

Setting the Stage for Accurate and Fluent Reading:

Decoding Foundations for K - 2

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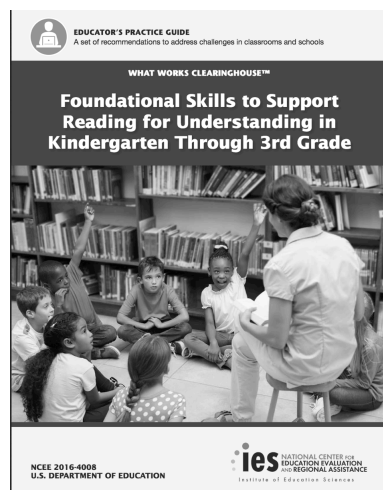
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Recommended IES Practice Guide

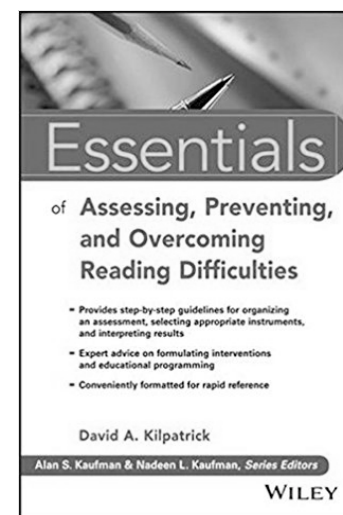
Foundational Skills to Support Reading for Understanding in Kindergarten Through 3rd Grade

Available online



Recommended Book

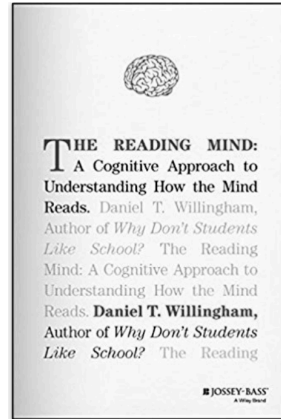
Kilpatrick, D. A. (2015). *Essentials of assessing, preventing, and overcoming reading difficulties*. Hoboken, New Jersey: John Wiley & Sons.



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Recommended Book

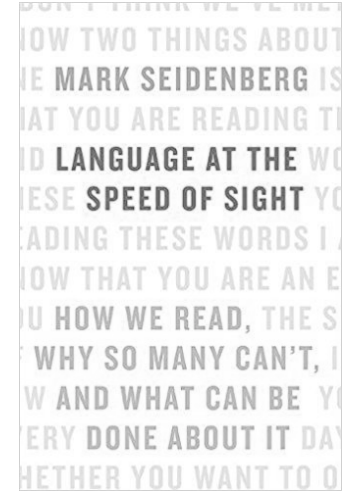
Willingham, D. T. (2017). *The Reading Mind: A cognitive approach to understanding how the mind reads*. San Francisco, California: Jossey-Bass.



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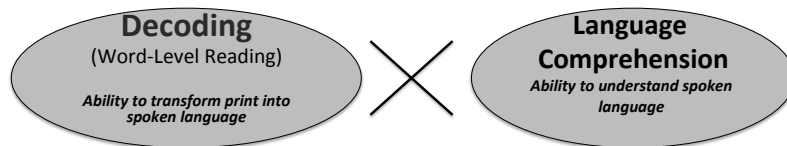
Recommended Book

Seidenberg, M. (2017). *Language at the speed of sight*. New York: Basic Books.



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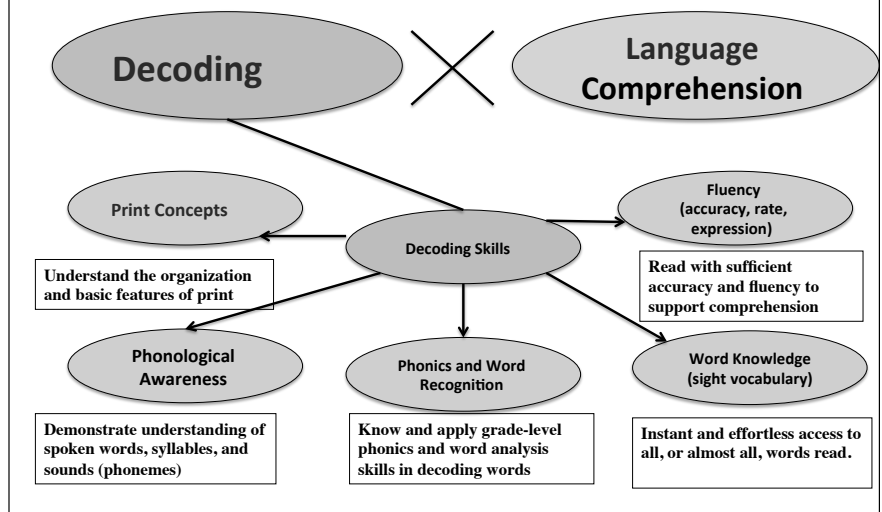
Simple View of Reading



Word-level reading and oral language comprehension are relatively independent abilities.

Gough, 1986

Simple View of Reading



Big Picture Critical Foundation Skills

- Print Concepts
- Phonological Awareness
- Phonics and Word Recognition
- Word Knowledge (Sight Vocabulary)
- Fluency

What Why How

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Why – Foundation Decoding Skills

Research indicates that students have **better future prospects as readers** if they develop understanding and facility with the alphabetic code by the end of second grade. (Moats 2012)

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Why – Foundation Decoding Skills

If we do not **catch students early** (by end of second grade at the latest), improvement in their relative standing is much less likely and cost much more.

Many reading disabilities can be **remediated** or **ameliorated** by the end of first grade with explicit, phonics-emphasis instruction.

(Ryder, Tunmer, & Greaney, 2008; Mathes et al, 2005)

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Why – Foundation Decoding Skills

Poor readers in grades 3 – 5 needed about **two hours per day** to bring their basic reading skills up to the level predicted by their verbal reasoning abilities.

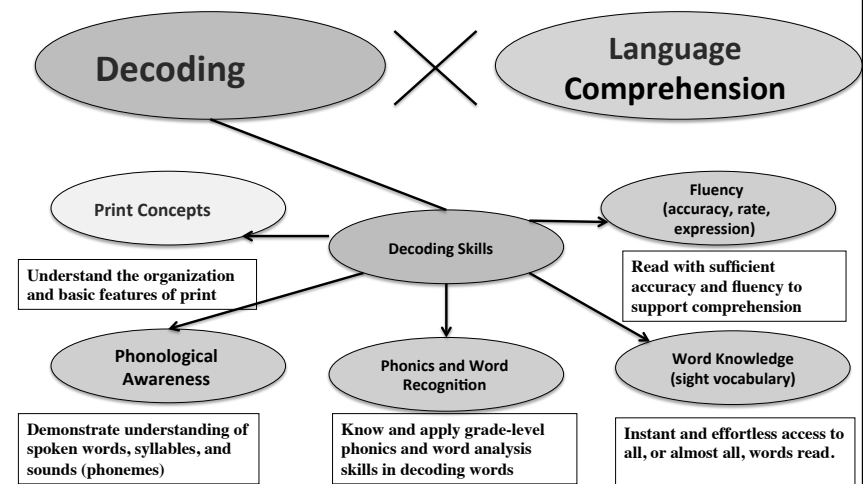
(Torgesen et. al 2001)

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Print Concepts

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Simple View of Reading



Print Concepts - K

Demonstrate understanding of the organization and basic features of print.

- Follow words from left to right, top to bottom, and page by page.
- Recognize that spoken words are represented in written language by specific sequences of letters.
- Understand that words are separated by **spaces** in print.
- Recognize **and name all upper- and lowercase letters** of the alphabet.

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Print Concepts – K Why

- Young children's knowledge of forms and functions of written language is an important **precursor to skillful reading**. Justice & Piasta 2011
- Prereaders knowledge of letter names is among the **strongest predictors of subsequent progress**. Seidenberg, 2017
- Knowledge of letter forms and names is basis of **learning alphabetic system**. Evans & Saint-Aubin 2011

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Print Concepts

26 categories of objects

Write a variety of A's

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Print Concepts

Understand the organization and basic features of print

Fun facts about letter forms and the **code**:

Researchers found that the most common letter shapes match the shapes that people most frequently encounter in their daily **visual world**. Willingham, 2017

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Print Concepts

Understand the organization and basic features of print

Fun facts about letter forms:

Basic constituents of letters: **C**



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Print Concepts – K How?

Letter Names

- Teach letter names **explicitly**.
- Utilize a version of the **Alphabet Song**.
- Introduce upper-case letter names before lower-case because they are visually easier to learn. Adams 2013

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Print Concepts – K How?

Letter Names

- Teach to mastery
 - Letters can be named accurately, confidently, effortlessly.
- Provide extra time on:
 - Visually similar (b, d, p, q)
 - Upper and lower case forms that differ (E e, R r)

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Print Concepts

Understand the organization and basic features of print

Additional notes:

b and d reversals are not a sign of dyslexia.
b and d reversals are developmental.

Dyslexia is NOT rooted in visual problems.

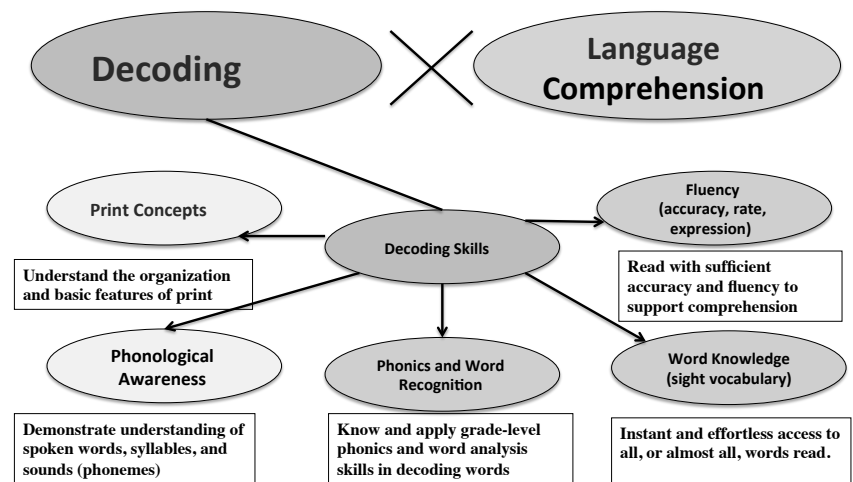
Willingham, 2017

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Phonological Awareness

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Simple View of Reading



K - Phonological Awareness

Demonstrate understanding of spoken words, syllables, and sounds (phonemes).

- Recognize and produce **rhyming words**.
- Count, pronounce, blend, and segment **syllables** in spoken words.
- Blend and segment **onsets and rimes** of single-syllable spoken words.
- Isolate and pronounce the **initial, medial vowel, and final sounds** (phonemes) in three-phoneme (consonant-vowel-consonant, or CVC) words.
- Add or substitute** individual sounds (phonemes) in simple, one-syllable words to make new words.

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1st - Phonological Awareness

Demonstrate understanding of spoken words, syllables, and sounds (phonemes).

- Distinguish long from short vowel sounds in spoken single-syllable words.
- Orally produce single-syllable words by **blending** sounds (phonemes), including consonant blends.
- Isolate and pronounce initial, medial vowel, and final sounds (phonemes) in spoken single-syllable words.
- Segment** spoken single-syllable words into their complete sequence of individual sounds (phonemes).

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Phonological Awareness - What

- Understanding that oral language can be broken into components.**
 - ✓ Sentences into words
 - ✓ Words into syllables
 - ✓ Words into on-set rimes
 - ✓ Words into phonemes
- Involves:**
 - ✓ Blending
 - ✓ Segmenting

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Phonological Awareness - What

| | Blending | Segmenting |
|--------------------------------|---|---|
| Sentences into words | "Listen. / - rode - the - bus. Say the sentence." I rode the bus. | "Listen to this sentence. <i>We ate lunch.</i> Clap and say the words in the sentence." We - ate - lunch. |
| Words into syllables | "Listen to the parts of a word. <i>rock - et</i> Say the word." rocket | "Listen. <i>Marty</i> Let's clap and say the parts in <i>Marty</i> ." Mar -- ty |
| Words into on-set rimes | "Listen. f -- at What word?" fat | "Say <i>Sam</i> in two parts." S --- am |
| Words into phonemes | "Listen. I will say the sounds. You say the word. <i>mmmmaaat</i> What word?" mat | "Fist in the air. Say the sounds in <i>man</i> and put up one finger for each sound?" mmm aaa nnn |

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Phonological Awareness

Phonological Awareness Skills

- **Early**
 - rhyming
 - alliteration
 - segment words into syllables
 - identify initial sound in word
- **Basic**
 - blending sounds into words
 - segmenting words into sounds
- **Advanced**
 - manipulating phonemes
 - deleting, adding, substituting

Kilpatrick, 2015

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Phonemic Awareness - What?

- **The ability to hear and manipulate phonemes (sounds) within words.**
- An **auditory skill**.
- **Segmenting** and **blending** activities have the greatest benefit to reading acquisition. (National Reading Panel, 2000; Snider, 1995)
- Generally, teach blending before segmenting. (Lane & Pullen, 2005)

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Phonemic Awareness - Why

- Must be aware of phonemes within words in order to **map graphemes onto phonemes**. (Ehri & Roberts, 2006)
- Phonological awareness is necessary for phonic decoding and sight vocabulary storage. (Kilpatrick, 2017)

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Phonemic Awareness - Why

- Must be aware of phonemes within words in order to **map graphemes onto phonemes**. (Ehri & Roberts, 2006)
- Phoneme awareness performance is a **strong predictor** of long-term reading and spelling success and can predict literacy performance more accurately than variables such as intelligence, vocabulary knowledge, and socioeconomic status. (Gillon, 2004)
- Phonemic awareness activities in kindergarten resulted in **word reading gains** in first and second grade. (Foorman, Francis, Beller, Winikates, & Fletcher, 1997)

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Phonemic Awareness - Why

- Phonemic Awareness can help students learn to **read and spell**.
- The relationship between phonemic awareness and learning to **read and spell is reciprocal**: having phonemic awareness helps children learn to read and spell; learning to read and spell words by working with letter-sound relationships improves children's phonemic awareness.

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Phonemic Awareness - How

- Include phonemic awareness activities in beginning reading programs for students of any age.
- **Kindergarten**: 10 - 15 minutes a day (Foorman et al, 1997)
- **First Grade and Second Grade**: 10 minutes a day including advanced phonemic awareness
- **Intervention**: Within intervention program if student reads below 2nd grade level
- **Intervention**: Advanced phonemic awareness may be necessary for struggling older readers (Kilpatrick, 2015)
- **All Elementary Grades**: Incorporate into spelling instruction.

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Phonemic Awareness - How

- Phonemic awareness activities should be:
 1. Few in number
 2. Explicitly modeled

At-risk students need additional explicit instruction.
 3. Supported by **concrete materials or gestures**
 4. Designed to include all students
 5. Introduced using instructional routines

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Example A

- **Blending Sounds into Words**
 1. We're going to play a say-the-word game. I'll say the sounds. You say the word.
 2. Listen. aaaammmmm
 3. What word? *am*
 4. (Repeat with other words.)
 5. (If time permits, check individual students.)

(Practice: am, map, sit, ship, trip)

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Example B

- **Segmenting words into sounds - Smooth Segmenting**

1. Put your fists together.
2. Get ready to stretch the word.
3. The word is fin. What word? *fin*
4. Stretch it. *fffiinnnn*
5. Shrink it. *fin*
6. (If time permits, check individual students.)

(Practice: sit, list, fish, grip)

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Example C

- **Segmenting Words into Sounds - Separate Segmenting**

1. We're going to say the sounds in a word.
2. Fist in the air. Put up one finger for each sound.
3. The word is sat. What word? *sat*
4. First sound? */sss/* Next sound? */aaa/* Last sound? */t/*
5. (If time permits, check individual students.)

(Practice: fan, fast, shop, with)

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Example D Advanced Phonological Awareness

- **Adding Phonemes**

1. We're going to add sounds to the beginning of words.
2. Say – am. *am*
3. Add */s/* at the beginning of the word.
4. What word? */Sam/* Again.

Practice: am – j – jam
an – p – pan
ad – m – mad

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Example E Advanced Phonological Awareness

- **Deleting Phonemes**

1. The word is Pam. What word? *Pam*
2. Take away the */p/* and the word is? */am/*

Practice: had – h – ad
tin – t – in
sit – s – it

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Example F Advanced Phonological Awareness

• Substituting Phonemes

1. The word is bat. What word? /bat/
2. Change the /b/ to /k/ and the word is? /cat/

Practice:

man change the /m/ to /p/

sit change the /s/ to /b/

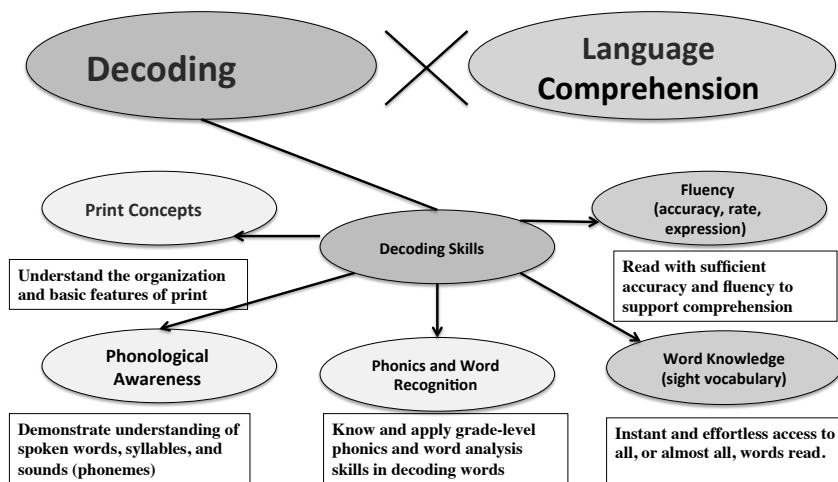
nap change the /n/ to /t/

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Phonics and Word Recognition

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Simple View of Reading



Phonics and Word Recognition K

Know and apply grade-level phonics and word analysis skills in decoding words.

- a. Demonstrate basic knowledge of one-to-one letter-sound correspondences by producing the primary sounds or many of the most frequent sounds for each **consonant**.
- b. Associate the **long and short sounds** with common spellings (graphemes) for the five major vowels.
- c. Read common **high-frequency words** by sight (e.g., *the, of, to, you, she, my, is, are, do, does*).
- d. Distinguish between similarly spelled words by identifying the sounds of the letters that differ.

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Phonics and Word Recognition 1st Grade

Know and apply grade-level phonics and word analysis skills in decoding words.

- Know the spelling-sound correspondences for common **consonant digraphs**.
- Decode regularly spelled **one-syllable words**.
- Know **final -e** and **common vowel team** conventions for representing long vowel sounds.
- Use knowledge that **every syllable must have a vowel sound** to determine the number of syllables in a printed word.
- Decode two-syllable** words following basic patterns by breaking the words into syllables.
- Read words with **inflectional endings**.
- Recognize and read grade-appropriate **irregularly spelled words**.

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Phonics and Word Recognition 2nd grade

Know and apply grade-level phonics and word analysis skills in decoding words.

- Distinguish **long and short vowels** when reading regularly spelled one-syllable words.
- Know spelling-sound correspondences for additional **common vowel teams**.
- Decode regularly spelled **two-syllable words with long vowels**.
- Decode words with common **prefixes and suffixes**.
- Identify words with inconsistent but common spelling-sound correspondences.
- Recognize and read grade-appropriate **irregularly spelled words**.

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Phonics and Word Recognition 3rd grade

Know and apply grade-level phonics and word analysis skills in decoding words.

- Identify and know the **meaning** of the most common **prefixes and derivational suffixes**.
- Decode words with common **Latin suffixes**.
- Decode **multi-syllable words**.
- Read grade-appropriate **irregularly spelled words**.

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Phonics and Word Knowledge

- Phoneme – Grapheme Associations (Letter – Sounds Associations)
- Decoding Single Syllable Words
- Decoding Multisyllabic Words
- Reading Irregular Words
- Reading Decodable Text
- Applying Word Knowledge to Passage Reading

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Phonics and Word Knowledge

Phoneme – Grapheme Associations
Letter – Sound Associations

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Phoneme – Grapheme Associations - What

Ability to say a sound in response to a grapheme (letter or letters that represent a phoneme)

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Phoneme – Grapheme Associations - What

Sequence for introducing phoneme – grapheme associations

- 1. simple → complex**
single letter graphemes before two letter graphemes
- 2. common → uncommon**
m and s before x and z
- 3. minimize confusion**
separate b and d
separate m and n
- 4. continuous → stop sounds**

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Phoneme – Grapheme Associations - What

Example Sequence of Phoneme - Grapheme Associations

(IES Practice Guide – Foundational Skills to Support Reading for Understanding in Kindergarten Through 3rd Grade, 2016)

- **Single consonant and vowel letters**
a m t s i f d r o g l h u c b n k v e w j p y x q z (Carnine, Silbert, and Kame'enui, 1997)
- **Consonant blends**
bl cl fl gl pl sl
cr dr gr pr tr br fr
sm sp st sw sc
- **Consonant digraphs**
th sh ch ph ng tch dge
- **Long vowels with silent e**
a-e i-e o-e u-e e-e
- **Two-letter vowel teams** (combination of letters standing for single vowel sound)
ai ay ea ee ey oa ie igh

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Letter-Sound Associations - Why

- English is an **alphabetic language**.
- Students with letter-sound associations **perform better**. (Juel, 1991)
- Students benefit from **early, systematic introduction** to letter-sound associations.

“Phonics instruction provides the biggest impact on growth when begun in kindergarten or first grade before children have learned to read independently.” (National Reading Panel, 2000)

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Letter – Sound Associations – Why

- Letter-Sound Knowledge involves pairing **visual memory** with **phonological memory**.
- “Letter-sound knowledge is essential for both phonic **decoding** and for storing words in one’s **sight vocabulary**.” (Kilpatrick, p. 64)
- If students have difficulty with letter-sound associations, not visual memory but **phonological memory**. (Kilpatrick, p. 33)

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Letter-Sound Associations - Why

- **Good readers rely primarily on the letters in a word** rather than context or pictures to identify/pronounce familiar and unfamiliar words.

(Ehri, 1994; Kilpatrick, 2015; Seidenberg, 2017)

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Letter - Sound Associations - How

- Provide **explicit instruction** (rather than implicit instruction) to introduce phoneme – grapheme associations
- Teach phoneme – grapheme associations to a high level of **mastery**
- Provide **cumulative review**
- Differentiate between **continuous** and **stop** sounds

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Letter-Sound Associations

Example A – Introducing within word and then isolating the grapheme

sat

1. (Point to example word.) This word is sat .
2. (Point to the underlined grapheme.) This is the letter a.
This sound is /aaaa/.
3. Say the sound with me. /aaaa/
4. What sound? /aaaa/

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Letter – Sound Associations

Example B – Introducing the phoneme – grapheme association in isolation

a

1. (Point to letter.) This is the letter a. This sound is /aaaa/.
2. Say the sound with me. /aaaa/
3. What sound? /aaaa/

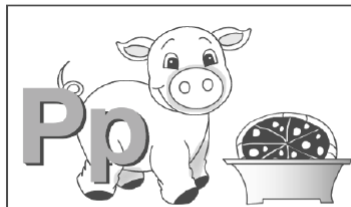
58

Letter - Sound Associations

Example C

Introducing the

- **phoneme – grapheme association**
- **using a memorable picture and**
- **letter of the alphabet**



"The letter P is for Pig, who is very pleasant when asking for pizza. Pig says, 'P-p-please, may I have some pizza?'"

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Letter-Sound Associations

Fun facts about Letter-Sound associations:

Finnish, Spanish, and Italian have a **one to one** correspondence between letters and sounds. Kids learn to decode quite quickly in these countries.

English, French, Danish, and Portuguese have **"one to many"** systems and readers lag behind in primary grades.

However, by fourth grade readers in these countries catch up. Willingham, 2017

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Phonics and Word Knowledge

Decoding Single Syllable Words

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Decoding Single Syllable Words – What Syllable Patterns

| Syllable Pattern | Single Syllable Words | Multi-Syllable Words |
|--|---|---|
| Closed Syllables VC CVC CCVC CVCC A syllable with a short vowel, spelled with a single vowel letter ending in one or more consonants. | am, sat, brat, math | rab bit, in sect, nap kin, top ic, pun ish, kit ten |
| Open Syllables CV CCV A syllable that ends with a long vowel sound, spelled with a single vowel letter. | me, he, she, hi no, go, ho | pro test, tor na do, si lent, hu man, ro bot, re lax |
| Silent e CVCe CCVCe A syllable with a long vowel, spelled with one vowel + one consonant + silent e. | mine, cave, ripe, tape, shape, whale, shine | in vite , ex cite , pan cake , man hole , in side , nick name |

Decoding Single Syllable Words – What Syllable Patterns (Moats, L and Tolman, C. 2009, *Language Essentials for Teachers of Reading and Spelling (LETRS)*, Sopris/Voyager)

| Syllable Pattern | Single Syllable Words | Multi-Syllable Words |
|--|---|--|
| Vowel Team CVVC CCVVC CVVCC Syllables with long or short vowel spellings that use two to four letters to spell the vowel. Diphthongs ou/ow and oi/oy are included in this category. | rain, mail, deal, clean, speed, scream, least | train er, spoil age, mail man, rain bow, ex haust , pro ceed |
| Vowel-r A syllable with er, ir, or, ar, or ur . Vowel pronunciation often changes before /r/. | barn, fern, bird, torn, yard | per form, yard stick, sports man, sur plus, morn ing, dis turb |
| Consonant –le An unaccented final syllable that contains a consonant before /l/, followed by a silent e. | | mid dle, pud dle, ma ple, can dle, fid dle, ea gle |

Decoding Single Syllable Words - Why

- **Ability to blend** individual sounds into recognizable words is a critical component of reading. (Beck, 2006)
- **Diverse learners** must be encouraged to look carefully at spelling and sounds and to repeatedly sound out and blend words. (Reitsma, 1983)

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Decoding Single Syllable Words – Why

- That **direct instruction in alphabet coding** facilitates early reading acquisition is one of the most well established conclusions in all of behavioral science.
(Stanovich, 1994)
- The first grader decoding ability continues to be a **major factor in comprehension** as students progress through the grades. (The Connecticut Longitudinal Study)

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Decoding Single Syllable Words – Why

- Students who receive systematic phonics instruction have **better comprehension** at the end of 2nd and 3rd grades. (Kilpatrick, 2015)
- Poorly developed word recognition skills are the most pervasive and debilitating source of reading **challenges**. (Adams, 1990; Perfetti, 1985; Share & Stanowich, 1995)
- John Hattie Effect Size for **Phonics Instruction** = **0.54**

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Decoding Single Syllable Words – How

- As soon as a **sound** is learned, incorporate the sound into **words**.
- **Model blending** of sounds into words.
- Provide an adequate amount of **practice** on decodable words to build word fluency.

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Decoding Single Syllable Words – How

- Utilize **instructional routines** to introduce specific types of words.

Examples of instructional routines

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Decoding Strategy for Short Words

1. Say the sounds.
2. Say the sounds fast. (quickly)
3. Say the word.
4. Ask yourself
Is it a real word?
Does it make sense?

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Example A - Sound by Sound Blending

Sounding Out VC, CVC, CVCC, CCVC words

mom top shop dot

1. (Write the first letter on the board.) What sound?
2. (Write the second letter on the board.) What sound?
3. (Move your hand under the two letters.) Blend it.
4. (Write the third letter.) What sound?
5. (Move your hand under the letters.) Blend the sounds.
6. What word?

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Example B - Continuous Blending

Sounding Out VC, CVC, CVCC, CCVC words

sip fit lip tip rim

1. When I touch a letter, I'll say its sound. I'll keep saying the sound until I touch the next letter. I won't stop between sounds.
2. My turn to sound out this word. (Touch under each letter and say the sound. Hold continuous sounds. Say stop sounds quickly. Don't stop between sounds.)
3. Sound out this word with me. (Touch under each letter.)
4. Your turn. Sound out this word by yourselves. (Touch under each letter.)
5. What word? (Glide your finger under the word.)

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Example C Sounding Out Words with Vowel Team

rain train pant paint sail seal

Precorrection Procedure

1. (Point to the underlined letters.) What sound?
2. (Point to the word.) What word?
3. (Have students reread the list without the precorrection.)
4. (Have individual students read the words or have them read the words to their partner.)

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Example D CVCE words – Sound Blending

like mine fit fine

1. (Point to the first letter.) What sound?
2. (Point to the vowel and final e.) What sound?
3. (Point to the consonant.) What sound?
4. (Glide finger under the word.) Blend it.
5. What word?

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Example E - Decoding Words with Onset Rime

1. (Point to rime.) What part? **an**
2. Get ready to read words that end with an.
3. (Point to new word.) What word? **ran**
4. (Point to next word.) What word? **fan**
5. (Continue with additional words.)
6. (Reread the list more rapidly.)

- Note: Reading “word families” reinforces spelling patterns within words and is an excellent way to build word reading fluency. Practice the “word family” until students are very fluent. Use choral reading and partner reading.

an
ran
fan
man
tan
pan
ban
can
Stan
plan

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High frequency rimes (phonograms)

| | | | | |
|------|-------|------|------|------|
| -at | -ell | -it | -ot | -ug |
| -an | -eat | -in | -op | -ump |
| -ap | -est | -ill | -ock | -unk |
| -ack | -ip | | -oke | -uck |
| -ail | -ice | | -ore | |
| -ain | -ine | | | |
| -ake | -ide | | | |
| -ale | -ick | | | |
| -ame | -ing | | | |
| -ash | -ink | | | |
| -ate | -ight | | | |
| -aw | | | | |
| -ay | | | | |

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Decoding Single Syllable Words – How

- Pair **decoding** and **encoding** of words.
 - Decoding and encoding rely on the same underlying knowledge. (Joshi, 2008 – 2009; Moats, 2005 – 2006)
 - Linking spelling and decoding instruction deepens children’s knowledge of the written system. (Brady 2012; Yopp, Hallie, & Yopp, 2011)

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Phonics and Word Knowledge

Decoding Multi-Syllabic Words

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Decoding of Multisyllabic Words – How - Pronunciation

- Rather than using rigid, rule-directed syllabication to divide words into parts, students are taught to recognize the parts in a flexible manner.
(Archer et al. 2003, 2006; Bhattacharya & Ehri, 2004)
- Putting words into “decodable chunks” using prefixes, suffixes, and vowels should be stressed.
(Archer et al. 2006)

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Example A Decoding of Multisyllabic Words (Loop, Loop, Loop Strategy)

Decoding of Multisyllabic Words (Loop, Loop, Loop Strategy)

(Preparation: Segment the word into decodable chunks. Add loops under the word to indicate decodable chunks.)

rabbit napkin kitten

1. (Move finger under the first part.) What part?
2. (Repeat for remaining parts.)
3. (Move finger quickly under the parts.) What part? What part?
What part?
4. What word?
5. Is that a real word?

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Example A Decoding of Multisyllabic Words (Loop, Loop, Loop Strategy)

Decoding of Multisyllabic Words (Loop, Loop, Loop Strategy)

(Preparation: Directly teach the pronunciation of prefixes and suffixes. Segment the word into decodable chunks. Be sure that prefixes and suffixes are separate parts. Draw loops to segment the words.)

instruction commitment remarkable

1. (Move finger under the first part.) What part?
2. (Repeat for remaining parts.)
3. (Move finger quickly under the parts.) What part? What part?
What part?
4. What word?
5. Is that a real word?

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Example B Decoding of Multisyllabic Words (Strategy Instruction)

Decoding of Multisyllabic Words (Strategy Instruction)

(Preparation: Directly teach students the pronunciation of prefixes and suffixes. Select multisyllabic words with focus affixes for decoding practice. Guide students in using the following strategy.)

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REWARDS Strategy

• Overt Strategy

- 1. Circle the prefixes.
- 2. Circle the suffixes.
- 3. Underline the vowels.
- 4. Say the parts of the word.
- 5. Say the whole word.
- 6. Make it a real word.

reconstruction

instruction

unconventionality

82

The Most Common Prefixes in English

| Prefix | Meaning | % of prefixed words | Examples |
|-------------|-----------------------|---------------------|---|
| un | not; opposite | 26% | uncover, unlock, unsafe |
| re | again; back | 14% | rewrite, reread, return |
| in/im/ir/il | not; into | 11% | incorrect, insert, inexpensive, illegal, irregular, inability |
| dis | away, apart, negative | 7% | discover, discontent, distrust |
| en/em | cause to | 4% | enjoy, endure, enlighten, entail |
| mis | wrong; bad | 3% | mistake, misread, misspell, misbehave |
| pre | before | 3% | prevent, pretest, preplan |
| pro | in favor of | 1% | protect, profess, provide, process |
| a | not; in, on, without | 1% | atypical, anemia, anonymous, apolitical, apathy |

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Most Common Suffixes in English

| Suffix | Meaning | % of prefixed words | Examples |
|----------------------|--------------------------|---------------------|---|
| s, es plural | more than one | 31% | movies, wishes, hats, amendments |
| ed past tense | in the past | 20% | walked, jumped, helped |
| ing present tense | In the present | 14% | walking, jumping, helping |
| ly adverb | how something is | 7% | quickly, fearfully, easily, happily, majestically, nonchalantly |
| er, or noun | one who, what/that/which | 4% | teacher, tailor, conductor, boxer, baker, survivor, orator |
| ion, tion, sion noun | state, quality; act | 4% | action, erosion, vision, invitation, conclusion, condemnation |
| able, ible adjective | able to be, can be done | 2% | comfortable, likable, enjoyable, solvable, sensible, incredible |
| al, ial adjective | related to, like | 1% | fatal, cordial, structural, territorial, categorical |

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Phonics and Word Recognition

Reading Irregular Words

85

Irregular words - What

Distinction between three terms

High frequency words

- Only 100 words account for approximately 50% of the words in English print.
- Only 13 words (a, and, for, he, is, in, it, of, that, the, to, was, you) account for 25% of words in print.

Irregular words

- Words that cannot be sounded out accurately using the most common sounds for graphemes.
- Many high frequency words are irregular.

Sight vocabulary

- Words that are recognized instantly.
- The quick and automatic recognition of most common words appearing in text is necessary for fluent reading.

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Irregular Words - What

• Irregular words in English

- Nearly all English words represent every sound in the spoken word, even if they represent some sounds irregularly.
- Most irregular words have only one irregular letter – sound association.

Examples: *been, from, both*

More than one irregular letter – sound association

one once sugar bouquet

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The Orthographic Mapping Process

| Phonological Long-Term Memory | | | |
|-------------------------------------|--|---|---|
| Whole-Word Pronunciation | /rēd/ | /sīd/ | /frūm/ |
| Pronunciation Phonemically Analyzed | /r/ /ē/ /d/ | /s/ /ī/ /d/ | /f/ /r/ /ū/ /m/ |
| Written Form of Word | red Regular Word 1:1 Letter to Sound | side Regular Word Not 1:1 Letter to Sound | from Exception Word 1:1 Letter to Sound |

Kilpatrick, 2015, page 107

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Example A

Irregular Words - Sounding Out

was

1. (Write the word on the board.) Sound out this word.
/waaaaasssss/
2. (Say the word in a sentence.) Tom */waaaaasssss/* in the room.
3. Is that a real word? *no*
4. What do we say? *was*
5. (*Carefully examine the word with the students, determining the "tricky" part of the word.*)

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Example B

Irregular Words - Memorization

give have love most whose

1. This word is _____.
2. What word? _____
3. Spell and read the word. _____
4. What letter is tricky? _____

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Phonics and Word Recognition

Reading Decodable Text

91

Decoding Text- What

A Critical Distinction

✓ Predictable Books

- Books in which you can predict words given the nature of the text.
- Excellent for teaching the structure of oral language.
- If used as initial reading materials, may promote guessing.

✓ Leveled Books

- Books that are labeled by level of readability.
- Useful in matching books to students who read over third grade level.
- Since leveled books do not control for the order of introduction of sounds or irregular words, less useful in beginning reading.

✓ Decodable Text

- Text material in which the students can read ALL the words because:
 - the words contain known sounds
 - the irregular words have been taught
 - the story words have been taught

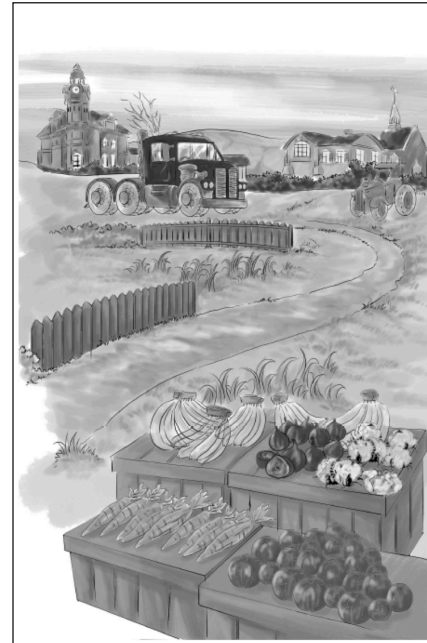
92

Decodable Text - Why

Decodable texts –

- Opportunity to apply what students are learning about the alphabetic code. (Cheatham & Allor, 2012)
- Decodable text prompts use of what students have learned. (Adam, 2009)

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Non-fiction

3. Planting Crops

A big plot of land with a lot of plants on it is said to be a crop. Crops are planted. Lots of plants can be crops: bananas, carrots, and melons. Cotton is a crop, as well. You have to get crops wet often. The sun helps crops get big. You cannot let pests kill the plants. Frost can kill crops as well. But you cannot stop frost. You just have to have luck.



Using Captions for Practice

- an egg in an egg cup
- a hug and a kiss
- on top of a rock
- a bag of nuts
- got the log hut
- a duck and a hen
- sit back to back

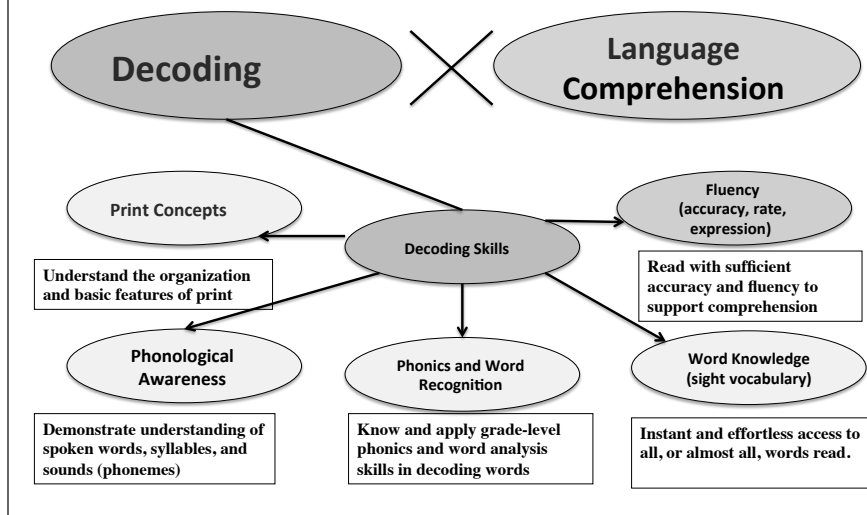
95

Word Knowledge

Sight Vocabulary

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Simple View of Reading



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Word Knowledge (sight vocabulary)

- Skilled readers have instant and effortless access to all, or almost all, words they read.
- In other words, skilled readers have a very large sight vocabulary.

Word Knowledge (sight vocabulary)

- **How do students remember words they no longer need to sound out?**
- **False Assumption:** Students use visual memory to remember words as they would in remembering the label for a book or table.
- **Research Conclusion:**
Brain activity is NOT the same for naming objects and reading words. (Kilpatrick, p. 30)

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Process – Brain to Text

Pronunciation (Whole Word)
↓
Break down into sound sequence
↓
Bond sound sequence onto letters
↓
Align sound sequence and letter sequence

Kirpatrick, 2015

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Word Knowledge (sight vocabulary)

- How do students remember words they no longer need to sound out?
- We input written words visually but **we do not store them visually**. Kilpatrick, p. 33
- Words are stored:
 - **orthographically** (spelling)
 - **phonologically** (pronunciation)
 - **semantically** (meaning)

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Word Knowledge (sight vocabulary)

- How do students remember words they no longer need to sound out?

Notes of interest:

- From second grade on, skilled readers **only need one to four exposures for a word to become a sight word**.
- The speed with which children in 1st and 2nd turn an unfamiliar word into a sight word is a **KEY PREDICTATOR** of those who will struggle later. (Kilpatrick, p. 35)

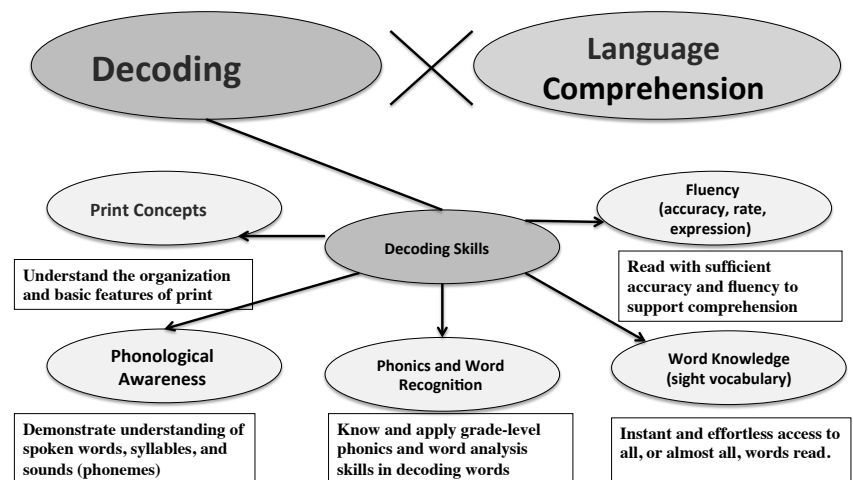
102

Fluency

accuracy, appropriate rate, expression

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Simple View of Reading



Fluency - What

- The ability to effortlessly read words accurately and quickly.
- The ability to read connected text accurately with appropriate rate and expression (prosody).
(Judson, Mercer, & Lane, 2000)

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Fluency - What?

- “The ability to read connected text rapidly, smoothly, effortlessly, and automatically with little conscious attention to the mechanics of reading such as decoding.”

(Meyer & Felton, 1999)

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2005 Hasbrouck & Tindal Oral Reading Fluency Data

Jan Hasbrouck and Gerald Tindal completed an extensive study of oral reading fluency in 2004. The results of their study are published in the technical report, "Oral Reading Fluency: 90 Years of Measurement," (brt.uoregon.edu/tech_reports.htm), and in the article, "Oral Reading Fluency Norms: A Valuable Assessment Tool..." in the April 2006 issue of *The Reading Teacher* (www.reading.org/publications/journals/RT/).

The table below shows the mean oral reading fluency of students in grades 1 through 8 as determined by Hasbrouck and Tindal's data.

You can use the information in this table to draw conclusions and make decisions about the oral reading fluency of your students. **Students who score 10 or more words below the 50th percentile using the average score of two unpracticed readings from grade-level materials need a fluency-building program.** In addition, teachers can use the table to set the long-term fluency goals for their struggling readers.

Average weekly improvement is the average words per week growth you can expect from a student. It was calculated by subtracting the fall score from the spring score and dividing the difference by 32, the typical number of weeks between the fall and spring assessments. For grade 1, since there is no fall assessment, the average weekly improvement was calculated by subtracting the winter score from the spring score and dividing the difference by 16, the typical number of weeks between the winter and spring assessments.

| Grade | Percentile | Fall WCPM* | Winter WCPM* | Spring WCPM* | Avg. Weekly Improvement** |
|-------|------------|------------|--------------|--------------|---------------------------|
| 1 | 90 | | 81 | 111 | 1.9 |
| | 75 | | 47 | 82 | 2.2 |
| | 50 | | 23 | 53 | 1.9 |
| | 25 | | 12 | 28 | 1.0 |
| | 10 | | 6 | 15 | 0.6 |
| 2 | 90 | 106 | 125 | 142 | 1.1 |
| | 75 | 79 | 100 | 117 | 1.2 |
| | 50 | 51 | 72 | 89 | 1.2 |
| | 25 | 25 | 42 | 61 | 1.1 |
| | 10 | 11 | 18 | 31 | 0.6 |

| Grade | Percentile | Fall WCPM* | Winter WCPM* | Spring WCPM* | Avg. Weekly Improvement** |
|-------|------------|------------|--------------|--------------|---------------------------|
| 3 | 90 | 128 | 146 | 162 | 1.1 |
| | 75 | 99 | 120 | 137 | 1.2 |
| | 50 | 71 | 92 | 107 | 1.1 |
| | 25 | 44 | 62 | 78 | 1.1 |
| | 10 | 21 | 36 | 48 | 0.8 |
| 4 | 90 | 145 | 166 | 180 | 1.1 |
| | 75 | 119 | 139 | 152 | 1.0 |
| | 50 | 94 | 112 | 123 | 0.9 |
| | 25 | 68 | 87 | 98 | 0.9 |
| | 10 | 45 | 61 | 72 | 0.8 |
| 5 | 90 | 166 | 182 | 194 | 0.9 |
| | 75 | 139 | 156 | 168 | 0.9 |
| | 50 | 110 | 127 | 139 | 0.9 |
| | 25 | 85 | 99 | 109 | 0.8 |
| | 10 | 61 | 74 | 83 | 0.7 |
| 6 | 90 | 177 | 195 | 204 | 0.8 |
| | 75 | 153 | 167 | 177 | 0.8 |
| | 50 | 127 | 140 | 150 | 0.7 |
| | 25 | 98 | 111 | 122 | 0.8 |
| | 10 | 68 | 82 | 93 | 0.8 |
| 7 | 90 | 180 | 192 | 202 | 0.7 |
| | 75 | 156 | 165 | 177 | 0.7 |
| | 50 | 128 | 136 | 150 | 0.7 |
| | 25 | 102 | 109 | 123 | 0.7 |
| | 10 | 79 | 88 | 98 | 0.6 |
| 8 | 90 | 185 | 199 | 199 | 0.4 |
| | 75 | 161 | 173 | 177 | 0.5 |
| | 50 | 133 | 146 | 151 | 0.6 |
| | 25 | 106 | 115 | 124 | 0.6 |
| | 10 | 77 | 84 | 97 | 0.6 |

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Table 4: Compiled ORF Norms 2017

| Grade | %ile | Fall WCPM* | Winter WCPM* | Spring WCPM* |
|-------|------|------------|--------------|--------------|
| 1 | 90 | | 97 | 116 |
| | 75 | | 59 | 91 |
| | 50 | | 29 | 60 |
| | 25 | | 16 | 34 |
| | 10 | | 9 | 18 |
| 2 | 90 | 111 | 131 | 148 |
| | 75 | 84 | 109 | 124 |
| | 50 | 50 | 84 | 100 |
| | 25 | 36 | 59 | 72 |
| | 10 | 23 | 35 | 43 |
| 3 | 90 | 134 | 161 | 166 |
| | 75 | 104 | 137 | 139 |
| | 50 | 83 | 97 | 112 |
| | 25 | 59 | 79 | 91 |
| | 10 | 40 | 62 | 63 |
| 4 | 90 | 153 | 168 | 184 |
| | 75 | 125 | 143 | 160 |
| | 50 | 94 | 120 | 133 |
| | 25 | 75 | 95 | 105 |
| | 10 | 60 | 71 | 83 |
| 5 | 90 | 179 | 183 | 195 |
| | 75 | 153 | 160 | 169 |
| | 50 | 121 | 133 | 146 |
| | 25 | 87 | 109 | 119 |
| | 10 | 64 | 84 | 102 |
| 6 | 90 | 185 | 195 | 204 |
| | 75 | 159 | 166 | 173 |
| | 50 | 132 | 145 | 146 |
| | 25 | 112 | 116 | 122 |
| | 10 | 89 | 91 | 91 |

*WCPM = words correct per minute

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- <http://www.brtprojects.org/publications/technical-reports/>
- Hasbrouck, J., Tindal, G. (2017). *An update to compiled ORF norms*. (Technical Report No. 1702). Eugene, OR: Behavioral Research and Teaching, University of Oregon.

109

Factors Effecting Rate

1. Proportion of words in text that are recognized as “**sight words**”.
Sight words include any word that readers have practiced reading sufficiently often to be read from memory.” (Ehri, 2002)
2. **Speed of decoding strategies** used to determine the pronunciation of unknown words.
3. **Speed** with which **word meanings** are identified.
4. **Speed** at which **overall meaning** is constructed.

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Fluency - Why

- Fluency is related to **reading comprehension**.
(Cunningham & Stanovich, 1998; Fuchs, Fuchs, & Maxwell, 1988; Jenkins, Fuchs, Espin, van den Broek, & Deno, 2000; Rasinski, 2011; Samuels, 2006; Shanahan, 2010)
- When students read fluently, decoding requires **less attention**. Attention can be given to comprehension.
(Samuels, Schermer, & Reinking, 1992)

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Fluency - Why

- Laborious decoding and low fluency results in **little reading**. (Moats, 2001)
- An accurate, fluent reader will read more.
(Cunningham & Stanovich, 1998; Stanovich, 1993)
- **The rich get richer. The poor get poorer.**
(Stanovich, 1986)

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Fluency - Why

- Fluent readers **complete assignments** with more ease.
- Fluent readers will also perform better on **reading tests**.
- Fluency is a **critical component** of reading instruction.

(Chard, Vaughn, & Tyler, 2002; Kuhn & Stahl, 2000; National Reading Panel, 2000)

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Fluency

Procedure #1. Provide extensive reading practice.

Utilize procedures such as augmented silent reading, choral reading, cloze reading, and partner reading that promote maximum practice for all students.

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Fluency

Procedure #2. Encourage wide independent reading.

- Read interesting text at reading level to build fluency.
(Carnegie, 2010)
- To build fluency students should read materials that are not too challenging but not too easy. (Moats, 2011)

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Fluency

Procedure #3. Provide repeated reading activities. John Hattie Effect Size for Repeated Reading = 0.67

Repeated Reading

- Student reads the same material a number of times (at least three)
- General procedure
 1. **Cold-timing** (one minute timing without prior practice)
 2. **Practice** (rereading of material to increase fluency)
 3. **Hot-timing** (one minute timing)
- Often coupled with the following interventions
 - Modeling done by teacher or listening to tape
 - Self-monitoring of progress through graphing

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After the Rain

Part 1

12 Chuck, Kim, and Nick played with the ship. "I will be glad
13 when this rain stops," Chuck said. "Ships and trains are OK,
23 but I think it will be fun to check on that shed on the trail."
38 "Look!" said Kim. "Is that a faint ray of sun I see in
51 the west?" Just then, the rain stopped.
58 "Let's go!" said Nick. "You stick the ship and the train
69 back on the shelf, and I will tell my mom."



Part 2

79 Chuck and Kim sped up the wet trail. "Wait! Wait!"
89 Nick said with a pant. Kim and Chuck sat on a gray rock
102 and waited. The shed was just up the trail.
111 "My dad said that this trail led to the train tracks when
123 my mom and dad were kids," Nick said. "He said that mail
135 going on the next train was kept in the shed."
145 "Well, let's go check the mail shed then," said Kim.



Part 3

155 "It's just junk," Chuck said. "I see paint cans, a paintbrush,
166 a bent tray, pails, and lots of dust."
174 "This is not junk," said Nick as he held up a mail sack.
187 "Look. This sack is from the Clay Trail Mail Run. This must
199 be Clay Trail. Dad said mail was kept in this shed. I bet it will
214 shock Dad to see the mail sack. He may faint!"
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Fluency - How Small Group Procedure

1. Cold-timing

- Time the students for one minute as they whisper read.
- Have them underline difficult words and circle the last word read.
- Have them determine the correct number of words read.

2. Accuracy-Practice

- Chorally read the material with your students.
- You may select to do this more than one time.

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Fluency - How Small Group Procedure (Continued)

3. Fluency Building – Practice

- Have students whisper-read as you time them for one minute.
- Students should try to read beyond cold-timing.

4. Hot-timing

- Have students exchange papers with their partners.
- Have the first reader read for a minute as the partner underlines any errors and circles the past word.
- Repeat the same step with the second reader.
- Have partners determine the number of correct words read for their partner.
- Have students graph their cold and hot timings.

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Big Picture Review Critical Foundation Skills

- Print Concepts
- Phonological Awareness
- Phonics and Word Recognition
- Word Knowledge (Sight Vocabulary)
- Fluency

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Thank You

May you thrive as an educator.