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

Educator's Practice Guide Summary • WHAT WORKS CLEARINGHOUSE™

The four evidence-based recommendations in this WWC practice guide support teachers in developing students' foundational reading skills.

Introduction

Students need instruction in foundational reading to successfully develop literacy skills. The *Foundational Skills to Support Reading for Understanding in Kindergarten Through 3rd Grade* practice guide from the What Works Clearinghouse (WWC) presents recommendations educators can use to help students improve their literacy skills in the early grades. The recommendations focus on:

- Developing foundational reading skills that enable students to read words,
- Relating those words to their oral language, and
- Reading connected text with sufficient accuracy and fluency to understand what was read.

This summary highlights the recommendations and supporting evidence described in the full practice guide. It also includes a suggested timeline for implementing the recommendations. The guide suggests that the recommendations should be implemented in the sequence in which they are presented, with adjustments based on students' abilities and needs. For more information, practical tips, and classroom examples, download your free copy of the guide.

Recommendations in this practice guide:

1. Teach students academic language skills, including the use of inferential and narrative language, and vocabulary knowledge.
2. Develop awareness of the segments of sound in speech and how they link to letters.
3. Teach students to decode words, analyze word parts, and write and recognize words.
4. Ensure that each student reads connected text every day to support reading accuracy, fluency, and comprehension.

Timeline across grades K–3

Grade K	Grade 1	Grade 2	Grade 3
Recommendation 1			
Recommendation 2			
		Recommendation 3	
		Recommendation 4	

Recommendation 1.
Teach students academic language skills, including the use of inferential and narrative language, and vocabulary knowledge.

Academic language is a critical component of oral language. Academic language skills enable students to understand the formal structures and words found in books and school, such as *summarize*, *describe*, and *connect*. Types of academic language skills include the use of inferential language, narrative language, and academic vocabulary words. Inferential language instruction supports students' ability to think analytically and to understand text that connects ideas from multiple contexts. Students with more advanced narrative language skills can follow increasingly intricate series of events, such as stories, historical events, phenomena in nature, and instructions. By guiding students to develop their academic language skills, teachers can mitigate some of the challenges that students encounter when learning to comprehend text.

How to carry out the recommendation

1. **Engage students in conversations that support the use and comprehension of inferential language.** Develop students' inferential language—such as predicting, problem-solving, hypothesizing, or contrasting—with conversations before, during, and after read-alouds or other activities. Use open-ended questions to challenge students to think about the messages in both narrative and informational texts and how those messages apply to the world around th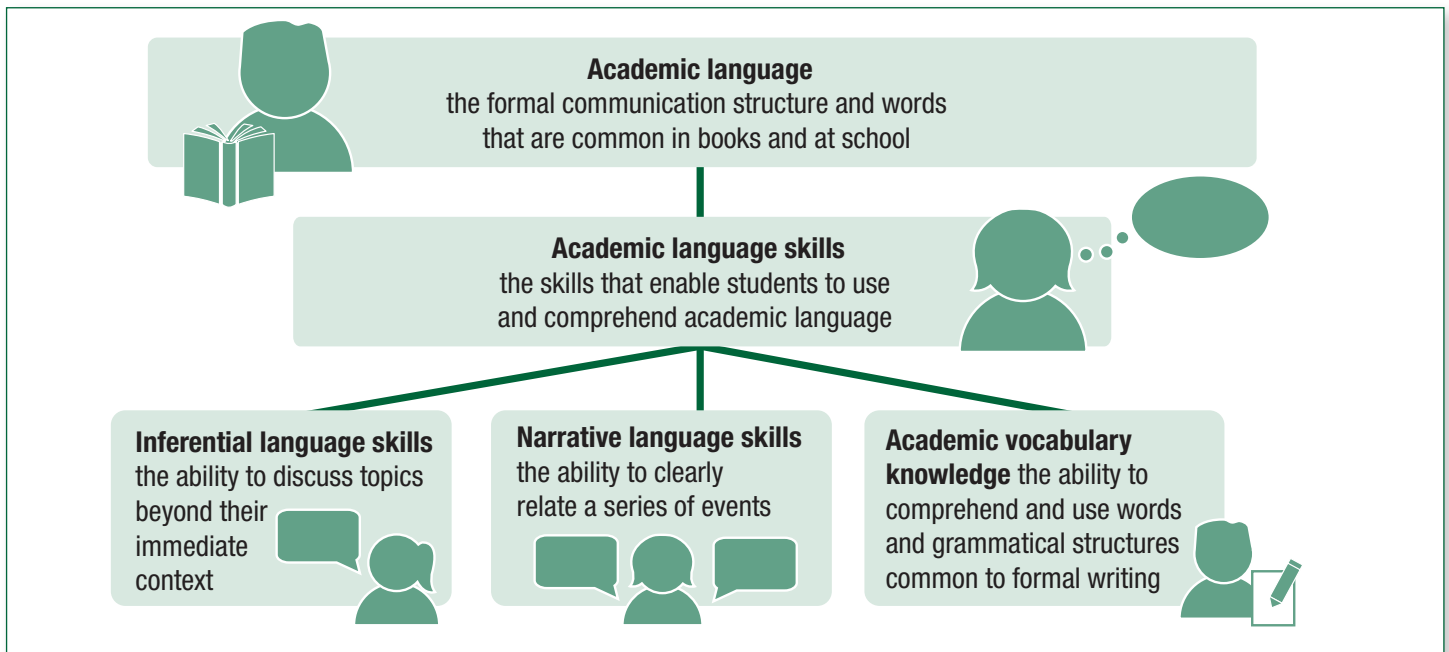em—by connecting events to their own lives, hypothesizing causal relationships, or solving problems. Teachers should model how to provide reasoned answers that fully address the questions and illustrate critical thinking. Prompt students to include additional detail; to connect the targeted idea and their response; and to answer with general statements that are not tied to the specific characters, events, or facts presented in the text.

2. **Explicitly engage students in developing narrative language skills.** Teach narrative language skills to help readers organize information in a logical sequence, as well as to connect that information using appropriate complex grammatical structures. Students can learn complex grammatical structures (such as compound sentences), elements of linguistic structure (such as verb phrases), and elements of story grammar (such as plot and setting) and the specific elements of narrative language that are used to describe experiences or events during whole-class or small-group lessons. Students can develop narrative language skills both before they learn basic text reading skills and while they are in the process of mastering those skills. Introduce students to each new element or structure, model how to use the element to connect and expand ideas, and then provide continued opportunities for students to practice using the new elements. Support students' use of the elements by scaffolding their responses. Engage students in the use of narrative language through activities that ask them to predict or summarize a story or factual information or to develop detailed descriptions.

3. **Teach academic vocabulary in the context of other reading activities.** Introduce students to academic vocabulary that is relevant in many

subject areas, including words or grammatical rules that support content that students are reading or learning. Appropriate words are those that will occur frequently throughout the school year and in a variety of contexts and are likely unfamiliar to most students (for example, *investigate*). After introducing students to new words, encourage deeper understanding by providing extended opportunities for them to use and discuss the

words. Activities that support deeper understanding allow students to make connections between a new vocabulary word and other known words, relate the word to their own experiences, differentiate between correct and incorrect uses of the word, and generate and answer questions that include the word. Ensure that students encounter new academic vocabulary words or phrases in many different contexts throughout the day and year.

Defining academic language skills

Academic language
the formal communication structure and words that are common in books and at school

Academic language skills
the skills that enable students to use and comprehend academic language

Inferential language skills
the ability to discuss topics beyond their immediate context

Narrative language skills
the ability to clearly relate a series of events

Academic vocabulary knowledge the ability to comprehend and use words and grammatical structures common to formal writing

Recommendation 2.
Develop awareness of the segments of sound in speech and how they link to letters.

Teaching students to recognize and manipulate the segments of sound in words and to link those sounds to letters is necessary to prepare them to read words and comprehend text.[1] The ability to isolate sounds and then link those sounds to letters will help students read about 70 percent of regular monosyllabic words, such as *fish*, *sun*, and *eat*.[2] Teachers should begin the instruction described in this recommendation as soon as possible. Once students know a few consonant and vowel sounds and their corresponding letters, they can start to sound out and blend those letters into simple words, which is discussed more in Recommendation 3.

How to carry out the recommendation

1. **Teach students to recognize and manipulate segments of sound in speech.** Teach students how to recognize that words are made up of individual sound units. Demonstrate that sentences can be broken into words and then that some words can be broken into smaller words. Have students practice identifying individual words in sentences or compound words. Next, demonstrate how words can be broken into syllables. Once students can break words into syllables, teach them to recognize even smaller units within a syllable. Finally, teach students to isolate and manipulate individual phonemes, the smallest units of sound in a word.

Dividing compound words

> **Teacher:** You can also break some words into smaller words. What do you get if you take the *cow* out of *cowboy*?
>
> **Student:** *Boy*?
>
> **Teacher:** That's right!
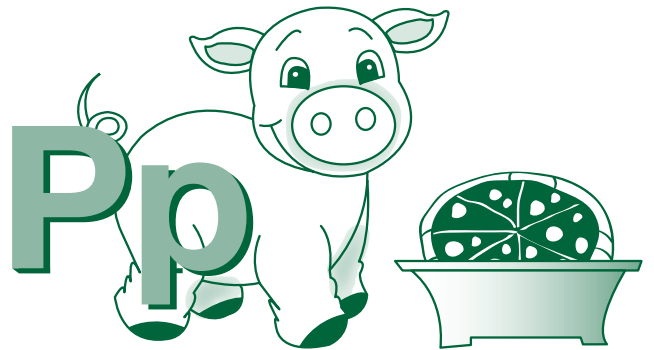
2. **Teach students letter–sound relations.**
   Once students have learned to isolate phonemes in speech, teach them each letter of the alphabet and its corresponding sounds, working with a few phonemes at a time. Present consonants and short vowel sounds represented by single letters first because these appear frequently in words students will encounter in the early stages of reading. Introduce consonant blends (e.g., *fl*, *sm*, *st*), common two-letter consonant digraphs (e.g., *sh*, *th*, *ch*), then teach long vowels with silent *e*, and finally two-letter vowel teams (vowel digraphs such as *ea* and *ou*). For each phoneme, begin by naming the letter or letters that represent the phoneme (e.g., connecting the letter *p* to the sound that the letter makes or identifying the letters *s* and *h* for the sound *sh* makes). Introduce the letters in both uppercase and lowercase. Next, show a memorable picture of a familiar, regular word containing that phoneme (e.g., *pig*). For each picture, tell students a story that incorporates the corresponding sound of the letter so that they remember the character and the sound when they see the letter in print. Ensure that students continue to practice with each phoneme.

3. **Use word-building and other activities to link students' knowledge of letter–sound relationships with phonemic awareness.**
   The final step in teaching students to link sounds to letters (the alphabetic principle) is connecting their awareness of how words are segmented into sounds with their knowledge of different letter–sound relationships. This allows students to begin spelling and decoding words. Use word-building exercises to enhance students' awareness of how words are composed and how each letter or phoneme in a word contributes to its spelling and pronunciation. See of the guide for activities teachers can use for this instruction, which can begin as soon as students have learned their first few letter sounds.

Sample 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?'"

Recommendation 3.
Teach students to decode words, analyze word parts, and write and recognize words.

Once students know a few consonants and vowels, they can begin to apply their letter–sound knowledge to decode and read words in isolation or in connected text.[3] Students also need to learn how to break down and read complex words by segmenting the words into pronounceable word parts. To do this, students must understand morphology, or the knowledge of meaningful word parts in the language. Learning to recognize letter patterns and word parts, and understanding that sounds relate to letters in predictable and unpredictable ways,

Blending *hat* by chunking and sounding out

Chunking	Sounding Out
Teacher: How does this word start?	**Teacher:** How does this word start?
Student: /h/	**Student:** /h/
Teacher: Then what's the next sound?	**Teacher:** Then what's the next sound?
Student: /a/	**Student:** /a/
Teacher: What sound do you get when you put those two together?	**Teacher:** And then what sound comes next?
Student: /ha/	**Student:** /t/
Teacher: And then what sound comes next?	**Teacher:** What happens when you put them together?
Student: /t/	**Student:** /h/ /a/ /t/
Teacher: What happens when you add /ha/ and /t/?	**Teacher:** What is the word?
Student: *Hat*!	**Student:** *Hat*!

will help students decode and read increasingly complex words. It will also help them to read with greater fluency, accuracy, and comprehension. As word recognition becomes easier, students can focus more on word meaning when they read, ultimately supporting reading comprehension.

How to carry out the recommendation

1. **Teach students to blend letter sounds and sound–spelling patterns from left to right within a word to produce a recognizable pronunciation.** Teach students to blend—or how to read a word systematically from left to right by combining each successive letter or combination of letters into one sound. Teachers can instruct students to blend either by chunking sounds or by sounding out each letter individually and then saying the sounds again quickly. In the chunking approach, students use letter tiles to combine the first and second letter sounds and letter–sound combinations (multiple letters producing one sound) and practice them as one chunk before adding the next sound to form another chunk, as illustrated above. For the sounding-out approach to blending, demonstrate how to say each letter sound in a word, starting at the leftmost letter and moving right, and then join all the sounds together to form the word.

2. **Instruct students in common sound–spelling patterns.** Demonstrate to students how letters are often combined to form unique sounds

that appear in multiple words. See of the practice guide for a list of types of sound–spelling patterns. Present letter combinations to students one at a time, with ample time to focus on each combination and its pronunciation, and with plenty of examples from familiar words to illustrate the pronunciation. Begin with initial consonant patterns and, as students advance, introduce vowel and syllable-construction patterns.

3. **Teach students to recognize common word parts.** Once students have learned a few common spelling patterns, show them how to analyze words by isolating and identifying meaningful word parts within them that share a similar meaning or use. Teach students about suffixes (e.g., *-s*, *-ed*, *-ing*, *-est*), contractions (e.g., *aren't*, *it's*, *you're*), forms of prefixes (e.g., *dis-*, *mis-*, *pre-*), and basic roots (e.g., *aqua*, *cent*, *uni*), and how to combine them to create words. Have students practice the new word parts by writing words or manipulating parts of the words to create new words (e.g., adding the suffix *-ing* to the words *park*, *call*, and *sing*), and then read the words aloud. Help students decode more complex words by teaching a word-analysis strategy like the one illustrated on the next page: identify the word parts and vowels, say the different parts of the word, and repeat the full sentence in which the word appears.

4. **Have students read decodable words in isolation and in text.** Provide students with opportunities to practice the letter sounds and

Word analysis strategy

1. Circle recognizable word parts. Look for prefixes at the beginning, suffixes at the end, and other familiar word parts.

   (re)visiting, (un)happiness

2. Underline the other vowels.

   (re)visiting, (un)happiness

3. Say the different parts of the word.

   re-vis-it-ing, un-happ-i-ness

4. Say them again fast to make it a real word.

   revisiting, unhappiness

5. Make sure the word makes sense in the sentence.

sound–spelling patterns taught in the classroom using word lists, decodable sentences, short decodable texts, or texts that contain many examples of words spelled with recently learned letter sounds or sound–spelling patterns. Give each student a copy of a word list and/or connected text passage for the letter combination being taught (such as the letter combination *oi* as in oink), or write or display the words and passage on a board for the whole group to read together. Ask students to underline the letter combination in each word in the word list, and then underline the combination in the appropriate words in the passage.

5. **Teach regular and irregular high-frequency words so that students can recognize them efficiently.** Help students learn to quickly recognize high-frequency words—words that appear often in all kinds of text. Because these words are so common, learning to recognize them quickly will speed up the reading process so that students can focus more on the meaning of the text. Irregular words (for example, *said*) have exceptions to the typical sound–spelling patterns and are not easy for early readers to decode. Use different strategies for teaching these words, such as teaching the words within the decoding sequence and correcting the pronunciation, labeling the words as rule-breakers and teaching them holistically, or having the student spell or write the words to draw attention to the middle sounds of the word. For regular words, have students apply their letter–sound skills to identify the word initially. Have students practice reading the words frequently until they learn to recognize them quickly. See of the practice guide for classroom activities that help students practice high-frequency words, including the Star Words activity below.

High-frequency words

Irregular words		Regular words	
the	*there*	*in*	*did*
was	*want*	*and*	*then*
from	*said*	*had*	*with*
have	*friend*	*that*	*down*
of		*him*	

6. **Introduce non-decodable words that are essential to the meaning of the text as whole words.** Non-decodable words are made up of irregular sound–spelling patterns or sound–spelling patterns that students have not yet learned (for example, *pigeon*). Before introducing a new text, determine if it includes any non-decodable words and, if so, introduce these words to students before reading the new text, including their spelling and meaning.

The "Star Words" activity

1. For each student, the teacher puts three to five high-frequency words on individual cards and connects the cards with a ring.
2. Throughout the week, other adults (aides, other teachers, or parents) ask the student to read the words on the ring.
3. For each word the student reads correctly, the adult puts a star on the card.
4. When the student receives three stars on each card, more high-frequency words can be added to the ring.

Recommendation 4.
Ensure that each student reads connected text every day to support reading accuracy, fluency, and comprehension.

Reading connected text (multiple related sentences) poses different challenges than reading isolated words or phrases. Reading connected text accurately, fluently, and with appropriate phrasing and comprehension requires students to identify words quickly, integrate ideas in the text with their background knowledge, self-monitor their understanding, and apply strategies to support comprehension and repair misunderstandings.[4] Having students read connected text daily, both with and without constructive feedback, facilitates the development of reading accuracy, fluency, and comprehension and should begin as soon as students can identify a few words.

How to carry out the recommendation

1. **As students read orally, model strategies, scaffold, and provide feedback to support accurate and efficient word identification.**
   Students need to practice reading connected text while they are learning the alphabetic principle and decoding, as described in Recommendations 2 and 3. For example, first introduce a particular sound spelling pattern (such as *th*) by presenting isolated words, and then have students read texts featuring words that contain the given pattern. To help students practice decoding and word identification, plan activities in which students receive support from a more-proficient reader—such as a teacher, parent, or another student—who can provide constructive feedback or support. When students encounter words they find difficult to read, remind them to apply the decoding and word-recognition skills and strategies they have learned and to then reread the word in context (see figure to the right). As text difficulty decreases from frustration level to instructional level and finally to independent level, texts present less challenge, and students require less support to read them accurately.

2. **Teach students to self-monitor their understanding of the text and to self-correct word-reading errors.** Teach students to monitor their understanding as they read and

Prompting students to apply word-reading strategies

For less advanced readers:

1. **"Look for parts you know."**
   Point out known letter sounds, sound–spelling patterns, or rime patterns if the student does not recognize any.

2. **"Sound it out."**
   If the student has difficulty, prompt each step of the process as shown in Recommendation 3.

3. **"Check it! Does it make sense?"**
   Prompt the reader to reread the sentence.

For more advanced readers:

1. **"You know this word part. Say this part."**
   Point to familiar prefixes or suffixes (e.g., *-ing*) or the first syllable of the word. Repeat for additional parts or syllables as needed.

2. **"Now read the whole word."**

to correct word-reading errors when they occur. Often, students do not recognize word-reading errors because they have not been paying attention to their own reading to know whether their reading made sense. Model and teach strategies for self-monitoring and self-correction and integrate these strategies with word-reading and fluency instruction. When a student makes a word-reading error on a word he or she should be able to read, pause so the student can correct the error; provide support if needed. Rather than simply telling the student the correct word, have students reread the sentence in which the misread word appears.

3. **Provide opportunities for oral reading practice with feedback to develop fluent and accurate reading with expression.** Have students practice to develop reading fluency—the ability to read orally at a natural pace and with expression, including appropriate pauses at the ends of sentences. Through modeling and feedback, help students understand how to read the text with expression and in meaningful phrases rather than word by word. See of the practice guide for activities to practice reading fluently.

Summary of Supporting Evidence

Recommendations and corresponding levels of evidence

Recommendation	Levels of Evidence		
	Strong Evidence	Moderate Evidence	Minimal Evidence
1. Teach students academic language skills, including the use of inferential and narrative language, and vocabulary knowledge.			◆
2. Develop awareness of the segments of sounds in speech and how they link to letters.	◆		
3. Teach students to decode words, analyze word parts, and write and recognize words.	◆		
4. Ensure that each student reads connected text every day to support reading accuracy, fluency, and comprehension.		◆	

Each practice guide recommendation is assigned a **level of evidence** that summarizes the rigorous research supporting it. To decide whether the level of evidence is **minimal**, **moderate**, or **strong**, the WWC assesses all of the research related to the core practices in each recommendation. The WWC and the panel rate the strength of the research evidence supporting each of their recommendations.

The level of evidence conveys the WWC's assessment about whether rigorous research studies that relate to a recommendation:

- Consistently demonstrate that the recommended practices improved relevant outcomes (see p. 53 of the guide for full list of relevant outcomes);
- Reflect the contexts and students to which the guide is meant to apply.

Regardless of the level of evidence, **each core practice in the guide is recommended by the expert panel**.

Summary of evidence for Recommendation 1

The first recommendation in the guide was assigned a **minimal** level of evidence. A minimal level of evidence does not mean that there is no research evidence supporting the recommendation. Actually, several studies meeting WWC standards found that the practices in the first recommendation were effective; however, these studies did not consistently show effects across all of the relevant outcomes.

Outcomes: The WWC identified seven studies that examined interventions teaching students inferential language, narrative language, and vocabulary. Six of these studies examined vocabulary outcomes, and of these, three showed positive effects, and three did not show effects (positive or negative). The four studies that examined listening comprehension outcomes showed no positive or negative effects, and none of the seven studies examined effects on syntax outcomes.

Contexts and students: The three studies that revealed positive effects were implemented in the United States with students in kindergarten and 1st grade.

Summary: Overall, the studies that met the WWC's group design standards indicated positive but inconsistent findings for vocabulary outcomes, no positive or negative effects were detected for listening comprehension outcomes, and no findings on syntax outcomes were examined in these studies. Because the findings did not provide a large and consistent amount of evidence of positive effects, the WWC assigned a minimal level of evidence to support this recommendation. For more details, see the description of evidence for Recommendation 1 on p. 63 of the practice guide.

Summary of evidence for Recommendation 2

The second recommendation in the guide was assigned a **strong** level of evidence. This means there is consistent evidence that the recommended practices have positive effects on outcomes for the contexts and students to which the guide is meant to apply.

Outcomes: The WWC identified 17 studies that examined interventions to help students develop awareness of segments of sound and letter–sound correspondence. All 17 studies showed positive effects on letter names and sounds and/or phonology outcomes.

Contexts and students: The studies included diverse students, most of whom were in kindergarten and 1st grade in the United States or Canada.

Summary: Overall, the body of evidence consistently showed that the practices outlined in this recommendation improved students' knowledge of letter names, sounds, and phonology when used with early elementary students in the United States or Canada. Therefore, the WWC assigned a strong level of evidence to support this recommendation. For more details, see the description of evidence for Recommendation 2 on p. 67 of the practice guide.

Summary of evidence for Recommendation 3

The third recommendation in the guide was assigned a **strong** level of evidence. This means there is consistent evidence that the recommended practices have positive effects on outcomes for the contexts and students to which the guide is meant to apply.

Outcomes: The WWC identified 18 studies that examined the effects of teaching students to decode words, analyze word parts, and write and recognize words. Thirteen studies had positive effects on word-reading and/or encoding outcomes, and none of the 18 studies examined morphology outcomes.

Contexts and students: The studies included diverse students from kindergarten through 3rd grade. Most of the studies were conducted in the United States.

Summary: Overall, the evidence consistently indicated that the practices outlined in Recommendation 3 had positive effects on word-reading and encoding outcomes for diverse students. Therefore, the WWC assigned a strong level of evidence to support this recommendation. For more information, see the description of evidence for Recommendation 3 on p. 74 of the practice guide.

Summary of evidence for Recommendation 4

The fourth recommendation in the guide was assigned a **moderate** level of evidence. Although many studies relevant to this recommendation met WWC group design standards and showed positive effects, there was not a consistent pattern of effects across all relevant outcomes.

Outcomes: The WWC identified 22 studies that examined the effectiveness of interventions with connected text. While 18 studies showed positive effects on word reading, oral reading accuracy, oral reading fluency, and/or reading comprehension outcomes, eight of these studies only showed effects in one relevant domain with no positive or negative effects on other relevant outcomes. In addition, three studies showed no effects on any outcome, and one study showed a negative effect on one outcome.

Contexts and students: The 18 studies with positive effects included diverse students in kindergarten through 3rd grade. Sixteen studies took place in the United States, and two took place in the United Kingdom.

Summary: Although 18 studies had positive effects on at least one outcome, the evidence collectively was inconsistent, with one study finding a negative effect and 11 studies finding no positive or negative effects on at least one relevant outcome. Therefore, the WWC assigned a moderate level of evidence to support this recommendation. For more information, see the description of evidence for Recommendation 4 on p. 82 of the practice guide.

If you would like to know more information about the specific study features that the WWC examines to determine the levels of evidence, you can find a detailed list in Appendix A, Table A.1 on p. 45 in the practice guide.

Endnotes

[1] National Institute of Child Health and Human Development (2000).

[2] Ziegler, Stone, & Jacobs (1997).

[3] Foorman et al. (2003).

[4] National Institute of Child Health and Human Development (2000).

For more practical tips and useful classroom examples, download a copy of the
***Foundational Skills to Support Reading for Understanding in Kindergarten Through 3rd Grade* practice guide at**
https://ies.ed.gov/ncee/wwc/PracticeGuide.aspx?sid=21

The Institute of Education Sciences publishes practice guides in education to provide educators with the best available evidence and expertise on current challenges in education. The WWC develops practice guides in conjunction with an expert panel, combining the panel's expertise with the findings of existing rigorous research to produce specific recommendations for addressing these challenges. This expert panel for this guide included Barbara Foorman, Michael Coyne, Carolyn A. Denton, Joseph Dimino, Lynda Hayes, Laura Justice, Warnick Lewis, and Richard Wagner. See Appendix A on p. 43 for a full description of practice guides.

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