

# The ABCs of Reading: About Basic Connections

Eva Trumbower, M.S., CCC-SLP



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## Topic



The topic of this keynote is exploration of the connections linking oral language, standards, research, and best practice in the instruction and acquisition of reading skill.



Memory device!  
The foot bone's connected to the leg bone....

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Learning occurs in many ways such as through sight, smell and touch, but in school, almost everything that counts involves language.

-Ramey & Ramey, 1999

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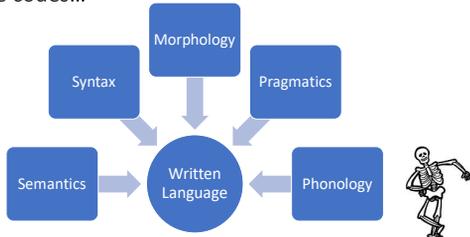
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Written codes are based on and connected to spoken language codes...



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Oral Language is the foundation for literacy

What does that actually mean?

- Oral language is the basis for written language.
- Each system of oral language affects ability to read.
- Each system must be mapped to print.
- The systems must be integrated during the act of reading to lead to comprehension of print with as much facility as listening to speech.



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Oral Language is the foundation for literacy

What it does NOT mean:

- It does not mean that learning to read is natural like learning the spoken code.
- It does not mean that a student with good listening comprehension, expressive language, and speech will learn to read with ease.



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### LANGUAGE AND READING



"A proper theory of speech is essential to an understanding of how people read—the most relevant consideration arises out of the deep biological gulf that separates the two processes. Speech, on the one side, is a product of biological evolution, standing as the most obvious, and arguably the most important, of our species-typical behaviors. Reading/writing, on the other, did not evolve biologically, but rather developed (in some cultures) as a secondary response to that which evolution had already produced. A consequence is that we are biologically destined to speak, not to read or write...." (p. 4-5)

Liebermann, A.M. (1997). How theories of speech affect research in reading and writing. In B. Blachman, ed., Foundations of Reading Acquisition and Dyslexia: implications for early intervention. Mahwah, N.J.: Lawrence Erlbaum.

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### Models that describe a complex relationship between oral and written language



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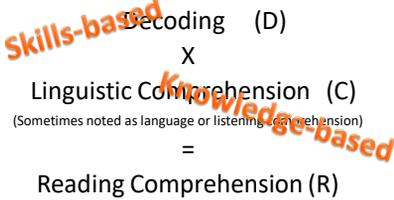
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### Simple View of Reading

Gough, P & Tunmer, W. (1986) Decoding, reading and reading disability. Remedial and Special Education. 7:6-10



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### Simple View of Reading (SVR)

- Gough and Tunmer first proposed the simple view of reading in 1986
- It is a conceptual framework, not a process model.
- When trying to understand something as complex as reading, it is helpful first to simplify
- The SVR delineates two major, essential, interacting but different components of reading.
- The simple view of reading is a conceptual framework for thinking about 'reading.'



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### The Simple View: What can it tell us?

"Both decoding (D) skills and language comprehension (LC) abilities are necessary for reading and both must be strong. Strength in one area (D or LC) cannot compensate for a deficit in the other area."

- A student with excellent decoding skills will achieve reading comprehension equal to his language comprehension skills ...
- A student with strong language comprehension abilities...will achieve reading comprehension equal to his decoding skills.
- A weakness in one area will be exacerbated by a weakness in the other area."

Davidson, M., Farrell, L., Hunter, M. & Osenga, T. (2010) The Simple View of Reading: Research of importance to all educators. Available online at <http://www.cdi.org/articles/>



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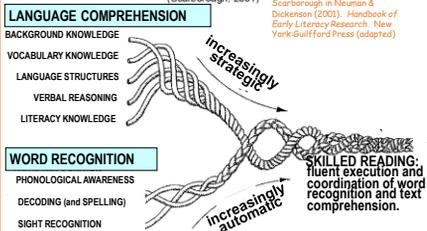
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### The Many Strands that are Woven into Skilled Reading



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### Overview of Written Language

- Reading is first and foremost a language activity
- Reading relies on one's knowledge of the phonologic, semantic, syntactic, and pragmatic systems of language
- Deficiencies in any one of these systems can disrupt ability to read and/or write
- Lack of instruction in the way that each of the systems maps to print may produce a deficiency in reading.




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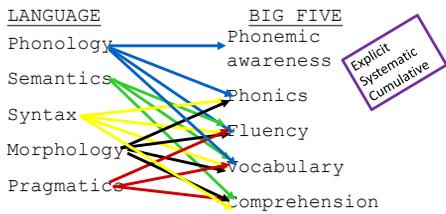
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### Connections: Oral Language and Reading Research Summary © Patterson and Trumbower 2010



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### Connecting Standards, Research, EBPs, Curriculum...



- Standards are, generally, connected to high quality research.
- Standards do not specify how to teach or what programs to use.
- Standards specify the expected outcomes.
- The Standards define what all students are expected to know and be able to do, **not how teachers should teach.**
- The Standards often specify grade level targets.
- The Standards **must therefore be complemented by a well-developed, content-rich curriculum consistent and connected to research results, evidence-based instruction, instructional practices, and the expectations.**

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MO ELA Standards and Grade Levels for Addressing Print Awareness, Phonemic Awareness, Phonics, Vocabulary

Skill	Kindergarten	First	Second	Third
Print Awareness				
Phonemic Awareness				
Phonics				
Vocabulary				
Morphology				

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17

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Connections...



Connections between research, standards, EB Practices and EB Programs in reading instruction

- Standards connect to the research
- Research connects to scientific evidence
- Evidence connects to practices
- Practices connect to instructional programs and plans
- Instructional programs connect to instructional delivery systems, fidelity, and pedagogy
- Resulting outcomes connect to instructional adjustments



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18

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We might conclude...

- Districts and specialists must choose programs that:
  - Are evidence-based
  - Allow for fidelity to approach and implementation
  - Provide for monitoring of fidelity
  - Provide dosage information
- Provide processes for progress monitoring and instructional adjustments
- That will lead to the knowledge and skills defined by the Standards



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### Looking at each side of the model(s): Vocabulary

- Vocabulary is one aspect of the language comprehension side of the equation.
- Much scientific research has been conducted on the acquisition of vocabulary.
- Much scientific research has been conducted on the instruction of vocabulary.
- Standards address vocabulary development and expansion.

Acquisition of vocabulary connects to oral language, research, practice and standards.

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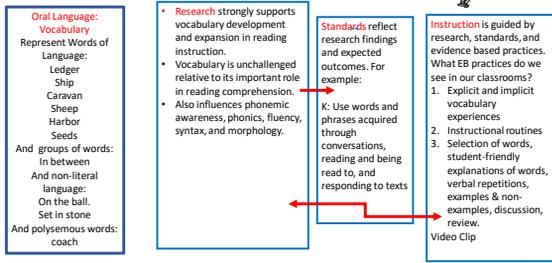
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### Connections in vocabulary instruction...



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### Vocabulary and Instruction

- Vocabulary should be taught explicitly and implicitly.
- With EB explicit instruction of vocabulary there is an intentional selection of words, contextualization of words, student-friendly explanations of words, verbal repetitions, examples & non-examples, discussion, review.
- Implicit vocabulary acquisition in the early years and grades is, generally, through read-alouds, classroom discourse, content material, and wide reading.



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22

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### Why isn't implicit instruction alone adequate?

- Words that are encountered in oral and written language must be outside the student's current vocabulary to be considered new learning.
- Words must be encountered multiple times to be learned without explanation.
- Research indicates that of 100 unfamiliar words encountered in context, 5 to 15 will be learned and multiple encounters of those words are required for learning to take place.
- Students must be able to infer meanings.
- To read widely, a student must be able to decode print automatically and fluently.

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### Connections: Phonology, PA, Phonics, Morphology, Word Study...



**Oral Language:** The sounds of the language and rules that govern the way they are put together.  
 Pets; dogs; boxes.  
 42-44 phonemes in English

Yikes! I have to be able to write down what I say semantically, syntactically, morphologically, and pragmatically, so that it sounds like the speech of our culture. The phonology of the language must be addressed!

Now we must go from what we have spoken and signed for thousands of years to a "code" to make this system possible!

To invent the code and to crack the code: 3 layers

1. The alphabetic layer: basic letter-sound correspondences
  2. The pattern layer: consonant-vowel patterns (CVC, CVCe, CVVC, etc.)
  3. The meaning and morphological layer: inflections, roots, affixes
- Print awareness and phonemic awareness are also necessary**

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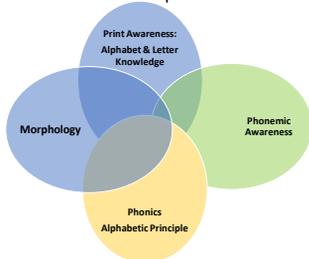
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### Connections and Overlap



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Phoenician, Greek, Roman, Cyrillic, Elvish(Quenya), and English Alphabetic Codes

ABCDEF GHIJKLMNO  
PQRSTU VWXYZ  
abcdefghijklmnopqrstuvwxyz  
klmnopqrst  
uvwxyz

А В Г Д Е  
Ж З И Й К  
Л М Н О П Р  
С Т У Ф Х Ц  
Ч Ш Щ Ъ Ы Ь  
Э Ю Я

Аа Вв Сс Тт Дд Ее Жж Зз  
Ии Кк Лл Мм Нн Оо Пп  
Рр Сс Тт Уу Фф Хх Цц  
Чч Шш Щщ Ъъ Ыы Ьь  
Ээ Юю Яя

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Is it easy to crack a code?

Enigma 

Rosetta Stone 



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Print Awareness and the MO GLEs



Grades K-2 Examples  
Develop print awareness in the reading process by:

- Identifying all upper-and lower-case letters
- Sequencing the letters of the alphabet
- Book orientation
- Knowing that sentences are comprised of words separated by; spaces
- One-to- one correspondence between spoken and written words
- Recognizing distinguishing features of a sentence
- Sentences are organized into paragraphs to convey meaning

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### Learning the code: The Phonological System & Phonemic Awareness

**Connects to Oral Language**

**Phonological Awareness**

A broad skill that includes identifying and manipulating units of oral language: words, syllables, onsets & rimes.

**Phonemic awareness:**

The specific ability to focus on and manipulate individual sounds (phonemes) in spoken words.

**Purpose:** It is the foundation for word recognition skills in an alphabetic system.

**Connects to Research**

One of the best predictors of how well children will learn to reading during the first 2 years of reading instruction.

Large effect sizes for normally developing readers, students with reading disorders, students at-risk for reading problems, students across SES levels.

A critical foundational element in learning to read.

Has a positive, indirect influence on reading comprehension.

Explicit/Systematic instruction yields best results

Results are stronger when letters are included in instruction.

Small group instruction yields greater effect sizes.

Not an end in itself; instruction promotes strategies for application to decoding.

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29

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#### Examples of Research support for classroom instruction in Phonemic Awareness PA instruction...

- should begin with assessment for determination of level of complexity of PA skills and should continue with authentic or formative assessments for flexible grouping.
- should include teaching PA with letters which is shown to help normally developing readers and at-risk readers acquire PA better than PA instruction without letters.
- shows better outcomes when one or two but not all PA targets are taught per instructional period.
- is best in small groups which yields greater effect sizes than when students are taught individually or in classrooms.
- should take length of time into consideration. Ehri, et. al. found that instruction lasting from 5 to 18 total hours produced larger effect sizes than instruction of shorter or longer duration.

Ehri, L.C., et al. (2001). Phonemic Awareness Instruction Helps Children Learn to Read: Evidence from the National Reading Panels Analysis. *Reading Research Quarterly*, 36, 250-287.

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#### Connections in MO ELAS GLE: Examples for Grades K and 1

Develop Phonemic awareness in the reading process by:

- Distinguishing orally presented rhyming pairs of words from non-rhyming pairs
- Recognizing spoken alliteration or groups of words that begin with the same onset or initial sound
- Blending spoken onsets and rimes
- Blending spoken phonemes to form one-syllable words
- Producing and identifying sounds and syllables in spoken words
- Recognizing the change in a spoken word when a specific phoneme is added, changed, or removed
- Segmenting spoken words of three to five phonemes into individual phonemes

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31

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### Learning the Code: The Phonological System & Phonics

**Connects to Research**

- Systematic phonics instruction is significantly more effective than incidental or non-phonics types of instruction. Both synthetic and analytic types of systematic phonics are strongly supported by research.
- The biggest impact on growth in reading occurs when instruction begins in K or 1<sup>st</sup> grade and much more effective than when introduced after 1<sup>st</sup> grade.
- Results in significant growth in younger students' (K & 1) reading comprehension as well as for older struggling readers and reading disabled students.
- Produces significant growth in spelling.
- Is beneficial to students regardless of SES.

**Connects to Standards**

- K: Connects to letters & sounds, PA, writing. For example: recognizes that new words can be created when letters are changed, added, or deleted and uses letter-sound knowledge to write simple messages and words.
- 1<sup>st</sup>: decodes words in context by using letter-sound knowledge
- Produces: consonant blends, consonant digraphs, uses syllabication patterns to decode words
- 2<sup>nd</sup>: Decodes words with vowel diphthongs, long & short vowels, vowel digraphs
- 3<sup>rd</sup>: Decodes words that double final consonants when adding an ending
- Decodes known and unknown words by spelling patterns

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32

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### Connections: Semantics, Morphology, PA, and Phonics Research, Standards, Instruction and Overlap with Word Study



**Oral Language: Connect small meaningful units that make big meaningful differences to indicate:**  
 Time (tense)  
 Number (plural)  
 And to add to and change word meanings:  
 Derivations and Affixes  
 Sign/signature  
 Reassign; unhappy, action  
 All the ships in the harbor  
 reloaded quickly and absconded  
 with their payment before the  
 ledger could be reconciled.

**Research:**  
 --Morphologically complex words make up more than half of the words in English.  
 --Through the elementary grades, a large % of new words are morphologically complex with a clear internal structure.  
 --Morphological instruction mediates and facilitates vocabulary acquisition and reading comprehension

**Standards** reflect research and expected outcomes.  
 Examples:  
 Develop an understanding of vocabulary by:  
 1<sup>st</sup> Grade-a. using common affixes to figure out the meaning of a word.  
 b. Identifying common root words and their inflectional endings  
 3<sup>rd</sup> Grade-a. decoding and identifying the meaning of common prefixes and suffixes and knowing how they change the meaning of root words.

**Instruction** is guided by research and EBPs.  
 What EBPs do we see in our classrooms?  
 Explicit and systematic instruction that includes:  
 Pronunciation of inflections & affixes; meanings of inflections & affixes; word groups with patterns; identifying root words and composing new words with affixes; decomposing morphologically complex words; decoding & encoding.  
 Video Clip

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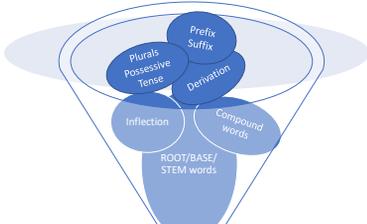
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### Morphology



Morphological Awareness

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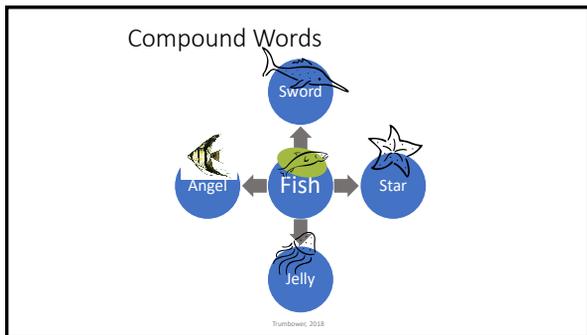
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**“Learning clusters of words that share a common origin helps students understand content area material.”**

Hennings, D.G. (2000). Contextually relevant word study: Adolescent vocabulary development across the curriculum. *Journal of Adolescent and Adult Literacy*, 44(3), pages 268-279

**Decoding and Spelling:** Some written words that are often described as ‘exceptions’ can actually be words that share a common origin. Morphology determines the spelling of the root, e.g., muscle>muscular; sign>signature>signal

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**ADD SOME PHONEMES, ADD SOME MORPHEMES, BUILD A WORD**

**Repeat**, vb. To say again,  
 L. repetere (re, again or anew + petere, to go to or to seek)  
 5 phonemes, 1 morpheme, 2 syllables, 6 graphemes

	Phoneme	Morpheme	Syllable	Grapheme
Repeated, vb. Adj.	7	2	3	8
Repeatedly, adv.	9	3	4	10
Repeater, n.	6	2	3	8
Repeating, adj.	7	2	3	9
Repeatable, adj.	8	2	4	10
Unrepeatable, adj.	10	3	5	12
Repeatability, n.	11	2	6	13
Move on to:	Repetitive Repetitively	Repetition Repetitious	Repetitious -ness	Repetitiously

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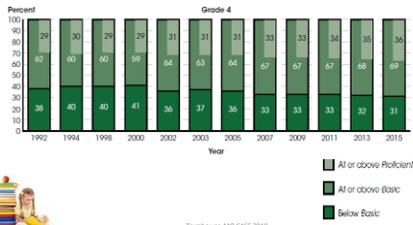
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**Reading achievement Outcomes in the USA  
 National Assessment of educational progress (NAEP)**



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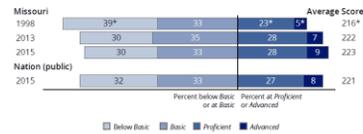
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**2015 Reading state snapshot report  
 Missouri- grade 4- public schools**



**Achievement-Level Percentages and Average Score Results**



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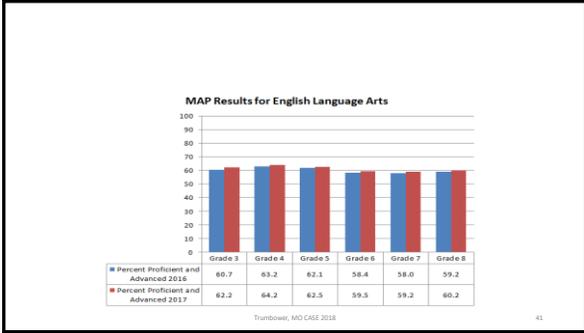
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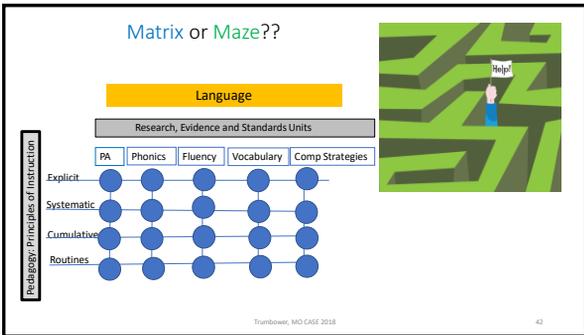
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### You are in the Dynamic Zone!

EB Practices and programs are in place with consideration for oral language, reading research, and standards.

There is alignment between and across grade levels and schools.

A differentiated instructional plan is in place.

Plans for regular assessments and interventions are in place.

Targeted professional development plans are in place.

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