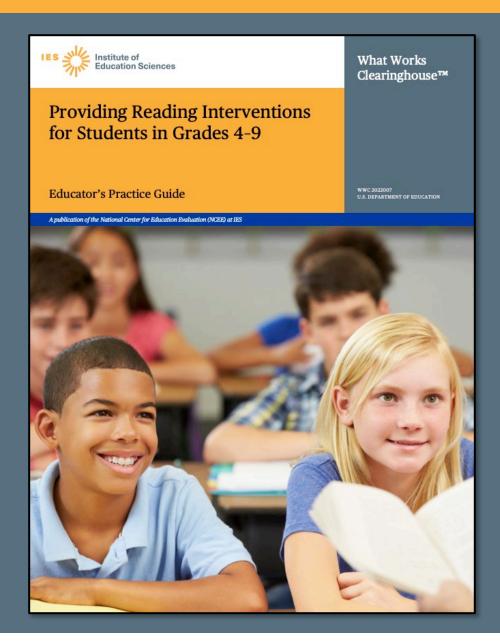
What Works Clearinghouse Practice Guide on Providing Reading Interventions for Students in Grades 4–9

Russell Gersten

Principal Investigator Instructional Research Group Sharon Vaughn
Panel Chair
University of Texas at Austin

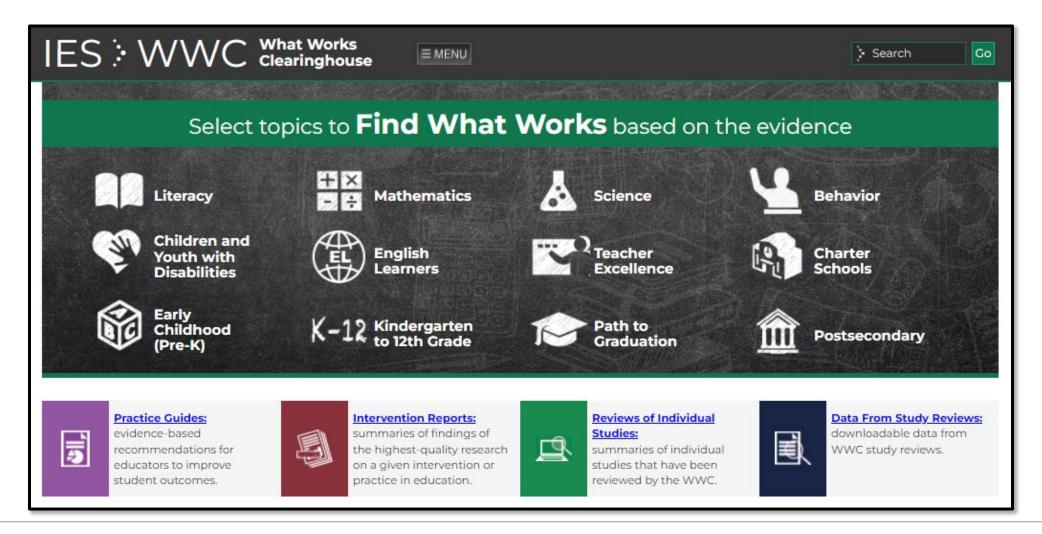


Introduction





What Works Clearinghouse (https://ies.ed.gov/ncee/wwc/)





Panel of Reading Experts

- Sharon Vaughn (Chair), University of Texas at Austin
- Michael J. Kieffer, New York University
- Margaret McKeown, University of Pittsburgh
- Deborah K. Reed, University of Iowa
- Michele Sanchez, Ysleta Independent School District, El Paso, Texas
- Kimberly St. Martin, MiMTSS TA Center, Michigan Department of Education
- Jade Wexler, *University of Maryland*



Who Might Find This Guide Useful

- This guide is designed for educators providing reading intervention or those who oversee MTSSs in reading. These educators include special educators, general education teachers, intervention teachers, reading specialists, reading coaches, and trained volunteers.
- This guide is also for school, district, or state personnel involved in adopting intervention curricula for their schools, and for parents seeking to understand what reading assistance might be helpful for their children.

Levels of Evidence

- **Strong:** There is consistent evidence that meets WWC standards and indicates that the practices improve outcomes for a diverse student population.
- Moderate: There is some evidence meeting WWC standards that the practices improve student outcomes, but there may be ambiguity about whether that improvement is the direct result of the practices or whether the findings can be replicated with a diverse population of students.
- **Minimal:** Evidence may not meet WWC standards or may exhibit inconsistencies, but the panel determined that the recommendation must be included because the practices are based on strong theory, are new and have not yet been studied, or are difficult to study with a rigorous research design.



Recommendations and corresponding levels of evidence

| Practice recommendation Level of evidence Minimal Moderate | | nce | |
|--|--|----------|--------|
| | | Moderate | Strong |
| Build students' decoding skills so they can read complex multisyllabic words. | | | ✓ |
| Provide purposeful fluency-building activities to help students read effortlessly. | | | ✓ |
| 3. Routinely use a set of comprehension-building practices to help students make sense of the text. | | | ✓ |
| 4. Provide students with opportunities to practice making sense of stretch text (i.e., challenging text) that will expose them to complex ideas and information. | | ✓ | |



Recommendation 1: Multisyllabic word reading

Build students' decoding skills so they can read complex multisyllabic words.

Level of Evidence: Strong



Recommendation 1: Build students' decoding skills so they can read complex multisyllabic words.

How-to Step 1: *Identify the level of students' word-reading skills in the intervention group and teach vowel and consonant letter-sounds and combinations, as necessary.*

How-to Step 2: Teach students a routine they can use to decode multisyllabic words.

How-to Step 3: *Embed spelling instruction in the lesson*.

How-to Step 4: Engage students in a wide array of activities that allow them to practice reading multisyllabic words accurately and with increasing automaticity.



How-to Step 1: Identify the level of students' word-reading skills and teach vowel and consonant letter-sounds and combinations, as necessary.

• For students who are having difficulty identifying sounds that are made by common vowels and consonants and their combinations, spend more intervention time reviewing or reteaching common vowel and consonant letter-sounds and combinations.

| long vowel sound | vowel sound as in me, labor, polar | |
|-----------------------------------|---|--|
| short vowel sound | vowel sound as in cap, digger | |
| vowel-consonant-e | "e" makes the vowel sound long as in cake, mistake | |
| vowel combinations oa, ea, ee, ai | long vowel sounds as in boat, remain, teachable | |
| vowel diphthongs oi, oy, ou, ew | vowel sounds as in toy, destroy, newsworthy | |
| r-controlled vowels | vowel sound as in car, fur, personable | |
| consonant-le | consonant sound as in bat <u>tle</u> , belit <u>tle</u> | |



How-to Step 1 (continued): *Identify the level of students' word-reading skills and teach vowel and consonant letter-sounds and combinations, as necessary.*

• For students who have mastered the simpler common sounds and combinations, teach advanced vowel and consonant combinations and vowel teams with 3 or 4 letters standing for a single sound.

Examples:

- -dge in *dodge*
- -ough in *thorough*



How-to Step 1 (continued): *Identify the level of students' word-reading skills and teach vowel and consonant letter-sounds and combinations, as necessary.*

- For students who can apply these understandings to complex two-syllable words, introduce three-syllable words to expand their application.
- If a student demonstrates mastery of both simple and advanced letter combinations, they do not need a word-reading intervention. These students may still benefit from remediation in vocabulary and/or comprehension.



How-to Step 2: Teach students a routine they can use to decode multisyllabic words.

• Explicitly teach students a routine to use when they encounter unfamiliar multisyllabic words.

The teacher refers to the following steps that are posted in the classroom:

- 1. Look for prefixes and suffixes. Circle prefixes and suffixes in the word.
- 2. Underline the remaining single vowels and vowel or vowel-consonant combinations.
- 3. Loop under each word part as you say it.
- 4. Say the whole word by blending the parts together, making it into a word you recognize.





Example: Routine to decode a multisyllabic word.

Step 1: Look for prefixes and suffixes. Circle prefixes and suffixes in the word.



Step 2: Underline the remaining single vowels and vowel or vowel-consonant combinations.

Step 3: Loop under each word part as you say it.



Step 4: Say the whole word by blending the parts together, making it into a word you recognize.

How-to Step 2 (continued): Teach students a routine they can use to decode multisyllabic words.

- Briefly demonstrate how the word-reading routine can be helpful in sounding out words.
- Guide students through the steps of the routine and discuss how they would apply them to an unfamiliar word.
- To help students keep in mind that the words they are reading have meaning, briefly explain the meaning or use of the word in a sentence.
- Guide students through applying the routine to several words before asking students to practice applying the routine on their own.



How-to Step 3: *Embed spelling instruction in the lesson*.

- Spelling words will help reinforce the vowel and consonant letter-sounds and combinations students are learning.
- Include practice in spelling monosyllabic and multisyllabic words. This activity is called encoding practice.
- Begin by asking students to read the word aloud and spell it.
- Encourage students to think about the different parts of the word and how many parts or syllables are in the word before they write it.
- Give students additional words to spell that include the same vowel and consonant letter-sounds and combinations.



How-to Step 4: Engage students in a wide array of activities that allow them to practice reading multisyllabic words accurately and with increasing automaticity.

- Provide multiple opportunities for students to apply the routine to build automaticity: the ability to recognize words instantly and effortlessly.
- Ensure that abbreviated versions of the steps of the routine are readily available by posting them on the board or providing each student with a prompt card.
- Initiate practice by reading word lists out loud as a group.



How-to Step 4 (continued): Engage students in a wide array of activities that allow them to practice reading multisyllabic words accurately and with increasing automaticity.

- Include words with the vowel and consonant letter-sounds or combinations in that day's lesson, as well as previously taught sounds Also include high-frequency words in the word lists.
- Continued practice with the words on the word list will help students begin to read them fluently.





Example: Activities to build students' automaticity with word

reading.

- 1. As a warm-up provide practice in vowel combinations in the multisyllabic words that students are going to encounter in a word list or section of text for the session.
- 2. Read a list of high-frequency prefixes and suffixes aloud as a group (in unison or by taking turns).
- 3. Ask students to underline prefixes and suffixes in each word in a word list, and then read the prefixes and suffixes aloud as a group (in unison or by taking turns).
- 4. Ask students to write words by adding a prefix and/or a suffix to a base word.
- Ask students to read a list of words once with their partner, noting any words students have difficulty reading. Then ask them to try to read more words correctly when they read the list to their partner a second time.
- 6. Read a list of words (up to 20 words) aloud as a group (in unison or by taking turns).
- 7. Time students as they read a list of words. Ask them to read the list again to meet or beat their previous time.
- Dictate words for students to spell that contain the targeted prefixes and suffixes or sounds in the lesson.
- 9. Read sentences containing multisyllabic words aloud as a group (in unison or by taking turns) or with the teacher reading first and then the students reading next.
- 10. Ask students to read the passage containing the words they are learning at least twice.

Source: Toste et al. (2019).





Obstacle: My students report having difficulty reading multisyllabic words in their core subject-area classes.

- The panel recommends including words from core subject-area classes during intervention time.
- A teacher or the team leader for social studies or science departments may be able to provide a list of words. It is also possible to locate lists of important words in the students' textbooks.





Obstacle: A few of my students can read multisyllabic words pretty effortlessly but perform poorly on reading tests because of weak vocabulary and difficulties in comprehension.

- These students need additional work on language and vocabulary development.

 Therefore, teachers should minimize decoding and fluency instruction and maximize comprehension instruction.
- When possible, group these students in an intervention that focuses on oral language and reading comprehension.
- Activities should include experiences that increase world knowledge and word knowledge and provide ample opportunities to engage students in meaningful discussion about the text they are reading.



Recommendation 2: Fluency building

Provide purposeful fluency-building activities to help develop students read effortlessly.

Level of Evidence: Strong



Recommendation 2: Provide purposeful fluency-building activities to help develop students read effortlessly.

How-to Step 1: Provide a purpose for each repeated reading.

How-to Step 2: Focus some instructional time on reading with prosody.

How-to Step 3: Regularly provide opportunities for students to read a wide range of texts.



How-to Step 1: Provide a purpose for each repeated reading.

- Rather than merely asking students to reread the same passage orally several times to increase their speed, the panel suggests providing students with a purpose for each reading of the same passage.
- Although the primary goal is to build effortless reading, rereading a piece of text with a purpose will often lead to increased understanding.

Examples of questions for which answers are evident:

- What happened in the passage you just read?
- 2. What did you learn about _____?
- 3. What were the first two things that happened in this section?



How-to Step 2: Focus some instructional time on reading with prosody.

- Draw students' attention to what prosody entails by dramatizing why prosody is important.
- Read a short paragraph aloud twice. The first time, read it quickly without expression and without stopping at punctuation marks. Then read the passage again, this time at a conversational pace and with prosody.
- After reading, discuss which rendition of the passage was easier to understand.
- Teach students to pause at commas, stop at periods, raise or lower their voice when encountering a question mark, and show emotion when encountering an exclamation point.



How-to Step 3: Regularly provide opportunities for students to read a wide range of texts.

- Reading a wide range of texts counterbalances the limitations of repeatedly reading the same brief passage by exposing students to a variety of sentence structures and text topics.
- As students explore a wider range of texts, they are exposed to unfamiliar words and syntax, and their reading becomes more fluent.
- Choose texts at the higher end of students' instructional reading level. When possible, choose texts that align to grade-level content or other topics of high interest to the group of students.





Obstacle: Partner work doesn't seem productive. When I pair students for fluency-building activities, the student who is struggling does not know when the better reader makes a mistake.

- Pairing students for fluency work should be done with student skill level in mind.
- To create appropriate partners, rank order the students from most able to least able reader and split the ranked list in half. Pair the first student in the first half with the first student in the second half.
- If there is an odd number of students, the teacher or a volunteer can be paired with a student.
- Teach students how to read with a partner to help students work productively with their partner.





Obstacle: Students don't like timed readings, and they often focus on reading so fast they don't understand what they're reading.

- Experiences reading only for the purpose of increasing speed may have made some students averse to any type of repeated reading or timed reading.
- The goal is to help them read with ease and gain confidence in their reading and understanding of the text.
- Explain that when they read too fast, they will have trouble understanding what they are reading.
- When timed readings are done sparingly and mixed with other fluency activities that require students to reread for a different purpose, students may enjoy seeing the progress they make in understanding the text and in their rate and accuracy.





Obstacle: When I give my students a purpose for rereading, they spend so much time trying to find the answer that they don't have time to read the passage again.

- The goal is for students to read the passage multiple times, with a clear purpose for each rereading. Therefore, during fluency-building activities, the students should not spend a lot of time digging into the passage to determine the answer to a complex question.
- Start with questions that can be answered with information evident in the text. As students demonstrate confidence with those questions, consider asking more difficult questions that require students draw conclusions.



Obstacle: Sometimes students avoid finding words they do not know because they feel embarrassed or have concerns that the teacher will ask them to do more work.

- In these cases, teachers can address these concerns through remarks such as: "There are at least two words that I think are very difficult. See if you have the same two words as me."
- Another option is to motivate students by having them work in pairs to choose difficult words. This may make them feel more comfortable and ease their concerns about appearing less able to respond to the task.



Obstacle: It is hard to find materials that include the words or patterns the students are learning, relate to subject-area topics, are age-appropriate, and increase in difficulty.

- Often published programs contain word lists and passages for fluency instruction. If a published program is not available, choose words and passages from a variety of sources, including subject-area textbooks, novels, newspapers, or electronic resources, that emphasize the sound patterns, words, or content of the lesson.
- Schedule time during grade-level or department meetings to collect and develop materials to address the skills you are teaching. Over time you will have materials that span a wide range of topics and vary in difficulty.

Recommendation 3: Comprehension building

Routinely use a set of comprehension-building practices to help students make sense of the text.

Level of Evidence: Strong

Parts of Recommendation 3

Part A: Build students' world and word knowledge so they can make sense of the text.

Part B: Consistently provide students with opportunities to ask and answer questions to better understand the text they read.

Part C: Teach students a routine for determining the gist of a short section of text.

Part D: Teach students to monitor their comprehension as they read.



Recommendation 3, Part A: Build students' world and word knowledge so they can make sense of the text.

How-to Step 1: Develop world knowledge that is relevant for making sense of the passage.

How-to Step 2: Teach the meaning of a few words that are essential for understanding the passage.

How-to Step 3: Teach students how to derive meanings of unknown words using context.

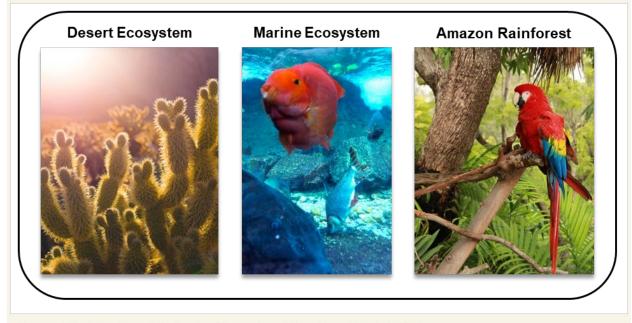
How-to Step 4: Teach prefixes and suffixes to help students derive meanings of words.

How-to Step 5: Teach the meaning of Latin and Greek roots.



How-to Step 1: Develop world knowledge that is relevant for making sense of the passage.

- Provide a brief 3- to 5-minute introduction on the topic before reading to help students develop knowledge that might help them understand what they are reading.
- Another way to prepare students for reading about a topic is to present a short 2- to 4-minute video clip, podcast, or brief informational lecture with illustrations.



Source: The Meadows Center for Preventing Educational Risk (2015).

How-to Step 1 (continued): Develop world knowledge that is relevant for making sense of the passage.

• Another way to develop world knowledge before reading is to ask students questions about the topic. Not only will this will provide students with an opportunity to think about what they have read or learned about before, but it can also potentially pique their interest in the topic.



How-to Step 2: Teach the meaning of a few words that are essential for understanding the passage.

- Identify words that are critical and conceptually central for understanding the passage but are likely to be difficult for students.
- Choose words that appear early or frequently in the passage and for which knowing the meaning is critical for understanding the text.
- During reading, stop intermittently to briefly provide the meaning of additional essential words that are critical for understanding the passage.
- If students are reading independently or in pairs, ask students to look up and make eye contact when they get to the sentence with the essential word you would like to discuss.



How-to Step 3: Teach students how to derive meanings of unknown words using context.

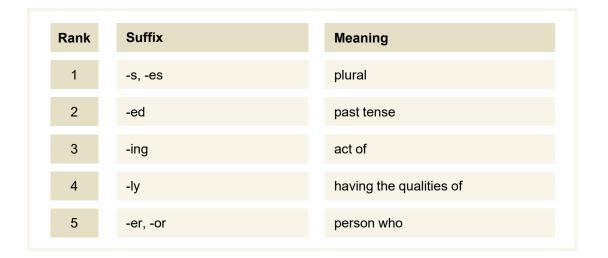
- In some circumstances, the sentences surrounding an unknown word can help students determine its meaning.
- Teach and explicitly model how to find clues in the surrounding sentences to help students determine the meanings of words they do not understand.
- Demonstrate three steps for determining the meaning of unknown words using surrounding sentences.



How-to Step 4: Teach prefixes and suffixes to help students derive meanings of words.

• Teach the meanings of prefixes and suffixes, especially those that students will encounter in the text.

| Rank | Prefix | Meaning |
|------|--------------------|---------------------|
| 1 | un- | not |
| 2 | re- | again |
| 3 | in-, im-, il-, ir- | not |
| 4 | dis- | not |
| 5 | en-, em- | to make or put into |





How-to Step 4 (continued): Teach prefixes and suffixes to help students derive meanings of words.

- If the intervention curriculum does not have a sequence for teaching prefixes and suffixes, start by teaching commonly used prefixes (e.g., un-, re-, dis-) and suffixes (e.g., -s, -es, -ed). If students know the common prefixes and suffixes, move on to less frequently used prefixes (e.g., trans-, under-, anti-) and suffixes (-ial, -eous, -ence).
- Teach students to isolate the base word, prefix, and/or suffix and determine the meaning of each separately. Show students how putting the meanings of each of the parts together can help them determine the meaning of a word.



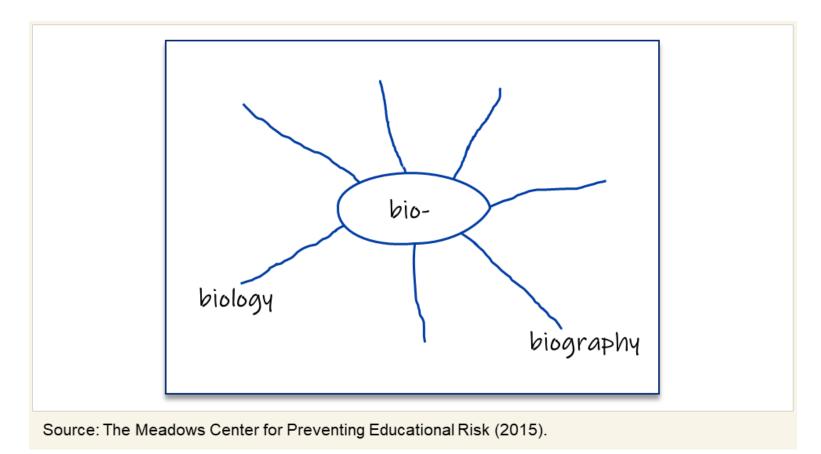
How-to Step 5: Teach the meaning of Latin and Greek roots.

- Latin and Greek roots appear frequently in words in math, science, and social studies textbooks (e.g., micro: microbiology, microscope, microbe; equi/equa: equivalent, equation, equal, equator, equalizer).
- Spend some time explicitly teaching the meaning of the roots, how these roots contribute to the meaning of a word, and how words with the same root are related.
- Work with students to develop a word map for each root. Word maps provide a graphic display of a group of words that are meaningfully related.





Example: Help students understand the meaning of words with a root using a word map.







Obstacle: I do not know what my students know about a topic, so I don't know how to plan for teaching them world knowledge.

- Poll students briefly to see what they know about a topic before teaching world knowledge related to the passage.
- If students know little about the topic, use a brief video clip or podcast closely related to the specific objective of the lesson to build world knowledge and pique students' interest.



Obstacle: There are so many words my students do not know. Working on word knowledge could take up the entire lesson.

- There are too many words to teach in depth. Students will also be learning words and their meanings in their subject-area classes.
- Focus on words that are essential to understanding the passage and those that students will encounter frequently in their readings.
- If not knowing the meaning of a particular word becomes a barrier to understanding the meaning of the text for some students, quickly provide the meaning of the word and continue reading.
- It can also be helpful to show students how to use dictionaries and thesauruses.





Obstacle: My students cannot find a word's meaning using the sentences surrounding the word because they don't know so many words in the passage.

- Students may not be able to use the surrounding sentences to determine the meaning of words when the reading level of the text is too high.
- Choose texts for which students will know more words when asking them to practice using surrounding sentences to determine the meaning of words.

Recommendation 3, Part B: Consistently provide students with opportunities to ask and answer questions to better understand the text they read.

How-to Step 1: Explicitly teach students how to find and justify answers to different types of questions.

How-to Step 2: Provide ample opportunities for students to collaboratively answer questions.

How-to Step 3: Teach students to ask questions about the text while reading.



How-to Step 1: Explicitly teach students how to find and justify answers to different types of questions.

- Teaching students to answer questions and justify their answers prepares students to read independently.
- By understanding common types of questions that may be asked, students develop habits for sifting through the information in the text or connecting to their world knowledge to figure out the answers.
- Teaching students how to answer different types of questions helps them find information that is either directly stated in or inferred from the text.





Example: Types of questions.

Question type Description The information needed to answer the question is considered "right there" because often the words in the question and the words used to answer the Right There Question question are in the same sentence. This type of question can also be referred to as a text-dependent question. The information needed to answer the question is in different parts of the Think and Search Question text so the student needs to "think and search" to figure out the answer. This type of question can also be referred to as a text-dependent question. To answer the question, the student must connect information in the text with information they learned or read previously. This type of question can Author and Me Question also be referred to as an inferential question.

Source: corestandards.org; Raphael and Au (2005); Ritchey et al. (2017); Vaughn, Cirino, et al. (2010); Vaughn, Wanzek, et al. (2010).



How-to Step 1 (continued): Explicitly teach students how to find and justify answers to different types of questions.

- Teach students to answer each type of question one at a time. Begin by modeling how to answer *Right There* questions by locating the words in the question in a sentence in the text.
- Once students show some facility answering *Right There* questions, explain that the answers to *Think and Search* questions are usually not right next to each other; the answers to the questions are separated by other information that does not answer the question.
- Model how to answer *Think and Search* questions several times before gradually including students in searching for the information that can help answer the questions.



How-to Step 1 (continued): Explicitly teach students how to find and justify answers to different types of questions.

- Move on to *Author and Me* questions only after providing ample practice opportunities with *Right There* and *Think and Search* questions.
- Demonstrate how to answer *Author and Me* questions. Begin by telling students that the answers to *Author and Me* questions go beyond what is explicitly stated in the text.
- Show students how to integrate the information from the text with their knowledge to formulate an answer.



How-to Step 2: Provide ample opportunities for students to collaboratively answer questions.

- Provide opportunities for students to work collaboratively to answer each type of question.
- Begin with *Right There* questions, move to *Think and Search* questions, and finally to *Author and Me* questions, as students demonstrate they can answer each type.
- Make sure to include previously learned question types as each new type is added.
- Guide students through the process of answering each question type by reminding them of what each type of question requires.



How-to Step 3: Teach students to ask questions about the text while reading.

- As students get more comfortable answering different types of questions, ask them to think of their own questions about the text.
- Ask students to develop their own *Right There* questions before moving on to *Think* and *Search* and *Author and Me* questions. Students can find the answers to the questions they develop themselves or work with a partner.
- To facilitate independence, provide students with prompt cards that include question stems to help students develop various question types.





Example: Question stems for students to use when asking questions about the text.

| What happens (happened) when? What is (was)? Why did (does)? | |
|--|--|
| Why did (does)? | |
| · · · · · · · · · · · · · · · · · · · | |
| | |
| How do (does)? | |
| How do and compare? | |
| What can you say about? | |
| What would happen if? | |





Obstacle: My students are having difficulty formulating justifications for their answers.

- Ask students probing questions to help them think about the reason for their responses.
- It may be necessary to briefly model how to go back to the text and find the material to support the response.
- Be sure to keep this interactive so that students stay engaged and the justification can be developed jointly. Students will need support when they practice justifying their answers.



Obstacle: When the questions use words that don't exactly match the text, my students are stumped.

- In some cases, the question has different wording than the precise wording in the text.
- Students may need help understanding the meanings of the words. Integrate a brief explanation of how the words mean the same thing even though they are not the same.
- Students may also experience difficulty following as pronouns appear in the text. It may be useful to help students identify, for example, who "he" or what "it" is referring to in the text.





Obstacle: My students still can't answer Author and Me questions even after I have modeled how to do it.

- It could be that students do not have the world knowledge necessary to make connections between the text and what they have read or learned.
- Be sure to use texts that cover topics students have read or have learned about previously.
- Students may also need several opportunities to practice connecting what they learned or read previously with information from the text.
- Alternate between teacher modeling, peer work, and independent practice with simpler texts before moving on to more complex texts.
- Provide more support at first by asking guiding questions and gradually transfer more responsibility to the students.





Obstacle: My students sometimes make seemingly irrelevant connections to their world knowledge.

- It is common for students to share experiences that, at least at the outset, are not well related to the topic.
- Ask students to consider whether what they learned or read previously is relevant to the topic before sharing and, if so, how.
- The discussion needs to address why a particular experience is relevant. Ask leading questions to help students evaluate the relevancy of the information to the topic of the text.



Obstacle: My students are really struggling with generating questions as they read.

- One way to get students started with generating questions is to begin with *Right There* who or what questions.
- Then move on to *Think and Search* who or what questions. Questions that begin with why and how are sometimes harder, and instruction on those types can be saved until after students have a solid understanding of the simpler questions.
- It is helpful to provide question stems to support students as they practice writing questions of their own.



Recommendation 3, Part C: Teach students a routine for determining the gist of a short section of text.

How-to Step 1: Model how to use a routine to generate gist statements.

How-to Step 2: Teach students how to use text structures to generate gist statements.

How-to Step 3: Work collaboratively with students to generate gist statements.



How-to Step 1: Model how to use a routine to generate gist statements.

- Teach students a routine they can use to generate gist statements.
- Most routines will include a step for determining who or what the passage is about and the most important information.
- Determining who or what the passage is about can be difficult. It might be helpful to tell students to look for words that appear frequently in the text and to look at the words that appear in the title, headings, and charts or diagrams.



How-to Step 1 (continued): *Model how to use a routine to generate gist statements*.

- To determine which information is most important, it might be helpful to tell students to look for information related to who or what the passage is about.
- Model how to generate the gist using the routine for several different types of text. Explain the reasons why information in the text is identified as important for generating the gist.





Example: Routine for generating a gist statement.

- Identify and mark the most important person (referred to as the who), place, or thing (referred to as the what) in a section of text.
- Mark and then list the important information about the most important person, place, or thing.
- Synthesize or piece together the important information to formulate a gist statement.
- Write the gist statement in your own words.
- Check that the gist statement includes all the important information in a short, complete sentence that makes sense.

How-to Step 2: Teach students how to use text structure to generate gist statements.

- Text structure refers to how information in a written piece of text is organized.
- Text structures can help students focus on what the text is about and help them generate gist statements.
- Three common text structures are cause and effect, problem and solution, and compare and contrast.
- If students do not understand the three text structures or are not able to recognize them, then teach or review the three text structures.
- Model how to identify and discriminate among the text structures, providing a rationale for the text structure identified.



How-to Step 2 (continued): Teach students how to use text structure to generate gist statements.

- Have students read a short passage and ask them to identify the text structure.
- Explain that paragraphs in a passage may have different text structures.
- Guide students in identifying the text structure in each paragraph and proceed with determining the important information.
- Help students understand that cause/effect and problem/solution text structures can be tricky to distinguish.
- In some cases, passages do not have a clear text structure.
- After students are proficient in identifying text structures, show students how to use a text structure to generate gist statements.





Example: Types of text structures and related questions that help identify the gist.

Problem/solution text structures are used to describe a problem and how it was solved.

Question: What is the problem? What is the solution?

Cause/effect text structures are used to explain how one thing or event led to or caused another thing or event to happen.

Question: What happened? What happened as a result?

Compare/contrast text structures are used to explain how topics are alike or different.

Question: How are the topics the same? How are they different?



How-to Step 3: Work collaboratively with students to generate gist statements.

- After modeling generating a gist statement using a routine or text structure once or twice, include students in collaboratively generating gist statements by prompting them through the steps of the routine.
- Have students provide rationales for their decisions and point to the portions of the text that support their thinking.
- Have students identify irrelevant information and provide their reasoning for why they consider the information to be irrelevant.
- Guide students by asking leading questions as the group works together to synthesize the most important information into a gist statement.





Obstacle: My students are having a really hard time generating gist statements. What can I do?

- Begin by focusing on the main *who* or *what* using short paragraphs or paragraphs that are not as difficult.
- In subsequent lessons, focus more on identifying the most important information.
- Teach students how to mark (e.g., highlight, underline, or circle) parts that may be important so they can distinguish the important information from the irrelevant information.
- Graphic organizers can be particularly helpful in sorting relevant from irrelevant information.





Obstacle: Students get tired of generating gist statements day after day.

• Including a variety of activities can be helpful. After spending some time devoted primarily to learning how to generate a gist statement, spend time on other areas of comprehension, such as word knowledge or asking and answering questions.





Obstacle: I am not sure what text to use with students when teaching them how to generate the gist.

- Generating gist statements for informational text related to science and history can be balanced with generating gist statements for texts on other topics that relate to interests they express, as well as fiction and nonfiction passages or short stories, including some material that relates to their lives.
- Students can also bring their core subject text and the group can work on gist statements with a current passage.
- This could be helpful in preparing students for the next day's lesson, which could help them feel more motivated to learn with their peers.



Obstacle: Sometimes, I think my students have finally learned how to generate gist statements. But then, a few days later, we get to a new piece of reading material, and it all falls apart. Will they ever learn how to do it?

- As texts get more difficult or students encounter unfamiliar topics, generating gist statements becomes more challenging, and students will need more support and discussion.
- Students may have trouble with a harder text when they do not have enough world and/or word knowledge.
- Continue to ask students to generate gist statements so they can continue to work the skill with harder and harder text.





Obstacle: I seem to spend too much time talking at my students when we work on gist statements.

- Teachers can model the process for generating a gist statement at the onset. However, soon after the model, students can play an increasingly larger role in the process.
- Guide discussion to identify who or what the section is about and the important information and to synthesize the important information into a gist statement.
- Remember to ask students to justify their responses.



Recommendation 3, Part D: Teach students to monitor their comprehension as they read.

How-to Step 1: *Help students determine when they do not understand the text.*

How-to Step 2: Teach students to ask themselves questions as they read to check their understanding and figure out what the text is about.

How-to Step 3: Provide opportunities for students to reflect on what they have learned.



How-to Step 1: *Help students determine when they do not understand the text.*

- To help students become more comfortable with acknowledging when portions of a text do not make sense to them, have students practice with isolated sentences.
- After students have practiced identifying whether or not what they read makes sense at the sentence level, move on to longer pieces of text with multiple sentences.

| 1. | The Olympic games began almost 3,000 years ago on the sun. | Yes | (No) |
|----|---|-----|------|
| 2. | When the first Europeans arrived in North America, Native | Yes | No |
| | Americans played grapes like football. | | |
| 3. | At the library, you can find books on any sport you are | Yes | No |
| | interested in. | | |
| 4. | Many people watch sports on TV for their exercise. | Yes | No |
| 5. | A student athlete goes to school and practices every day. | Yes | No |
| 6. | If you can do a cartwheel, a handstand, or the splits, then you | Yes | No |
| | can do gymnastics. | | |
| 7. | Basketball and skateboarding are two fairly new stores that | Yes | No |
| | began in the United States. | | |
| 8. | Many schools have a gym from students of exercise. | Yes | No |

Source: The Meadows Center for Preventing Educational Risk (2013).



How-to Step 2: Teach students to ask themselves questions as they read to check their understanding and figure out what the text is about.

- When students ask themselves questions, they have an opportunity to check their understanding.
- Asking themselves questions about their understanding helps students see what they know and do not know, so they can think about what they should do to better understand the text.
- Teach students to stop periodically and ask themselves what the section of text is about or what the gist statement is for the section of text.



How-to Step 2 (continued): Teach students to ask themselves questions as they read to check their understanding and figure out what the text is about.

- When they think about what the section is about, they can figure out whether what they are reading is making sense.
- If they do not understand, they can reread the section slowly and carefully, if necessary.





Example: Possible questions students can ask themselves as they read.

First, I ask myself: What was that section of text about? What is happening in this section?

Then I ask myself:

- 1. If I am not sure what this section is about, I ask: Are there any words I cannot read or do not understand? Are there any phrases or sentences that do not make sense? Should I reread that section carefully?
- 2. If a word or phrase doesn't make sense, I ask: How am I going to figure out what that word or phrase means?
- 3. If I am not sure what this section is about but it reminds me of something, I ask: What else do I know about this topic?
- 4. If I think I know what this section is about, I ask: What are the main points so far? Do I need to reread and mark the main points so that I can remember them?



How-to Step 3: Provide opportunities for students to reflect on what they have learned.

- Giving students opportunities to note what they have learned not only helps students integrate their learning and take stock of what they are understanding, but it also helps teachers prepare for the next lesson.
- Before the end of the intervention session, ask students to write down what they learned in the day's lesson, what they are still confused about, and what they might have done to help themselves understand better.
- Sentence starters can help students write about what they learned. Have students choose 2–3 sentence starters to complete at the end of class.
- Alternatively, ask students to answer some comprehension questions.





Example: Possible sentence starters to complete after reading.

- Today I learned...
- I was surprised by...
- 3. The most useful thing I will take from this lesson is...
- One thing I am not sure about is....
- 5. The main thing I want to find out more about is....
- After this session, I feel...





Example: Sample list of questions to help students reflect on

what they read.

- 1. How do humans contribute to greenhouse gases?
 - a. Burning fuel, such as gasoline in a car.
 - b. Playing video games.
 - c. Watching TV.
 - d. All of the answers above are correct.
- 2. What does the word gradually mean as it is used in the passage?
 - a. Does not change
 - b. Quickly
 - c. Slowly
 - d. Related
- 3. What could happen if sea levels rise?
 - a. Earth's temperatures may rise.
 - b. Homes near the sea could be flooded.
 - There will be more sea life.
 - d. There will be more fresh water for dry land.





Obstacle: My students are reticent to share what they did not understand.

- Helping students feel comfortable sharing when they are not understanding what they are reading may take time.
- Some students may not feel comfortable at first. They may want to hide their confusion, or they may not be accustomed to identifying when they are stuck.
- Repeatedly and gently, encourage students to share when they need help and remind them that you are there to help.





Obstacle: I keep stopping every two minutes to make sure they are understanding what they read. This does not seem to be working well.

- It can be hard to follow along with the text if you are stopping too often. If this technique is not working well, interrupt their reading after longer sections of text.
- Ask students to continue to mark (e.g., underline or highlight) any problem areas in the text as they read and share what they marked at stop points further along in the text.



Obstacle: Students like to preview the text to determine how difficult it is, but this doesn't seem like a good use of their time.

- Previewing text can prepare students for reading and can help them monitor their understanding.
- Students can check the title, subheadings, and figures to get a sense of what they will be reading and to quickly check in with themselves to see if the passage's topic is something they know about or if it is a topic that is unfamiliar to them.
- Teach students to think about whether the text will be difficult for them and how much they will read before checking their understanding.



Obstacle: My students mark too many words that they cannot read. How do I help them?

- If students underline profusely, check the difficulty level of the text. It could be that the text the students are reading is not at an appropriate level.
- If the text is at the students' instructional level, ask students to pick a few words or phrases that made it hard for them to understand the passage and focus on those.
- Consider modeling for students how you got stuck and choose a few words or phrases to mark for further exploration or discussion.
- If this remains a chronic problem, reconsider the reading material being used. It may be too difficult.



Recommendation 4: Stretch text

Provide students with opportunities to practice making sense of stretch text (i.e., challenging text) that will expose them to complex ideas and information.

Level of Evidence: Moderate



Recommendation 4: *Provide students with opportunities to practice making sense of stretch text (i.e., challenging text) that will expose them to complex ideas and information.*

How-to Step 1: Prepare for the lesson by carefully selecting appropriate stretch texts, choosing points to stop for discussion and clarification, and identifying words to teach.

How-to Step 2: *Provide significant support as the group works through a stretch text together.*

How-to Step 3: After students demonstrate comfort with reading stretch texts with the group, provide students with electronic supports to use when independently reading stretch text to assist with pronunciation of difficult words and word meanings.



How-to Step 1: Prepare for the lesson by carefully selecting appropriate stretch texts, choosing points to stop for discussion and clarification, and identifying words to teach.

- Consider texts that are at the upper range or somewhat above the upper range of students' independent reading levels.
- Sequence the stretch text passages so that the difficulty and passage length gradually increase.
- Choose texts related to topics students are studying in their subject-area classes when possible, rather than isolated passages or excerpts from the subject-area textbooks.
- Look for texts that are engaging and that discuss interesting ideas or perspectives.



How-to Step 1 (continued): Prepare for the lesson by carefully selecting appropriate stretch texts, choosing points to stop for discussion and clarification, and identifying words to teach.

- Before the lesson begins, read through the text to choose logical points to stop for group discussion.
- Also create a list of difficult multisyllabic words, proper nouns, and essential words to discuss before and during reading.





Example: Teacher preparing to read a short section from a grade-level text about noted novelist Louise Erdrich.

First excerpt: The teacher marks the following sections and words before beginning to read with the group. This is grade level material for the English language arts class.

Stop points and discussion starters:

- Stop after paragraph 1 What is this paragraph about?
- Stop after paragraph 2 *What was the purpose of the boarding schools for Native Americans?*
- Stop after paragraph 3 What happened in her novel LaRose that was disturbing?
- Stop after paragraph 4 What are some positive aspects of her novels? What do you think the author means when describing people who fall in between being wise and thoughtless at the same time?





Example (continued): Teacher preparing to read a short section from a grade-level text about noted novelist Louise Erdrich.

Proper nouns:

- Pulitzer Prize
- Louise Erdrich
- Ojibwe
- Bureau of Indian Affairs
- Native American

Multisyllabic words using previously taught word-reading skills:

- frequently
- reservation
- attended
- assimilate
- traditions

Essential words:

- novel
- reservation
- assimilate
- boarding school



How-to Step 2: Provide significant support as the group works through a stretch text together.

- Work through stretch texts as a group with teacher support, rather than assigning stretch texts to students to work on independently or with a partner.
- Before reading, help students understand that stretch text activities will be very difficult at times.
- Explain to them that all readers (including their teachers) read material that includes words that are difficult to read or understand, or about topics for which they lack relevant world knowledge.



How-to Step 2 (continued): Provide significant support as the group works through a stretch text together.

- Explain (and then remind them often) that, as in athletics or learning to play a musical instrument, readers need to challenge themselves to build their skills.
- Explain that the goal is to keep trying to make sense of challenging texts together, so students develop the habit of sticking with difficult passages.



How-to Step 3: After students demonstrate comfort with reading stretch texts with the group, provide students with electronic supports to use when independently reading stretch text to assist with pronunciation of difficult words and word meanings.

- Over time, students will demonstrate increased comfort in working with stretch texts.
- In addition to providing students with challenging text to grapple with in a supportive small-group setting, students can work with stretch texts during independent reading using electronic supports available on tablets, laptops, and other devices.
- Most of these devices include electronic dictionaries that can help students understand difficult words. Some devices may contain software that reminds students about their knowledge of word parts to help discern a word's meaning.





Obstacle: Stretch text is just too frustrating for my students. They tend to give up far too easily.

- Remind students that this challenging task is just one part of their lesson and that they will be guided and fully supported throughout the lesson.
- Begin with very brief 1- to 2-sentence stretch texts and then build up to longer selections.
- Also, consider engaging students prior to reading by reminding them that the text is very difficult and that they likely will not be able to read it with ease. Yet, they will see improvement with practice.



Obstacle: Grade-level science and history texts are typically many years above the instructional level for some of my intervention groups.

- In general, avoid material from textbooks. Use trade books, articles, short magazine pieces, and other selections that cover grade-level content, but are only somewhat above students' current instructional level.
- It is also helpful to start with slightly challenging text and then move to more advanced text as the students become familiar with the process of grappling with stretch text.
- Be aware that grade-level texts sometimes include very informative, student-friendly graphics and charts that can be very useful in learning the material. Therefore, it may be appropriate to use those selections for stretch text lessons.





Obstacle: I get confused between what is considered stretch text or challenging text, and how this all fits into Lexile levels.

- There is conflicting terminology used in different reading materials and by different authors, with no clear distinctions between what is challenging text and what is stretch text.
- Some refer to stretch text as 1–2 years above a student's current independent reading level. Others refer to stretch texts as at or near a student's highest Lexile range.
- Regardless of the specific definition used, the goal for this recommendation is increasing students' persistence in making sense of the text and building the students' world and word knowledge.
- Stretch texts allow for discussion of sophisticated ideas and perspectives that contribute to students' knowledge base for later reading and content classes.





Obstacle: My students would prefer reading short stories and novels for their stretch text rather than informational text.

- Reading fiction is valuable but reading only novels and short stories is not sufficient to adequately build the academic and content vocabulary and world knowledge students need.
- One option is the use of hybrid texts, texts aimed to provide students with a good deal of information about history, science, or economics but are couched in narrative form.
- Short biographical sketches such as those on Newsela.com can be useful.
- Occasional use of short stories and novels would be appropriate, especially if they have interesting themes or raise interesting issues.



Appendix

Levels of evidence for each recommendation



Evidence for Recommendation 1: Strong

The 32 studies supporting Recommendation 1 demonstrate:

- Effects on relevant outcomes: Three out of the five relevant outcome domains had statistically significant, positive meta-analytic effect sizes. More than 50 percent of the meta-analytic weight came from studies that meet WWC standards without reservations.
- Extent of evidence: Each outcome domain average is based on more than one study with a total sample size of at least 350 individuals.
- Relationship between the evidence and the recommendation: The studies supporting this recommendation exhibited a direct relationship between the evidence and recommended practices.



Evidence for Recommendation 2: Strong

The 33 studies supporting Recommendation 2 demonstrate:

- Effects on relevant outcomes: Three out of the four relevant outcome domains had a statistically significant, positive meta-analytic effect sizes. More than 50 percent of the meta-analytic weight came from studies that meet WWC standards without reservations.
- Extent of evidence: Each outcome domain average is based on more than one study with a total sample size of at least 350 individuals.
- Relationship between the evidence and the recommendation: The studies supporting this recommendation exhibited a direct relationship between the evidence and recommended practices.



Evidence for Recommendation 3: Strong

The 34 studies supporting Recommendation 3 demonstrate:

- Effects on relevant outcomes: Two out of the three relevant outcome domains had statistically significant, positive meta-analytic effect sizes. More than 50 percent of the meta-analytic weight came from studies that meet WWC standards without reservations.
- Extent of evidence: Each outcome domain average is based on more than one study with a total sample size of at least 350 individuals.
- Relationship between the evidence and the recommendation: The studies supporting this recommendation exhibited a direct relationship between the evidence and recommended practices.



Evidence for Recommendation 4: Moderate

The 15 studies supporting Recommendation 4 demonstrate:

- Effects on relevant outcomes: Both of the relevant outcome domains had statistically significant, positive meta-analytic effect sizes. However, for both relevant domains, more than 50 percent of the meta-analytic weight came from studies that meet WWC standards with reservations.
- Extent of evidence: Each outcome domain average is based on more than one study with a total sample size of at least 350 individuals.
- Relationship between the evidence and the recommendation: The studies supporting this recommendation exhibited a direct relationship between the evidence and recommended practices.

This presentation contains a few examples from the practice guide.

The full practice guide and supporting materials provide more details and are available on the What Works Clearinghouse website (https://ies.ed.gov/ncee/wwc/PracticeGuide/29).

Submit questions and requests via email to the WWC Help Desk at Contact. WWC@ed.gov.



Thank you

