



College and Career Readiness Standards for English Language Arts

Planting the Seeds of Reading Comprehension: Teaching the Foundations of Reading

A position paper describing the latest research on foundational reading skills instruction for young children, with strategies to support teaching in the classroom.

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About the Author



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Dr. Reutzel is the author of more than 225 published research reports, articles, books, book chapters, and monographs in reading, early literacy, and early childhood education and has received more than \$16 million dollars in research and program development funding. His research on early literacy in grades K–3 earned him a Special Recognition Award for Lifetime Contributions to Literacy in Utah. Ray is also a member of the *i-Ready*® Technical Advisory Committee.



Introduction

Research has clearly shown that young students' early reading success is highly dependent on knowledgeable primary grade teachers who understand and teach reading foundational skills (Cooper & Costa, 2012; Strickland, et al., 2002; Ushomirsky, 2011). I so admire these teachers who come to school every day prepared to practice and improve their early literacy instruction.

As any primary grade teacher knows, early reading doesn't sound like adult, proficient reading. Plant a seed, and the first thing you see will be a tiny, inauspicious sprout. A good gardener knows that this is the beginning of the development of a beautiful flower and so tends to its growth with sunlight, water, and fertilizer. In just the same way, the best primary grade teachers assure their young students' acquisition of foundational reading skills. Not surprisingly, these classroom gardeners get the best results when they use the right tools and methods.

Reading foundational skills allow a child's reading comprehension to blossom.

Reading foundational skills allow a child's reading comprehension to blossom. Although these skills are very different from reading comprehension, they are nevertheless necessary to it. We also recognize that teaching reading foundations won't necessarily result in reading comprehension. However, if a child can't fluently identify words, the chances of reading and understanding sentences, paragraphs, or whole texts for comprehension are practically zero. Conversely, just because a child can identify words fluently doesn't inevitably result in comprehension of sentences, paragraphs, or whole texts. Reading comprehension must be taught in combination or integrated with the teaching of reading foundational skills.

In this paper, I am going to talk about six areas of reading foundations that should be part of every early reading classroom:

1. Concepts about Print
Page 4

2. Letter Recognition
Page 6

3. Phonological Awareness
Page 10

4. Phonics
Page 13

5. Word Recognition
Page 18

6. Oral Reading Fluency
Page 20

Children acquire print awareness from seeing print around them, having books shared with them, and seeing print used in everyday life.

Teaching Concepts about Print


Concepts about print involves recognizing how print works and what to look at when reading a page: print not pictures, left-to-right and top-to-bottom directionality, punctuation marks, letters, words, bolded print.

Why It Matters

As children learn to read, they need to develop clear understandings about basic print concepts such as letters, words, sentences, directionality (top, bottom, left, right, first, last, etc.), and book handling, and be able to connect these concepts to the terms used to refer to them (Clay, 1972, 1991). In 2008, the *Developing Early Literacy: Report of the National Early Literacy Panel* identified *concepts about print* as one of 10 variables that were predictive of later reading proficiency.

Where do children acquire print awareness? From seeing print around them, having books shared with them, and seeing print used in everyday life (Hiebert, 1981). Research has consistently shown environmental print to be useful in teaching concepts about print and helping make children aware of print in their world (Kuby & Aldridge, 1994; Neuman & Roskos, 1993; Orellana & Hernandez, 1999; Proudfoot, 1992; Reutzel et al., 2003; Vukelich, 1994; West & Egley, 1998; Xu & Rutledge, 2003). Children from middle-class homes arrive at first grade having experienced 1,000 to 1,700 hours of one-on-one storybook reading, as well as another 1,000+ hours of print experience in their homes and communities. In comparison, children coming to first grade from homes below poverty level typically have experienced only 25 hours of storybook reading and less than 200 hours of general guidance about the forms and nature of print (Adams, 1990).

Teaching Tips That Work

 **Bring environmental print into the classroom.** Environmental print is the print children see in their community, school, and home environments. Examples include signs in the school building and on school grounds such as STOP and EXIT. Other examples include business and store signs and words on familiar products such as McDonald's, Cheerios, Diet Coke, and so forth. Gather a collection of product labels and logos. Work with children to create "I Can Read" or easy-to-read books such as "My Favorite Foods," "I Spy: Signs I See," "A Trip to the Supermarket," and "My Favorite Things." Remember that children may not yet be familiar with basic labeling terms.



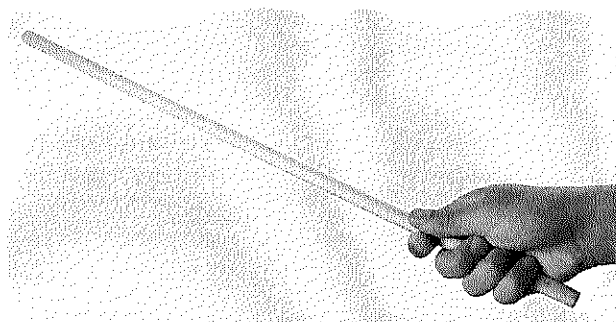
Integrate concepts about print instruction into reading experiences.

An *embedded in print* approach to teaching concepts about print in preschools and kindergarten significantly improves early reading progress (Reutzel et al., 1989). In an embedded approach, the teacher operates on enlarged print as if the entire group of children was all seated in her lap. Children hear their teacher using unfamiliar concepts about print terminology and at the same time, see her pointing, framing, highlighting, matching, etc., to refer to the print features. One of my favorite teaching techniques to use is *verbal punctuation*. Teachers and students read a text aloud, giving each punctuation mark a sound and a hand motion. An engaging and humorous example of verbal punctuation can be found on YouTube® by searching for Victor Borge's phonetic punctuation.

During shared reading, expert teachers use a variety of *print referencing techniques* to direct children's eyes to print concepts (Justice & Ezell, 2004). Point smoothly underneath print on a page to demonstrate for children that:

- print, not pictures, is how the message of reading is carried
- one begins reading at a particular point on a page
- one reads left to right, sweeping the eye back across the page to the next line below and proceeding from top to bottom on a page.

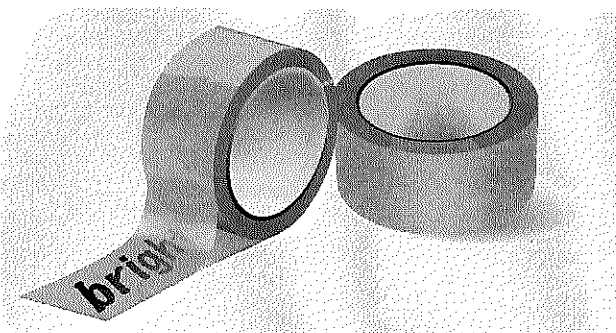
On the other hand, word-by-word pointing underneath print demonstrates for children the concept of word and voice–print matching, sometimes called *finger-point reading* (Ehri & Sweet, 1991; Reutzel, 1995; Reutzel and Cooter, 2015). When selecting a pointer, it is important to keep distractions to a minimum. Avoid using elaborate pointers—those with footballs, trees, or moons on the end. The best pointers are simple.



A plain wooden dowel will hold children's attention as a pointer, without distracting them from the task at hand.

Once upon a time there
was a little red hen who
shared a big red cottage
with a goose, **cat,** and

Fixed or sliding print frames direct children's eyes during shared reading to the print on the page.



Colored, transparent highlighter tape and arrows direct young students to the features of print under study.

The cat napped on the chair.

Sentence strips featuring text from a shared reading can be a focal point for instruction in print concepts.



"Children who enter kindergarten knowing many letter names tend to have an easier time learning to read than do children who have not learned these skills."

—Early Childhood–Head Start Taskforce

Teaching Letter Recognition

Letter recognition involves recognizing letters and associating the letter symbol with its name and sound.

Why It Matters

The National Early Literacy Panel (2008) found that letter-name and sound knowledge is the single best predictor of reading success in the primary grades. In the report titled *Teaching Our Youngest*, the Early Childhood–Head Start Taskforce (2002) stated, "Children who enter kindergarten knowing many letter names tend to have an easier time learning to read than do children who have not learned these skills" (p. 21). Kindergarten and early first grade teachers need to develop fluent letter recognition in their students—letter perception and pairing a sound with the visual image of a letter that is both rapid and accurate (Reutzel, 2015).

Teaching Tips That Work



Consider teaching the letters in alphabetical order. There is no particular order for teaching the alphabet letters that is firmly backed up by research. With young children, teachers can introduce the letters in the order of the alphabet, allowing learners to link the letters of the alphabet to their learning of alphabetical order. Teachers can, however, sequence letter learning instruction in other ways.

Singing the alphabet song while viewing a display of uppercase and lowercase letters is an effective way to focus instruction on alphabetic knowledge.



Use children's names to support letter recognition. Some teachers prefer to teach letter recognition using students' names. This can be a powerful source of motivation for learning letter names among 4-year-olds (Huang & Invernizzi, 2012; Jones & Reutzel, 2012; Justice et al., 2006). An excellent classroom resource for teaching children letter names and sounds using their own names is Krech's *Fresh and Fun: Teaching with Kids' Names* (2000).

Listening to alphabet books read aloud is yet another way to focus instruction on alphabetic knowledge. (Pictured at left.)





Get an early start on reading words. You can use letter names and sounds to get children started quickly with blending and spelling words. Choose one to three vowels along with some high-frequency consonants to start out with. Continue teaching the remaining letter names and sounds of the alphabet in order of their frequency of use.



Have children search to find letters. One engaging way for students to *search* for letters is to play an adaptation of the game “I Spy.” Required materials are several copies of the same book and an overhead transparency and washable ink pen for each student.

- Tell students to place the transparency over the selected book page.
- Next, teachers ask students to look carefully at the print on the page by saying, “I spy with my little eye _____.”
- Fill in the blank with a letter that occurs several times on the page—for example, “five lowercase letter *ms*.”
- To increase the challenge, tell children you will set a timer for one minute. Challenge them to accurately and quickly mark all of the *ms* on the page in the time allotted.
- Once children have learned a few letters, they can assume the role of “spy.”
- You can repeat the process using different letters on the same page.



Don’t forget to have children write letters. They also need to *write* letters as their teachers dictate them (Graham & Harris, 2013; NELP, 2008). This is an important practice for ensuring that children can identify uppercase and lowercase letters quickly and accurately (Graham & Harris, 2013; NELP, 2008; Reutzel, 2015). You can use a game called “Beat the Clock.” This game requires that children have paper and pencil or, better yet, a gel board or whiteboard and dry erase markers for writing.

- Set a timer for three minutes.
- Tell students, “Write an uppercase *b*.”
- Count off 10 seconds and then say, “Write a lowercase *m*.”
- Continue the process with a variety of letters until the timer alarm sounds.
- Then have children show you their letters. Make brief notes about each child’s performance on the dictation task.
- Then tell them, “Let’s see if we can beat the clock.” This time, count off 9 seconds between each letter dictated. This slightly faster pace challenges children to write the dictated letters more quickly, yet legibly and accurately.
- A simple graph can be created for each child showing his or her times across rounds of the game.

You can use letter names and sounds to get children started quickly with blending and spelling words.



There is no question that letters are best learned through "distributed practice and review over time" rather than from massed practice.



"One a Day" helps children learn their letters. I suggest teaching letters at a pace of about one each day in kindergarten (Jones & Reutzel, 2012). To help children remember information, you can use the *law of 10/20* (Cepeda et al., 2009; Cepeda et al., 2007; Cepeda et al., 2006).

If one wants to remember something, whether colors, dates, letters, words, math facts, or other information for six months or more, then a spaced review should take place at intervals of 10 to 20 percent of the time period for which the item is to be remembered.

Because six months is equivalent to 183 days, the law of 10/20 suggests that a **complete review** of the 26 letters taught in the first five weeks of school should occur at intervals of every 18 to 36 days (10 to 20 percent of 183 days). Reviewing all 26 letters **every five weeks** falls within the 10 to 20 percent range. There is no question that letters are best learned through "distributed practice and review over time" rather than from massed practice. Learning five letters a week, with spaced reviews every five weeks for a total of seven review cycles in the kindergarten year, is far more effective in helping children learn to quickly and accurately identify letters and sounds (Jones & Reutzel, 2012; Reutzel, 2015).



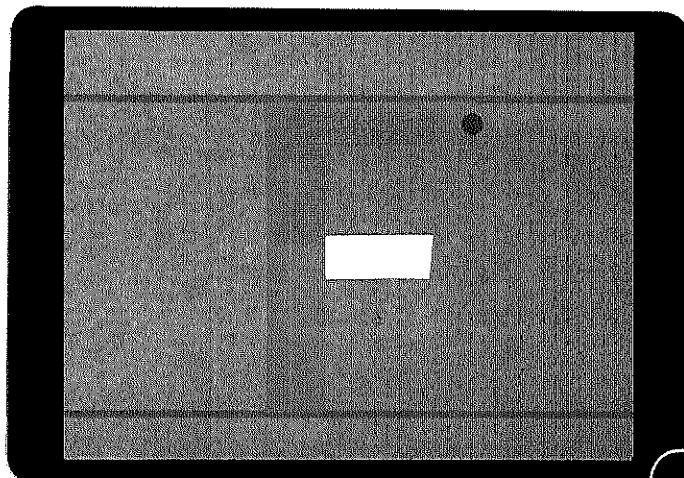
Some letters need more instruction and practice than others. Since not all letters are created equal in terms of usage (Huang & Invernizzi, 2012; Jones & Reutzel, 2012), it makes sense to spend more time on some letters than others. Once teachers are able to teach letters at a pace of one per day, I suggest giving letters that are less frequently used or don't have the sound of the letter in the name more time, perhaps two days, and teaching letters that are highly exposed in spoken and written language at a pace of about two letters per day (Jones & Reutzel, 2012).



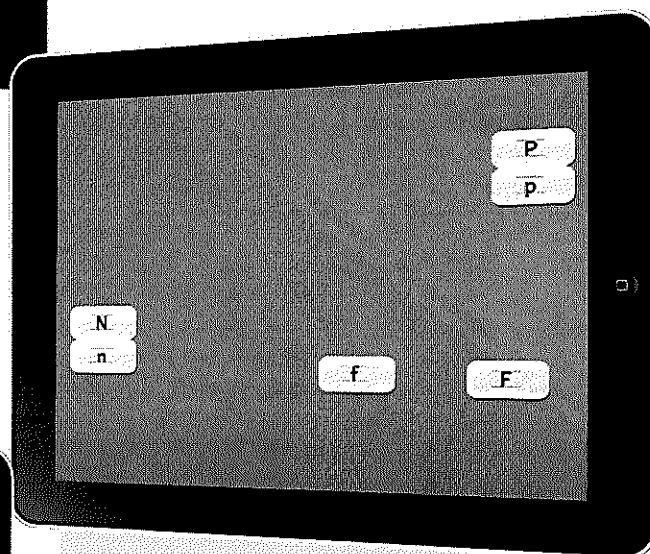
Finally, remember to use a combination of learning activities. Lessons should include learning activities that require letter recognition, naming, associating the symbol with a sound, forming letters, telling the letter apart from other letters, and categorizing letters into upper and lower case (Piasta & Wagner, 2010). Remember that in spite of its importance, alphabet knowledge instruction should not require an hour per day in pre-K and K classrooms (Neuman, 2006).

Support for Letter Learning in *i-Ready*

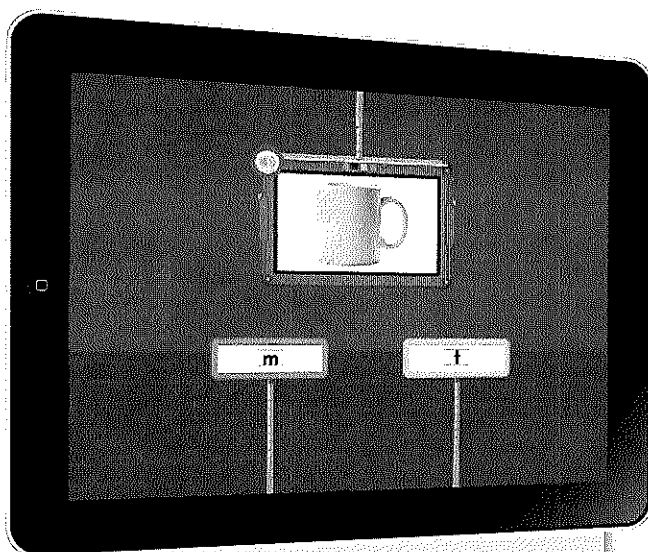
Letter learning activities in *i-Ready* include the following.



Activities that support forming letters



Activities that involve discriminating letters and matching upper and lowercase of the same letter



Activities that ask children to recognize the letter that stands for a sound in a pictured word

Research shows
that young children
must develop
phonological
and phonemic
awareness to learn
to read proficiently.

Teaching Phonological Awareness

Phonological and phonemic awareness involve the understanding that spoken language can be broken down into smaller units such as sentences, phrases, words, syllables, onsets, rimes, and phonemes (sounds).

Why It Matters

Research shows that young children must develop phonological and phonemic awareness to learn to read proficiently (e.g., Adams, 2001; Armbruster, Lehr, & Osborn, 2001; Mesmer & Williams, 2014; NELP, 2008; NRP, 2000; Reutzel, 2015). Marilyn Adams (2001) describes that phonological awareness proceeds in a stepwise fashion:

Step 1. The perception of individual words in spoken language

Step 2. The discernment of the syllables within spoken words

Step 3. The awareness that spoken syllables are made up of onsets (all the sounds in the syllable *before* the vowel) and rimes (the vowel sound in a syllable and every sound following it)

Step 4. The awareness of individual sounds, or phonemes, in spoken words

Step 5. The ability to manipulate (delete and substitute) individual sounds in spoken words

From these research findings, PA skills progress from the whole (words in sentences) to the parts of words (syllables, onsets and rimes, and then phonemes in words). Phonological awareness and phonemic awareness may sound similar, but they are not the same thing.

Phonological awareness is a much broader term that pertains to hearing and manipulating units of spoken language such as words, syllables, and rhyming elements.

Phonemic awareness pertains specifically to the ability to hear and manipulate individual or single phonemes in spoken words and syllables.

Another common misunderstanding is that phonemic awareness is the same thing as phonics. I like to think of phonemic awareness as *phonics in the dark*, meaning that one can hear the sounds but see no letters. Phonics, on the other hand, involves seeing written symbols, hearing spoken sounds, and linking the two. But children must first learn to hear sounds (phonemic awareness) before they can learn to associate sounds with letters (phonics). As children develop their phonemic awareness skills, it is appropriate and effective to link instruction with letters.

Teaching Tips That Work

Numerous studies have confirmed the effectiveness of several kinds of learning activities to help children develop phonological and phonemic awareness (Adams, 1990; Blevins, 1997; NELP, 2008). The following are important reminders for teachers as they plan phonological awareness instruction:

1. *Foster motivation to learn in an atmosphere of playfulness and fun.*
2. *Encourage interaction among children through group activities.*
3. *Curiosity about language and experimentation should be encouraged.*
Try spoonerisms where you exchange initial sounds in two words, for example, "Once upon a time, deep in the woods, there lived a family of bee threars (three bears)." Almost always, children will hear these changes and want to correct the teacher's reading!
4. *Be prepared for differences among students in their developmental acquisition of phonemic awareness.*
5. *Quickly move from PA instruction only to including PA instruction linked with letters (phonics), as this is particularly effective.*
6. *Use digital games and technologies to help students match sounds to pictures and eventually to letters to provide much-needed practice and feedback on their ability to hear individual sounds in spoken words.*



Spend enough time but not too much on phonemic awareness.

Research provides the following guidance on how much is enough and how much is too much.

- Use assessment tools to determine areas of need and save time.
- Teach up to 18 hours of instruction total, but not more (*National Reading Panel, 2000*).
- Short lessons work best (five minutes or less).
- Focus on one or two PA skills at a time.

Once students acquire a PA skill, instruction can move to the next PA skill, beginning with spoken word awareness and moving to manipulation of sounds in spoken words.

Numerous studies have confirmed the effectiveness of several kinds of learning activities to help children develop phonological and phonemic awareness.

Instructional time in kindergarten is best spent on blending and segmenting tasks rather than on rhyming tasks to develop phonemic awareness.



Have children practice counting words. Oral word counting activities can help students develop the ability to detect and isolate words in speech.

- For example, dictate a sentence such as *The children were playing baseball*.
- Children clap the number of words (5) with the teacher.
- Next, ask the children to push a plastic marker from a group of ten plastic markers at the bottom of their desks to the top to represent each word they hear (5).
- After this, prompt the children to hold up the number of fingers representing the number of words they heard in the sentence.



Practice breaking words into syllables. Segmenting is also important. Consider the following segmenting sequence:

"I will say the whole word—shadow. Next, I will stretch the word to count the speech parts—ssshhhaaa doohh. I count two. Now you try it. I will say the whole word—mustache. Now, let's stretch the word together and clap the speech parts—mus-tache. How many times did we clap?"

Yeh (2003) found that instructional time in kindergarten is best spent on blending and segmenting tasks rather than on rhyming tasks to develop phonemic awareness. Segmenting and blending spoken words sound-by-sound or phoneme-by-phoneme is the most abstract task and is the first and only level of phonemic awareness. Segmenting individual sounds in spoken words is a necessary prerequisite to spell. Blending, on the other hand, is a necessary prerequisite to read.



Don't forget onset and rime. The next phonological awareness level calls for segmenting and blending onsets and rimes. For example, in the word *sat*, *s* is the onset and *-at* is the rime. Similarly, in the first syllable of the word *turtle*, *t* is the onset and *-ur* is the rime. This activity is easily done in the context of poetry (teaching *rimes* with *rhymes*).



Practice categorizing, removing, adding, and substituting sounds. The final phonemic awareness skills taught are phoneme manipulation activities such as the phonemic categorization (*cat*, *can*, *ball*—which one doesn't have the same sound at the beginning of the word?), deletion (*cat*, take away the */t/*; what's left */ca/*), addition (*at*, what would we have if I add a */k/* sound? *cat*), and substitution tasks (*cat*, take away the */k/* sound and replace it with an */r/* sound. What word do we have now? *rat*).

Teaching Phonics

Phonics, or the alphabetic principle, helps children link spoken sounds to written symbols in systematic ways (letter–sound relationships) and apply this knowledge to decode words in print and spell words.

Why It Matters

The alphabetic principle is an understanding that specific letters or letter combinations represent specific sounds in spoken words; for example, the awareness that the /s/ sound in speech is represented by the letter *s* in print. Developing an understanding of the alphabetic principle is a major achievement that allows students to learn to decode and spell printed words using phonics.

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Research confirms that explicit and systematic phonics instruction is more effective than nonsystematic phonics instruction or programs that ignore phonics instruction altogether (NELP, 2008; NRP, 2000; Shanahan & Lonigan, 2010). When delivered as part of a comprehensive reading program—one that includes expansive vocabulary and comprehension instruction, reading of interesting, motivating, and complex texts, and writing—taught by a skillful teacher, phonics instruction helps students become enthusiastic lifelong readers.

Teaching Tips That Work



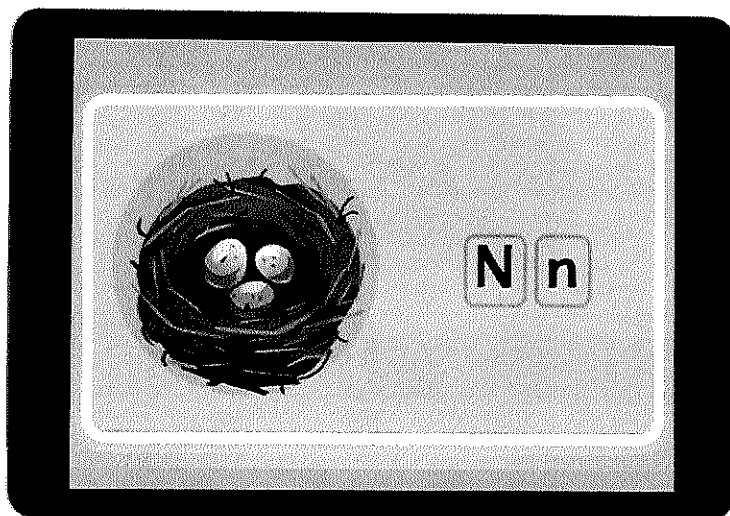
Five Effective Approaches to Phonics Instruction

There are five effective approaches for providing systematic phonics instruction. Research by the National Reading Panel (2000) found there wasn't a single approach to phonics instruction that was significantly superior to any others. Consequently, the wise teacher will make use of all of these approaches when teaching phonics.

1. **Synthetic phonics** shows students how to recognize letters or letter combinations and then represent these using specific speech sounds and blend these speech sounds together to pronounce words in print (“sounding out”).
2. **Embedded phonics** focuses on using phonics skills on words in texts selected for reading. The problem with embedded phonics instruction is that it can result in an incomplete, scattershot approach to learning and applying phonics (NRP, 2000, p. 8).
3. **Analogy-based phonics** is a variation of onset and rime instruction that encourages students to use their knowledge of word families, parts, chunks, or phonograms to identify new words that have the same word parts. For example, students learn to pronounce *light* by applying their prior knowledge of the *-ight* rime from three words they already know: *right*, *might*, and *night*.
4. **Analytic phonics** encourages students to discover letter–sound relationships. For example, *Stan*, *steam*, and *story* all include the *st* word element (*st* is a consonant blend).
5. **Phonics through spelling and writing** encourages students to segment the spoken sounds in words into phonemes and then write the letters that represent those sounds to spell the words. Several recent studies demonstrate that learning phonics through writing and spelling is extremely effective for younger learners (Cabell, Tortorelli, & Gerde, 2013; VanNess, Murnen, & Bertelsen, 2013).

5 Effective Approaches to Support Phonics Instruction with *i-Ready*

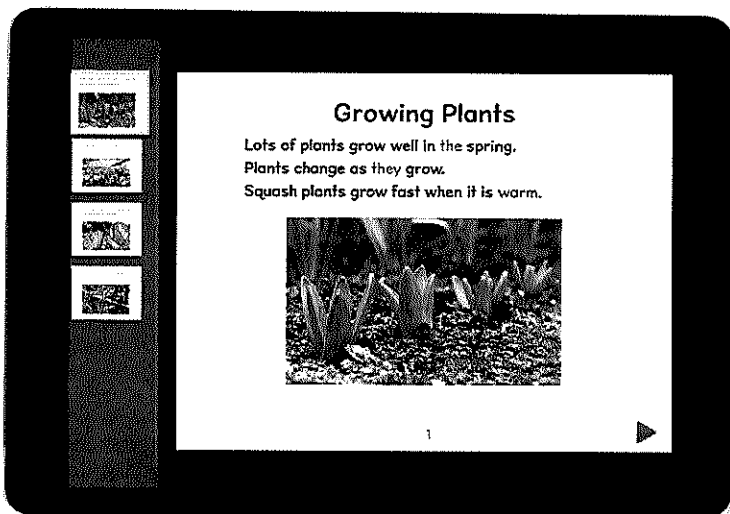
New *i-Ready* Phonics lessons integrate the five evidence-based approaches to teaching phonics.



1

Synthetic Phonics: Explicit instruction and practice activities focus on discrete letter-sound relationships, strategies for blending sounds, and decoding words.

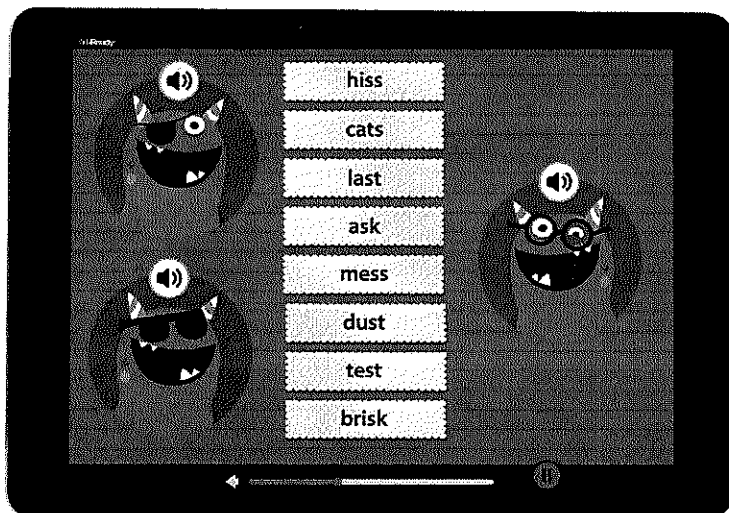
Left: Students earn Decoder Cards as they learn sound-spellings.



2

Embedded Phonics: Through context sentences and highly decodable texts, students practice applying their phonics knowledge as they read connected texts. Every *i-Ready* Phonics lesson provides opportunities for students to focus on the target skill in texts that help them make meaning of the words they're learning to decode.

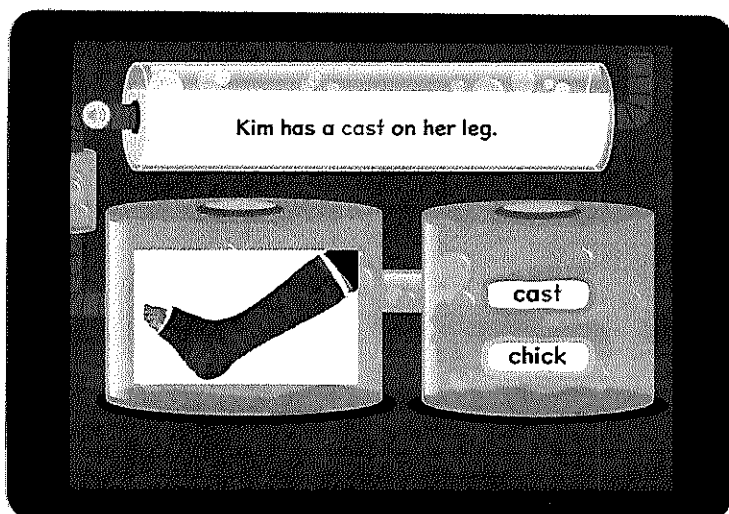
Left: This informational text is part of a Grade 1 i-Ready Phonics lesson.



3

Analogy-Based Phonics: Students learn to use known word families and word patterns to identify unknown words in playful word-building, sorting, and comparative activities.

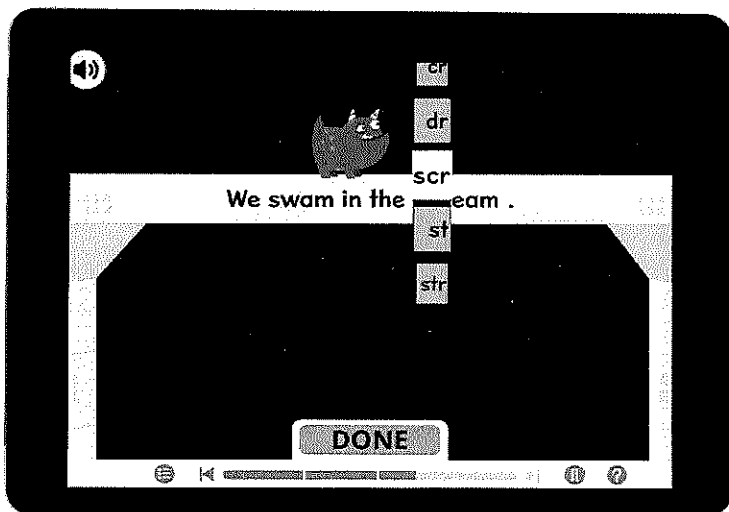
Left: In this activity, students sort words by identifying which share the same target elements.



4

Analytic Phonics: These activities support students in identifying phonetic patterns or in discriminating between them.

Left: In this activity, students distinguish between the end blend st and the ck spelling for the /k/ sound.



5

Phonics through Spelling: Students practice choosing letters to spell words in isolation, as well as working with spelling patterns within the context of sentences.

Left: In this spelling activity, students practice working with spelling patterns within the context of sentences.

One of the most important skills for younger readers to learn early on is how to blend letter sounds ... to gain approximate pronunciations they can match to words they already know how to say.

Strategies for Teaching Blending



Model how to blend letter sounds. One of the most important skills for younger readers to learn early on is how to **blend** letter sounds in printed words to gain approximate pronunciations they can match to words they already know how to say. The blending process is not easy and requires careful, sustained teacher explanation, modeling, and guided practice. The blending process occurs on two different levels: sequential and hierarchical.

Sequential blending means blending the sounds of letters in a single syllable from left to right in a temporal sequence.

Hierarchical blending means breaking words into syllables, applying sequential blending to the syllables, and then blending the syllables into words with more than one syllable.



Teach sequential blending of single-syllable words. In sequential blending, the reader scans each letter of a single-syllable word, moving from left to right, saying the sound of each letter and finally blending the letter sounds together to pronounce the word. To teach this skill, teachers must be very explicit in modeling and guiding students' practice.

Students practice decoding many more single-syllable CVC words using this strategy with guidance until they are able to fluently and accurately blend CVC words on their own. After accomplishing sequential blending of CVC words, they continue with consonant digraphs, blends, and clusters as well as vowel digraphs and diphthongs, *r*-controlled vowels, and VCe word patterns. Digital games and instructional programs can support students as they learn to sequentially blend sounds in syllables.



For multisyllable words, teach hierarchical blending. Young readers are often overwhelmed by the daunting task of decoding multisyllabic words because these words often contain more than seven letters, which begins to overtax students' working memory. Some students find multisyllabic words so difficult that they either try to avoid decoding them or just guess.

Hierarchical blending begins by dividing a whole word into pronunciation units around the vowels. Blending then moves to the familiar sequential-blending process within each syllable and then back up to the level of blending individual syllables to say the word. Thus, hierarchical blending begins with the whole word → syllables → letters → syllables and → the word again. To teach readers how to hierarchically blend letters and sounds to say multisyllable words, teachers need to carefully go over each step in this process.

Guide students as they practice, beginning with two- and three-syllable words and then progressing onto four- and five-syllable words that do not use prefixes or suffixes. Finally, teach students prefixes and suffixes explicitly and place a listing on a classroom wall. Then provide guided practice in the hierarchical blending strategy described here for words containing known prefixes and suffixes (e.g., *na-tion*) until students can accurately and fluently blend multisyllabic words on their own.



Teach sequential segmenting of single-syllable words. The student stretches out a spoken single-syllable word to hear the individual sounds. As the word is stretched, the student listens for and counts each sound in the word from first to last. Next, the student writes a letter for each sound that is heard in the stretched-out word to spell the word.

Guide students to practice many more single-syllable CVC words using this strategy until they can accurately and fluently segment CVC words and spell them on their own. Continue with consonant digraphs, blends, and clusters as well as vowel digraphs and diphthongs, *r*-controlled vowels, and VCe word patterns. Once children can proficiently apply the strategy, they can spell many of the words they want to use in their kindergarten and first grade writing. Digital games and instructional programs can support students as they learn to sequentially segment sounds in syllables and spell words.



For multisyllable words, teach hierarchical segmenting. Similar to hierarchical blending, hierarchical segmenting moves from saying whole words → dividing these into syllables or pronunciation units → hearing individual sounds → representing these sounds with letters to say syllables and → then combining syllable spellings to spell the entire word.

Guide students to practice many more multisyllabic words from two- to four- and five-syllable words without prefixes or suffixes. Then, teach prefixes and suffixes explicitly if this has not already taken place.

Guide students as they practice, beginning with two- and three-syllable words and then progressing onto four- and five-syllable words that do not use prefixes or suffixes.



Learning to recognize a small set of words called high-frequency words easily will get most children about 50 percent of the way toward early automatic and fluent word recognition.

Word Recognition

Teaching children to recognize words fluently boils down to repeatedly modeling and having students use three strategies—blending, segmenting, and **sight-word recognition**.

Why It Matters

In 1944, Thorndike and Lorge conducted word frequency counts of 4.5 million words taken from American magazine articles. They found that 25 words accounted for 1.5 million words of the total 4.5 million, or roughly 33 percent of the words an adult would read.

Learning to recognize a small set of words called *high-frequency words* easily will get most children about 50 percent of the way toward early automatic and fluent word recognition (Zeno, Ivens, Millard, & Duvvuri, 1995). For example, the word *the* occurs roughly 5 percent of the time in most English texts written for the adult population. Once children can effortlessly recognize the word *the*, they have mastered 5 percent of all the reading they will ever do as adults!

Teaching Tips That Work



Teach irregular words by sight. Many of the 25 highest-frequency words are irregular, meaning they are not decodable using typical phonics skills. For instance, imagine blending letter sounds to pronounce the word *the*. Either one would blend the three letter sounds /t/ /h/ /ē/, or perhaps say the consonant digraph /th/ using the voiced or unvoiced sounds and then blend that with the sound /ē/. However, blending these sounds together does not produce the conventional pronunciation of the word *the*. Thus, the word *the* is best taught by focusing students' attention on how the word "looks" and having them commit it to memory through repetitious exposures of various types (learning the word "by sight").



Use the five-step sight word method. Teach children a strategy for recognizing and remembering high-frequency sight words. This five-step sight word strategy draws on the work of E. Horn (1919) and P. Cunningham (1980):

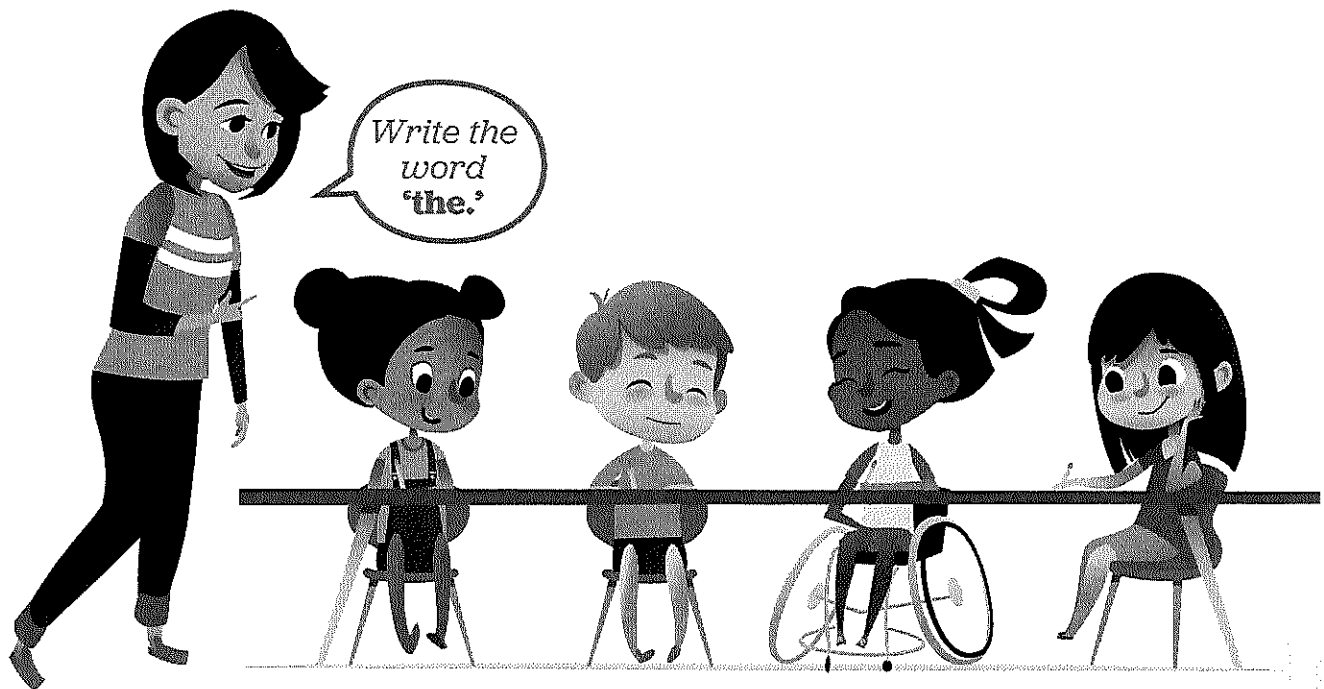
1. See the word.
2. Say the word.
3. Spell the word.
4. Write the word.
5. Check the word.



Teach the “drastic strategy.” P. Cunningham (1980) elaborated on the five-step method for certain hard-to-learn word spellings. She identified these as words that are difficult to decode, highly frequent, and have abstract or no meanings that were difficult to remember, such as *were*, *with*, *that*, or *what*. She called her strategy the “drastic strategy.” Use the strategy with the whole class or a small group.

1. Dictate the word *the*.
2. Have children write the word using lapboards, whiteboards, or another type of writing surface.
3. Ask for choral responses showing children’s dictations after writing each word.
4. Watch for children who copy from others, and make quick notes about those who are not able to write words from dictation for follow-up instruction.
5. Write the word on a 3” x 5” unlined card. Students cut the word into its letters. Students scramble the letters to spell the word three times.

In this way a new word becomes part of the child’s listening, speaking, reading, and writing vocabularies to ensure permanent learning.



It is important to emphasize that there is no reading comprehension without reading fluency.

Oral Reading Fluency

Reading fluency has the following features:


1. accurate, effortless, and automatic word identification (i.e., requiring little conscious attention)
2. appropriate age- or grade-level reading speed or *reading rate*
3. appropriate use of expression or *prosody* in the voice when reading aloud
4. correct text phrasing, sometimes called *chunking*.


Additionally, most reading experts also agree that fluent readers simultaneously comprehend what they read (*Samuels, 2007, 2012; National Reading Panel, 2000; Paige, Rasinski, Magpuri-Lavell, & Smith, 2014*).

Why It Matters

It is important to emphasize that there is no reading comprehension without reading fluency. LaBerge and Samuels's (1974) **automaticity** theory explains how reading fluency works. *Automaticity* implies that the human mind is limited in its ability to shift attention between decoding and comprehending. If readers get too bogged down in decoding and word recognition, they will not be able to pay attention to the author's message. Consequently, students must become automatic decoders and word recognizers to be able to shift the majority of their attention to comprehending a text.

Teaching Tips That Work

 **Model fluent reading.** Expose students to rich and varied models of fluent oral reading (*Rasinski, 2010, 2012; Rasinski et al., 2011; Reutzel, 2012; Stahl, 2004*). Occasional modeling of inaccurate, slow, or expressionless reading also seems to alert struggling students to the specific characteristics of fluent reading. In other words, some students need to be shown what fluency *is* and *is not* to understand what fluent reading is (*Reutzel, 2012*). Fluent reading can be assisted by a variety of digital technologies. For example, when a student doesn't know a word, technology can allow students to click on the unknown word and get a pronunciation and/or a meaning to allow reading to continue without too much disruption.

 **Use repeated oral reading.** There is considerable evidence that *repeated oral reading* of the same text for at least three practice repetitions leads to automaticity—fast, accurate, and effortless word recognition (*Ates, 2013; Gellert, 2014; Manning, Lewis, & Lewis, 2010; NRP, 2000; Samuels, 2012*). The key is to find methods to keep repeated oral reading exercises motivating, such as the use of choral reading.

Choral reading is one method. There are many benefits to choral reading whether it is whole class, small group, or in pairs. There are several common formats for choral readings of text.

Choral Reading Formats:

Unison Reading: Everyone reads together.

Echo Reading: The teacher or a student reads a passage aloud and then everyone else “echoes” by repeating it.

Antiphonal Reading: Two groups take turns reading passages aloud (usually a sentence or two).

Reading in Rounds: Groups read simultaneously but not in unison, starting at different times on a staggered schedule.

Partner reading is another method. Also called *paired or buddy reading*, this allows students who may be struggling to read aloud with more fluent partners (Olson, 2014).

- Partners take turns reading aloud an assigned passage to one another.
- The more developed reader going first, providing the model of fluent reading.
- The second reader then attempts the passage based on the partner’s modeling.
- The more fluent reader offers feedback on how to achieve greater fluency, and the less fluent reader rereads the passage until he or she can do so independently.

Readers of about the same ability are sometimes paired for this exercise, with the teacher providing the initial modeled reading and the two “buddies” then taking turns reading to each other and offering feedback until each can read the passage fluently. Partner reading is ideal when you want to differentiate text levels to meet students’ individual needs (Little, McCoach, & Reis, 2014).



Choose texts with fewer unfamiliar words. Research shows that choosing texts that contain fewer unfamiliar words and balance the number of high-frequency words and decodable words helps children learn. When children read in such texts, they made weekly gains of over 3.4 words correct per minute (Menon & Hiebert, 2005). Carefully selected texts, in a very real way, are scaffolding teachers can use to support students’ early oral reading fluency practice (Brown, 1999).



Have students perform Reader’s Theatre. Researchers have found that engaging students in reader’s theatre performances during an entire school year leads to significant gains in reading rates and improved expression. This is perhaps the most engaging and academically productive reading practice strategy, in terms of the research (Griffith & Rasinski, 2004; NRP, 2000; Sloyer, 1982; Young & Rasinski, 2009). Young and Rasinski (2009) found that engaging students in reader’s theatre performances during an entire school year led to more than double gains in reading rates, from 63 wcpm to 128 wcpm—36 percent increased expression! You can find a broad selection of reader’s theatre scripts online.

Engaging students in reader’s theatre performances during an entire school year leads to significant gains in reading rates and improved expression.



Conclusion

Teaching reading foundations lays the groundwork for success in later reading and writing. Although such teaching in the past has been largely mind dulling “drill and skill” instruction, the tips we have provided here are intended to be engaging, active, and applied to real reading and writing. The foundations of reading aren’t always glamorous or the end goal. They are on the other hand what they claim—an important means to an end—a beautiful house of reading and writing can only be constructed on these important reading foundations. Teachers who provide repeated, short, engaging, and applied reading foundation lessons will note how much more quickly their young students take to reading and writing as both enjoyable and accomplishable.

We wish every dedicated primary grade teacher to find the enjoyment of teaching reading foundations tied to real applications in reading texts with children and in writing words, phrases, sentences, captions, stories, poems, and other writing products. When students use these foundations in reading and writing, they are empowered and enjoy the real reasons humans read and write.

References

- Adams, M. J. (1990). *Beginning to read: Thinking and learning about print—a summary*. Urbana, IL: Center for the Study of Reading.
- Adams, M. J. (2001). Alphabetic anxiety and explicit, systematic phonics instruction: A cognitive science perspective. In S. B. Neuman & D. K. Dickinson (Eds.), *Handbook of early literacy research* (pp. 66–80). New York: Guilford Press.
- Armbruster, B. B., Lehr, F., & Osborn, J. (2001). *Put reading first: The research building blocks for teaching children to read*. Washington, DC: U.S. Department of Education.
- Ates, S. (2013). The effect of repeated reading exercises with performance-based feedback on fluent reading skills. *Reading Improvement*, 50(4), 158–165.
- Blevins, W. (1997). *Phonemic awareness activities for early reading success*. New York: Scholastic.
- Brown, K. J. (1999). What kind of text—for whom and when? Textual Scaffolding for Beginning Readers. *The Reading Teacher*, 53(4).
- Cabell, S. Q., Tortorelli, L. S., & Gerde, H. K. (2013). How do I write...? Scaffolding preschoolers’ early writing skills. *The Reading Teacher*, 66(8), 650–659.
- Cepeda, N. J., Coburn, N., Rohrer, D., Wixted, J. T., Mozer, M. C., & Pashler, H. (2009). Optimizing distributed practice: Theoretical analysis and practical implications. *Experimental Psychology*, 56(4), 236–246.
- Cepeda, N. J., Pashler, H., Vul, E., Wixted, J. T., & Rohrer, D. (2006). Distributed practice in verbal recall tasks: A review and quantitative synthesis. *Psychological Bulletin*, 132(3), 354–380.
- Cepeda, N. J., Vul, E., Rohrer, D., Wixted, J. T., & Pashler, H. (2007). Spacing effects in learning: A temporal ridge of optimal retention. *Psychological Science*, 19(11), 1095–1102.
- Clay, M. M. (1972). *Sand and stones*. Exeter, NH: Heinemann.
- Clay, M. M. (1991). *Becoming literate: The construction of inner control*. Portsmouth, NH: Heinemann.
- Cooper, D., & Costa, K. (2012). *Increasing the effectiveness and efficiency of existing public investments in early childhood education: Recommendations to boost program outcomes and efficiency*. Washington, DC: Center for American Progress.
- Cunningham, P. M. (1980). Teaching were, with, what, and other “four-letter” words. *The Reading Teacher*, 34, 160–163.
- Early Childhood–Head Start Taskforce. (2002). *Teaching our youngest: A guide for preschool teachers and child care and family providers*. Washington, DC: U.S. Departments of Education and Health and Human Services.
- Ehri, L. C., & Sweet, J. (1991). Fingerpoint-reading of memorized text: What enables beginners to process the print? *Reading Research Quarterly*, 26, 442–462.
- Gellert, A. S. (2014). Does repeated reading predict reading development over time? A study of children from Grade 3 to 4. *Scandinavian Journal of Psychology*, 55(4), 303–310. doi:10.1111/sjop.12132
- Graham, S., & Harris, K. (2013). How do you write? Writing for young children. In D. R. Reutzel (Ed.), *The handbook of research-based practice in early education* (pp. 380–394). New York, NY: Guilford Press.
- Griffith, L. W., & Rasinski, T. V. (2004). A focus on fluency: How one teacher incorporated fluency with her reading curriculum. *The Reading Teacher*, 58(2), 126–137.
- Hiebert, E. (1981). Developmental patterns and interrelationships of preschool children’s print awareness. *Reading Research Quarterly*, 16, 236–260.
- Horn, E. (1919). Principles of method in teaching spelling as derived from scientific investigation. In G. M. Whipple (Ed.), *Fourth report of the Committee on Economy of Time in Education, Eighteenth Yearbook of the National Society for the Study of Education*. Bloomington, IL: Public School Publishing.
- Huang, F. L., & Invernizzi, M. A. (2012). The association of kindergarten entry age with early literacy outcomes. *The Journal of Educational Research*, 105, 431–441.
- Jones, C. D., & Reutzel, D. R. (2012). Enhanced alphabet knowledge instruction: Exploring a change of frequency, focus, and distributed cycles of review. *Reading Psychology: An International Quarterly*, 33(5), 448–464.
- Justice, L. M., Bowles, R. P., & Skibbe, L. E. (2006). Measuring preschool attainment of print concept knowledge: A study of typical and at-risk 3- to 5-year-old children using item response theory. *Language, Speech and Hearing Services in Schools*, 37, 224–235.
- Justice, L. M., & Ezell, H. K. (2004). Print referencing: An emergent literacy enhancement strategy and its clinical applications. *Language Speech and Hearing Services in Schools*, 35(2), 185–193.
- Krech, B. (2000). *Fresh & fun: Teaching with kids’ names (Grades K–2)*. New York: Scholastic.
- Kuby, P., & Aldridge, J. (1994). Direct vs. indirect environmental print instruction and early reading ability in kindergarten children. *Reading Psychology*, 18(2), 91–104.

- LaBerge, D., & Samuels, S. J. (1974). Toward a theory of automatic information processing in reading. *Cognitive Psychology*, 6, 293–323.
- Little, C. A., McCoach, D. B., Reis, M. (2014). Effects of differentiated reading instruction on student achievement in middle school. *Journal of Advanced Academics*, 25, 384–402.
- Manning, M., Lewis, M., & Lewis, M. (2010). Revisiting silent sustained reading: An update of the research. In E. H. Hiebert, & D. R. Reutzel (Eds.), *Silent reading revisited: New directions for teachers and researchers* (pp. 112–128). Newark, DE: International Reading Association.
- Menon, S., & Hiebert, E. H. (2005). A comparison of first graders' reading with little books or literature-based basal anthologies. *Reading Research Quarterly*, 40(1), 12–36.
- Mesmer, H. A. E., & Williams, T. O. (2014). Modeling first grade reading development. *Reading Psychology: An International Quarterly*, 35(5), 468–495.
- National Early Literacy Panel (NELP). (2008). *Developing early literacy: Report of the National Early Literacy Panel*. Washington, DC: National Institute for Literacy.
- National Reading Panel (NRP). (2000). *Report of the National Reading Panel: Teaching children to read*. Washington, DC: National Institute of Child Health and Human Development.
- Neuman, S. B. (2006). N is for nonsensical: Low-income preschool children need content-rich instruction, not drill in procedural skills. *Educational Leadership*, (October), 28–31.
- Neuman, S. B., & Roskos, K. (1993). Access to print for children of poverty: Differential effects of adult mediation and literacy-enriched play settings on environmental and functional print tasks. *American Educational Research Journal*, 30(1), 95–122.
- Oison, P. C. (2014). Weaker readers as experts: Preferential instruction and the fluency improvement of lower performing student tutors. *Reading Improvement*, 51(1), 32–40.
- Orellana, M. F., & Hernandez, A. (1999). Talking the walk: Children reading urban environmental print. *The Reading Teacher*, 52(6), 612–619.
- Paige, D. D., Rasinski, T., Magguri-Lavell, T., & Smith, G. S. (2014). Interpreting the relationships among prosody, automaticity, accuracy, and silent reading comprehension in secondary students. *Journal of Literacy Research*, 46(2), 123–156.
- Piasta, S. B., & Wagner, R. K. (2010). Developing early literacy skills: A meta-analysis of alphabet learning and instruction. *Reading Research Quarterly*, 45(1), 8–38.
- Proudfoot, G. (1992). Pssst! There is literacy at the laundromat. *English Quarterly*, 24(1), 10–11.
- Rasinski, T. V., Reutzel, D. R., Chard, D., & Linan-Thompson, S. (2011). Reading fluency. In M. L. Kamil, P. D. Pearson, E. B. Moje, & P. P. Afflerbach (Eds.), *Handbook of Reading Research* (Vol. IV, pp. 286–319). New York, NY: Routledge.
- Rasinski, T. V. (2010). *The fluent reader: Oral & silent reading strategies for building fluency*. New York, NY: Scholastic, Inc.
- Rasinski, T. V. (2012). Why reading fluency should be hot! *The Reading Teacher*, 65(8), 516–522.
- Reutzel, D. R. (1995). Finger-Point Reading and Beyond: Learning About Print Strategies (LAPS) *Reading Horizons*, 35(4), pp. 310–328.
- Reutzel, D. R. (2012). Hey teacher, when you say fluency, what do you mean: Developing fluency and meta-fluency in elementary classrooms. In T. V. Rasinski, C. Blachowicz, & K. Lems (Eds.), *Fluency instruction: Research-based best practices* (2nd ed., pp. 114–140). New York, NY: Guilford Press.
- Reutzel, D. R. (2015). The Inside Track: Early literacy research: Findings primary grade teachers will want to know. *The Reading Teacher*, 69(1), 12–22.
- Reutzel, D. R., & Cooter, R. B. Jr. (2015). *Teaching Children to Read: The Teacher Makes the Difference. Seventh Edition and E-Book Edition*. Boston, MA: Allyn and Bacon/Pearson. ISBN 978-0-13-354866-6.
- Reutzel, D. R., Oda, L. K., & Moore, B. H. (1989). Developing print awareness: The effect of three instructional approaches on kindergartners' print awareness, reading readiness, and word reading. *Journal of Reading Behavior*, 21(3), 197–217.
- Reutzel, D. R., Young, J. R., Fawson, P. C., Morrison, T. G., & Wilcox, B. (2003). Reading environmental print: The role of concepts of print in discriminating young readers' responses. *Reading Psychology*, 24(2), 123–162.
- Samuels, S. J. (2007). The DIBELS tests: Is speed of barking at print what we mean by fluency? *Reading Research Quarterly*, 42(1), 563–566.
- Samuels, S. J. (2012). Reading fluency: Its past, present and future. In T. V. Rasinski, C. Blachowicz, & K. Lems (Eds.), *Fluency instruction: Research-based best practices* (2nd ed., pp. 3–16). New York, NY: Guilford Press.
- Shanahan, T., & Lonigan, C. J. (2010). National Early Literacy Panel: A summary of the process and the report. *Educational Researcher*, 39(4), 279–285.
- Sloyer, S. (1982). *Reader's theatre: Story dramatization in the classroom*. Urbana, IL: National Council of Teachers of English.
- Stahl, S. (2004). What do we know about fluency? In P. McCardle, & V. Chhabra (Eds.), *The voice of evidence in reading research* (pp. 187–211). Baltimore: Paul H. Brookes.
- Strickland, D. S., Snow, C., Griffin, P., Burns, M. S., & McNamara, P. (2002). *Preparing our teachers: Opportunities for better reading instruction*. Washington, DC: John Henry Press.
- Thorndike, E. L., & Lorge, I. (1944). *Thorndike-Lorge magazine count*. New York: Columbia University.
- Ushomirsky, N. (2011). *Stuck schools revisited: Beneath the averages*. Washington, DC: Education Trust.
- VanNess, A. R., Murnen, T. J., & Bertelsen, C. D. (2013). Let me tell you a secret: Kindergartners can write! *The Reading Teacher*, 66(7), 574–585.
- Vukelich, C. (1994). Effects of play interventions on young children's reading of environmental print. *Early Childhood Research Quarterly*, 9(2), 153–170.
- West, L. S., & Egley, E. H. (1998). Children get more than a hamburger: Using labels and logos to enhance literacy. *Dimensions of Early Childhood*, 26(3–4), 43–46.
- Xu, S. H., & Rutledge, A. L. (2003). Chicken starts with Ch! Kindergartners learn through environmental print. *Young Children*, 58(2), 44–51.
- Yeh, S. (2003). An evaluation of two approaches for teaching phonemic awareness to children in Head Start. *Early Childhood Research Quarterly*, 18(1), 511–529.
- Young, C., & Rasinski, T. (2009). Implementing reader's theatre as an approach to classroom fluency instruction. *The Reading Teacher*, 63(1), 4–13.
- Zeno, S. M., Ivens, S. H., Millard, R. T., & Duvvuri, R. (1995). *The educator's word guide*. New York: Touchstone Applied Science.



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