

# Reading, Spelling, and Language: Why There is No Such Thing as a "Sight" Word

DIBELS Super Summit  
July 9, 2018

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## Topics For This Talk

- Prevalence of beliefs about reading and spelling as "visual memory" activities
- Common indicators of these beliefs in our classrooms
- Review of evidence that orthographic memory relies on language processes and is only incidentally visual
- Characteristics of instruction that are aligned with a linguistic theory of reading and spelling

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### Izzy, 2<sup>nd</sup> Grade

Reading, 16<sup>th</sup>  
%ile

Spelling, 12<sup>th</sup>  
%ile

Vocabulary,  
98<sup>th</sup> %ile

Dear Dr. Moats,  
When I read  
I want to scream!  
When I read in my  
head I get a head  
ache. Sometimes when  
I get my spelling test  
back in my folder I  
cry becous I mist so  
meny words. In math and  
sins and but I love  
and do good at. My favrit  
thing to do at home is but.

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How can teachers help Izzy?

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### Classroom Practices Reflecting the Belief That Reading is Primarily “Visual”

- Vision therapy or colored overlays are often recommended when kids can't read
- High frequency words are treated as “sight words,” learned by rote repetition
  - 100 flash card words required in K
  - Texts written with high frequency words rather than with pattern-based words
  - Spelling taught by visual memory (write the word 10 times...)

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### Have You Seen This Conceptual Model of Word Recognition?

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### How Reading and Spelling are Treated as “Visual” Skills

- “Visual” cueing errors, along with meaning and structure errors, are a category in scoring Running Records
- In the cueing systems model, the word “visual” is used interchangeably with “graphophonic”
- Phonology has no role in the model

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### Everyday Practice: The Alphabetic Word Wall



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### The Alphabetic Word Wall

O  
one  
once  
only  
out  
open  
on  
off



E  
eye  
eat  
end  
every  
even

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### “Making Words”

**i, u, k, m, n, p, p**  
up, in, ink/kin, pin, pun, pup,  
pump, pink, mink, pumpkin

**a, i, b, b, r, s, t**  
at, sat, rat, bat, bar, tar,  
star, stir, stair, rabbits

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### Indirect Consequences of the “Visual” Theory

- “Phoneme awareness” instruction that doesn’t focus on phonemes
  - syllable counting
  - rhyming
  - matching a first sound
  - inventing spelling by sound
- Phoneme awareness not directly assessed
  - No PA inventories

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### Indirect Consequences of the “Visual” Theory, continued...

- Phonics and “word work” that is brief and minimal, often inaccurate, irrelevant to the text reading, and random – as if it were not central to the processes of learning to read and spell.
- Prevalence of meaning-emphasis (whole language) methods.

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### Error Correction That Does Not Focus on How the Code Works

- “...Don't know that word? Well just keep reading and see what might make sense here...”
- “...Look at the picture to find a clue...”



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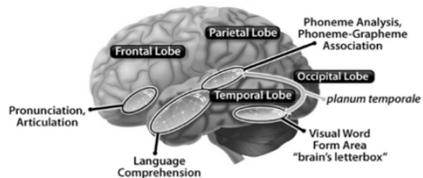
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### If Reading is Not “Visual,” What Is It?

#### The Reading Brain



Source: LETRS 3<sup>rd</sup> Edition, Unit 1, Voyager Sopris Learning

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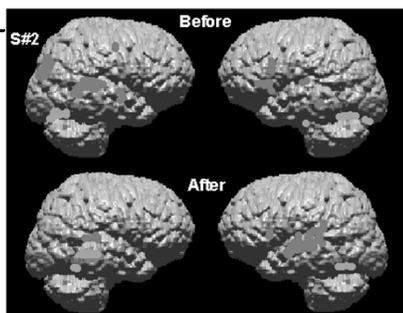
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### 7<sup>th</sup>-Grader, Before and After Remediation (University of Texas, Houston)



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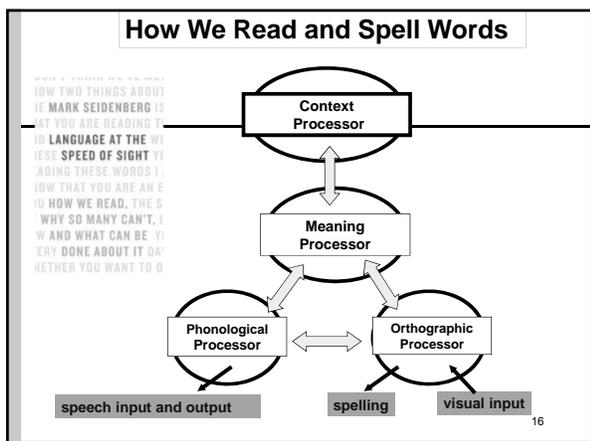
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### What Do Brain Images Tell Us?

- Orthographic memory is intimately connected to the language centers in the left hemisphere
- Non-linguistic, visual-spatial functions are subsumed by other areas of the brain
- The orthographic processor is highly specialized for linguistic symbols

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### Graphemes are Abstract Mental Representations

- Mental graphemic images
- Mental graphemic images
  - Mental graphemic images
  - Mental graphemic images
  - **Mental graphemic images**
- **Mental graphemic images**

~ P h q w d o # j u d s k h p l f l p d j h v

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### How We Learn Printed Words

Units of Analysis	
researched	<i>word</i>
re-search-ed	<i>morpheme</i>
re-searched	<i>syllable</i>
r-e-s-ear-ch-ed	<i>grapheme</i>
/r/ /ē/ /s/ /er/ /ch/ /t/	<i>phoneme</i>
r-e-s-e-a-r-c-h-e-d	<i>letter</i>

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### Phonological Deficits Characterize Reading Difficulties as a Whole...

Connecticut Study (Fletcher, Shaywitz et al.)

Task	IQ-Discrepant (Solid Line)	IQ-Consistent (Dotted Line)
Problem Solving	0.4	0.4
Concept Formation	0.3	0.3
Phonological Awareness	-0.6	0.1
Rapid Naming	0.1	0.1
Vocabulary	0.1	0.1
Paired Associate Learning	0.1	0.1
Visual Motor	0.1	0.1

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### What is Phoneme Awareness?

- Count the sounds.
- Reverse the sounds.
- Compare two words.
- Delete and recombine the sounds.

Not the same as phonics, but makes phonics possible!

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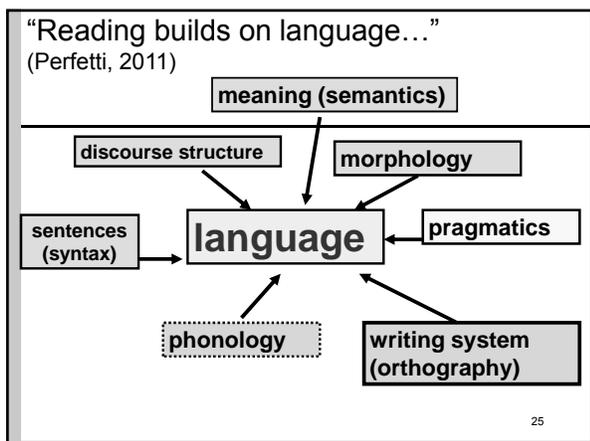
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“It’s Just My Words That Give Me Trouble”

ATTENTION

Due to remodeling construction, SUBWAY will be closed for today. We apologies for any incontinence this has caused.

Please visit our nearest location at 38 th and Sheridan Blvd. in the Kings shopping center.

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**Development of Word Reading Skills**  
(Ehri; Share; Kilpatrick)

- Every level of word-reading development depends upon phonological skills, even fast mapping of new “sight” words
- Visual shape memory is critical for LETTER learning, but plays virtually no role in WORD reading (beyond visual acuity)
  - *Orthographic memory* is a central brain function, requiring only rudimentary visual acuity; letters are abstract representations in memory

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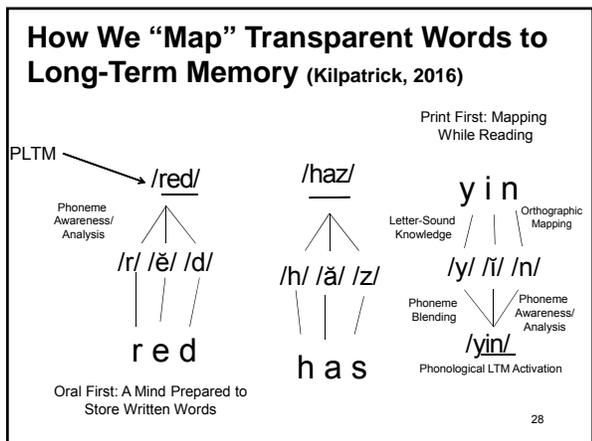
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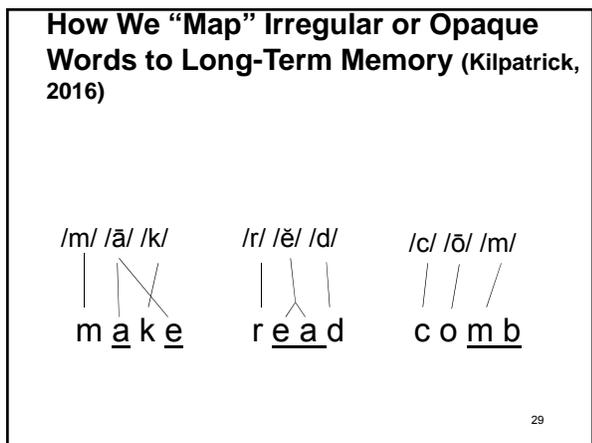
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### Orthographic Patterns Are Learned by Attending to the Word Spellings That One is Exposed To

read	eight	comb
stead	weight	limb
steady	freight	jamb
instead	weigh	bomb
head	neigh	climb
bread	neighbor	thumb
dead	inveigh	numb

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### Important Big Idea!

To teach students to read “as if by sight,” with automatic recognition of both regular and irregular words, teach them how the written code represents speech, beginning with its building blocks: phonemes and graphemes.

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### So How Do We Help Izzy, Who Spells Like This?

- claping
- sppeling
- speling
- makeing
- misst
- tugd
- backd

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### What Kind of Instruction Works? STRUCTURED LITERACY



- ✓ Focus on language structure
  - Phonology, orthography, morphology, syntax, discourse
- ✓ Explicit, systematic teaching
- ✓ Progresses step by step through a planned sequence
- ✓ With as much practice (intensity) as necessary

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### Consider The Past Tense: It's Linguistically Complex!

- Three pronunciations:
  - /t/ in backed, missed, baked
  - /d/ in tugged, judged, pinned
  - /ed/ in wanted, headed
- Looks like a syllable, is usually not a syllable
- As a vowel suffix, causes the “drop e” rule and doubling rule to apply

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### Prerequisite Language Skills

- Vowels and consonants as speech sounds represented by graphemes
  - The “floss” spelling pattern: /f/, /l/, /s/ represented by doubled letters after a short vowel in a one-syllable word
- Syllable concept
- Suffix concept and suffix sorting
  - Vowel suffixes (ing, ed, er, est)
  - Consonant suffixes (ly, ment, ness)

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### The Aim: Deep Understanding of the Speech to Print Relationship

- The past tense is a voiced phoneme /d/ if it follows a final consonant or vowel that is also voiced (hummed, vowed, jazzed)
- The past tense is a voiceless phoneme /t/ if it follows a final consonant that is also unvoiced (kissed, stuffed, pitched)
- The past tense is a syllable only when it follows a final /t/ or /d/ in the base word (wanted, ended)

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### So What About "Sight" Words?

go, goes, gone	friend – "If you fri your
do, does, done	friend, she'll come to
	an end."
there, here, where	one, won, some,
love, have, give	come, done, love, of

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### In Summary: Toward Linguistically Informed Instruction

- Learning to read is complex; word recognition rests on multiple linguistic processes, with phoneme awareness providing the essential foundation for orthographic mapping
- "Visual" clues such as configuration do not contribute to word recognition
- Good readers who know words well process them as multi-dimensional, linguistic objects
- Good teachers teach words as multi-dimensional, linguistic objects – even the "sight" words!

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### THANK YOU!



*"By God, for a minute there it suddenly all made sense!"*

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