on.



37

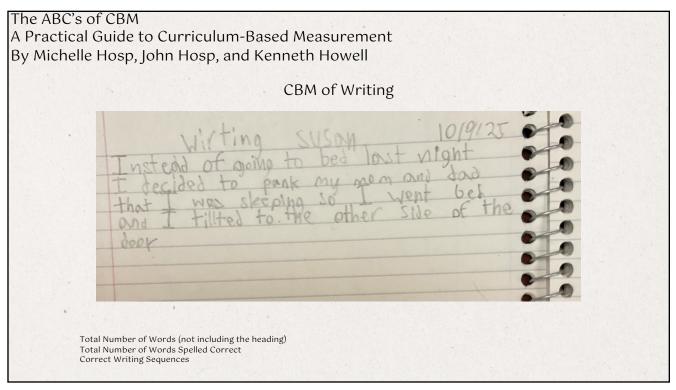
Examples
OG with older
students further
along in the
scope/sequence

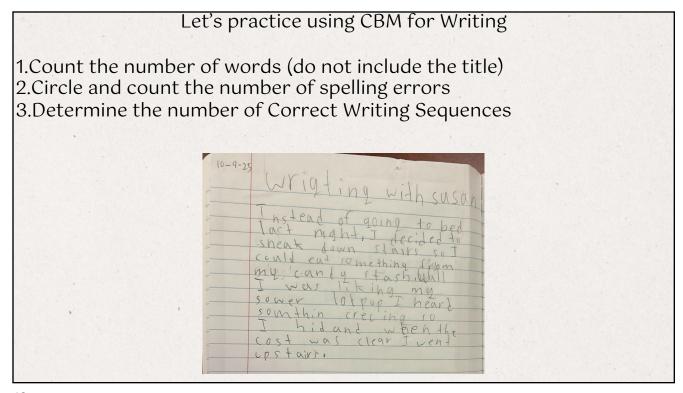
Include 2-3 phrases that are **Science** related

Enzymes are special proteins. Enzymes break down food. Enzymes help give you energy.

Include 2-3 phrases that are Social Studies related

People eat brown rice.
People eat white rice.
People eat rice many different ways.





Assessment Recommendations

Text Structure Informal Assessments

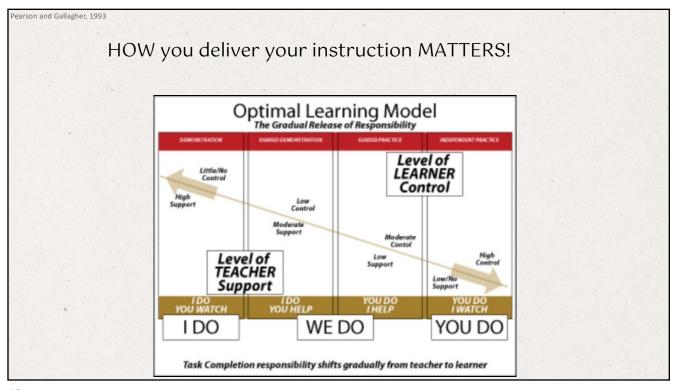
1st grade example:

- Read aloud either a decodable text or grade appropriate text
- 2. Teacher presents on the board 3-4 events out of order and reads them to the students.
- 3. Students reorder sentences orally and then write completed retell (optional to write retell).



41

Where to begin? **Text Structures Assessment** Directions Read each passage carefully and identify the text structure used. Choose from these five · Sequence (chronological order, steps in a process) . Cause and Effect (shows reasons and results) Problem and Solution (presents a problem and its solution) • Description (provides details about a topic) Part 1: Identify the Text Structure (2 points each) The invention of the printing press in 1440 by Johannes Gutenberg changed the world forever. As a result of this invention, books could be produced much faster and cheaper than before. This led to more people learning to read because books became more accessible. Consequently, ideas spread more quickly across Europe, which helped spark the Renaissance and the Reformation. $To \ make \ the \ perfect \ peanut \ butter \ and \ jelly \ sandwich, start \ by \ gathering \ your \ ingredients:$ bread, peanut butter, jelly, and a knife. First, lay out two slices of bread on a clean surface. Next, spread peanut butter on one slice of bread. Then, spread jelly on the other slice. Finally, press the two slices together and enjoy your sandwich!



MOTIVATION Matters

Here are the BIG 5 evidence-based recommendations

- 1. Use real audiences for their writing assignments (think newspaper)
- 2. Put away the red pen and celebrate each small improvement
- 3. It's okay to share your own writing struggles, if relevant, in order to demonstrate that despite struggles, you overcame early difficulties.
- 4. Set goals and track their progress
- 5. Teach students to self-monitor (did I use 3 sequence transitions?)

