This document provides a summary of Recommendation 3a from the WWC practice guide *Providing Reading Interventions for Students in Grades 4-9*. Full reference is on the last page.

CONTENT: Reading
GRADE LEVEL(S): 4–9
LEVEL OF EVIDENCE: Strong

Recommendation

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

This part of Recommendation 3 focuses on developing both knowledge of the topics discussed in texts (referred to here as world knowledge) and knowledge of word meanings (referred to here as word knowledge). World and word knowledge have reciprocal relationships with reading: world and word knowledge can help students understand what they are reading, and reading with understanding will improve students' knowledge of word meanings and of the world. Teaching new words and their meanings can support students in learning new concepts and ways of thinking that help students make sense of sophisticated content.

How to carry out the recommendation

1. Develop world knowledge that is relevant for making sense of the passage.

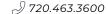
Instructional strategies from the examples

- Provide a brief introduction to the content prior to reading.
- Provide a purpose for the topic introduction, and ask students to share what they learned about the topic.
- Ask students questions about the topic.

South Carolina standards alignment

ELA: 3-5.I.2, 6-8.I.2, 9-12.1.2, 3-5.RL.MC.8, 6-8.RL.MC.8, 9-12.RL.MC.8, 3-5.RL.RCS.13, 6-8.RL.RCS.13, 9-12.RL.RCS.13, 3-5.R1.RCS.12, 6-8.RI.RC.12, 9-12.RI.RCS.12 **TEACHER:** INST.MS.1, INST.MS.2, INST.AM.1, INST.TCK.1, INST.TCK.2, INST.TCK.3, INST.TH.1, INST.TH.2, PLAN.SW.3







Provide a brief 3–5-minute introduction on the topic before reading to help students develop knowledge that might help them understand what they are reading. This can be done by asking students to read an easier, brief passage before presenting the higher-level text on the same topic.

Another way to prepare students for reading about a topic is to present a short 2–4-minute video clip, podcast, or brief informational lecture with illustrations. For each resource, provide a purpose, such as asking students to look for two things they learned about the topic from the video or podcast that they will share with the group or with a partner when the video or podcast ends. The teacher can summarize the most important ideas that were shared and clarify misunderstandings.

Another way to develop world knowledge before reading is to ask students questions about the topic. Not only will this 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. To ensure that students remain on topic, ask them whether their answers help them to understand the topic better. With practice, students will get better at determining whether the information they share is helpful or is distracting them from focusing on the topic of the text. Tell students when they have correctly evaluated the usefulness of the information they shared and provide suggestions when they misunderstand the information they shared or the topic.

2. Teach the meaning of a few words that are essential for understanding the passage.

Instructional strategies from the examples

- Identify essential words that students may have difficulty with and briefly teach their meaning before reading.
- Stop while reading to teach the meaning of other essential words.
- Continually work with new words and their meanings

South Carolina standards alignment

ELA: 3-5.RL.LCS.10, 6-8.RL.LCS.10, 9-12.RL.LCS.10, 3-5.RI.LCS.9, 6-8.RI.LCS.9, 9-12.RI.LCS.9

TEACHER: INST.MS.1, INST.PIC.2, INST.PIC.5, INST.PIC.6, INST.PIC.7, INST.AM.1, INST.Q.1, INST.Q.2, INST.Q.3, INST.Q.4, INST.Q.5, INST.Q.6, INST.Q.7, INST.Q.8, INST.TH.1, INST.TH.2, INST.PS.1, PLAN.SW.1, PLAN.SW.3

Identify words that are critical and conceptually central for understanding the passage but are likely to be difficult for students. These are words that appear early or

frequently in the passage, and might include bolded words. Write these words somewhere for all students to see, such as on a whiteboard. Briefly teach the meaning of a couple of essential words before the lesson and quickly provide the meaning of other essential words during reading.

Select one or two of the essential words to teach before reading the passage. Since the goal of understanding the meaning of these words is to help students access the information in the text, provide a brief, simple definition that relates to the content of the passage before reading. Provide an example, non-example, and/or visual representation of the word to help students understand the meaning.

During reading, stop intermittently to briefly provide the meaning of additional essential words that are critical for understanding the passage. Provide a simple definition of the word or rephrase the sentence with a known synonym for the word. For example, a teacher could quickly clarify the word *effortless* by replacing the word with the synonym *easy* when reading the sentence a second time. The goal is to provide the meaning of the word quickly and ensure that the unfamiliar word does not disrupt comprehension.

Giving students information about a word is important to initiate word learning. However, students will need to work with the words and their meanings to remember them. Once or twice a week, provide additional opportunities for students to work with the words and their meanings after reading. For example, ask students to provide examples of the words, discuss non-examples of the words, or use the words to answer questions about the text or topic either orally or in writing. Include previously taught words to reinforce their meanings. Have students write the words and definitions in a log. These logs can help students keep track of their learning and review words they previously learned.

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. Ask students if they know the meaning of the word. If they do not, provide a quick definition in the context of the sentence or rephrase the sentence with words they know. The goal is to provide the meaning without disrupting reading too much.

Teacher briefly providing the meaning of a few words that will help a group of students understand the meaning of the passage

After preparing students to read about the American Revolution, the teacher proceeded with building students' word knowledge.

The American Revolutionary War was a time when the colonists had a **conflict** and fought Great Britain. The colonies got their freedom and became an independent country called the United States of America. One of the reasons that the colonists had a conflict with Great Britain is that they felt they were not represented in the British government. The British government was making new laws and making the colonists pay more taxes, but the colonies had no say in them. The colonists said, "No taxation without representation." They wanted to have some say in the British government if they had to pay excessive taxes and live by British law. The war did not happen right away. First, there were protests and arguments. Then there were some small fights between the colonists and the local British army. Things just got worse and worse over the years until the colonies and Great Britain were at war.

The teacher chose the bolded word *conflict* to teach before reading because it is conceptually central and appears early in the text. Prior to reading, the teacher says, "*conflict* means a disagreement or argument. The American Revolution happened because the Americans and the British had a disagreement about who should run the government." The teacher reinforces the meaning of *conflict* during reading by explaining the meaning in the context of the information in the text.

In addition, while reading this paragraph, the teacher quickly provides the meaning of the two underlined words based on the context of the passage: excessive and local. The teacher reads the sentence again, replacing the word excessive with too much: "They wanted to have some say in the British government if they were going to pay too much in taxes and have to live by British law. Excessive means too much." The teacher reads the sentence by rephrasing the part of the sentence with the word local: "Then there were some small fights between the colonists and the British troops that were stationed nearby. Local means the area near or around where you are."

Teacher engaging students in activities to solidify the meaning of the words that appeared in the passage they just read

Teacher: We are going to talk about some of the words you learned today. You will work with a partner. Be ready to share your discussion with the group. The first word is conflict. A conflict is a serious disagreement or argument about something important. Talk with your partner about a conflict that two groups of people had in American history and how the conflict was resolved.

Next, the teacher asks students to talk to a partner about the words *excessive* and *local*. Students share examples of each word.

3. Teach students how to derive meanings of unknown words using context.

Instructional strategies from the examples

- Teach and explicitly model how to find clues to a word's meaning in the sentences around the word.
- Demonstrate a three-step process for determining the meaning of unknown words: 1. Mark the word, 2. Reread the sentence and look for clues, 3. Reread the sentences before and after.
- Guide students through the three steps and ask them to share what they learned. Provide feedback and support as needed.

South Carolina standards alignment

ELA: 3-5.RL.LCS.10, 6-8.RL.LCS.10, 9-12.RL.LCS.10, 3-5.RI.LCS.9, 6-8.RI.LCS.9, 9-12.RI.LCS.9

TEACHER: INST.TH.1, INST.TH.2

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. First, mark the word the students do not understand. Second, have the students reread the sentence with the unknown word and look for clues in that sentence to figure out the word's meaning. Third, if the sentence with the unknown word does not provide enough information, have students reread the sentences before or after and look for clues to figure out the word's meaning.

Be sure to tell students that sometimes they will read the sentence or the sentences around the word and still have difficulty figuring out the meaning of the word. If the surrounding sentences do not provide enough information to determine the meaning, students can ask for help or look up the word.

Guide students by prompting them through the steps and having them explain the reason for their responses. Tell students when they have answered and reasoned correctly. When the answer is incorrect, provide support through prompts and clues to get them closer to the correct meaning.

Teacher modeling how to use the surrounding sentences to figure out the meaning of the word obstacles

In 1922, Howard Carter and his crew found King Tut's tomb. Many archaeologists searched for the tomb, but Carter and his team were the first to find it. They came across many obstacles while trying to find the tomb. One was that the daily temperature reached as high as 120 degrees. Another was that the tomb is in the desert, where nothing grows, and there is nothing to protect people from the extremely hot sun. To make things worse, there was a lot of sand and rock around the tomb that were difficult to remove because the summer sun made them very hot to touch.

Teacher: I do not understand what the word obstacle means in this paragraph. So, I am going to try to use the surrounding sentences to try to figure out what it means. Let's look at the steps that are on the bulletin board.

- 1. Underline the unknown word.
- 2. Reread the sentence with the unknown word and look for clues in that sentence to figure out the word's meaning.
- 3. Reread sentences surrounding the sentence with the unknown wording and look for clues to figure out the word's meaning.

Teacher: First, I'll underline the word. Then I will reread the sentence with the word obstacle in it and look for clues to what it means. "They came across many obstacles while trying to find the tomb." That sentence just tells us that they came across obstacles but does not tell us what an obstacle is.

Now, I'll go to Step 3 and reread the sentences near the word to look for clues about the meaning: "Many archaeologists searched for the tomb, but Carter and his team were the first to find it." That doesn't give me any clues. "They came across many obstacles while trying to find the tomb. One was that the daily temperature reached as high as 120 degrees."

Ah, here the author tells us that one obstacle was very high temperatures. Being that hot would stop or slow down their work. In the next sentences, the author gives us two other

obstacles: no shade from the sun, and rocks and sand that were hard to move because they were too hot to touch. With all this information, I think obstacles means anything that makes it difficult for you to do something because the examples the author gave us were things that made it difficult to explore King Tut's tomb.

Teacher guiding students in using context to figure out the meaning of the word remote

Seabirds or marine birds spend most of the time at sea. They also live on *remote* islands in the ocean. There are no humans or animals on the island or nearby. The island is so far away that it is a place where the birds can rest, build their nests, and incubate their eggs. This is one reason why seabirds have survived for 60 million years.

The teacher asked students to share the words they did not know and underlined with a partner. The teacher then chose one pair to share the words with the group. The students did not understand the word *remote*. The teacher guided the students using context to understand the meaning of the word *remote*.

Teacher: We don't know what the word remote means. What do we do first?

Dakota: Underline the word and reread the sentence with the unknown word to figure out the

word's meaning.

Teacher: Read the sentence for us, Emerson.

Emerson: They also live on remote islands in the ocean.

Teacher: Is the author helping you to understand what remote means?

Emerson: No.

Teacher: What is the author telling us?

Emerson: The author is just saying that they live on remote islands. **Teacher:** Does the author give you any clues about what remote means?

Emerson: No.

Teacher: Okay, what do we do next, Riley?

Riley: Reread sentences surrounding the unknown word, looking for clues to figure out the

word's meaning.

Teacher: Great. Will you read them for us?

Riley: They also live on remote islands in the ocean. There are no humans or animals on the island or nearby. The island is so far away that it is a place where the birds can rest, build their nests, and incubate their eggs.

Teacher: There is a lot of information in those sentences. Is there anything the author says that will help us learn the meaning of remote?

Riley: Well... I think remote means safe.

Teacher: Remote does have something to do with safe, but it doesn't mean safe. You know often there is a lot of different information in the passages, and I bet you thought it was safe because of the clues that talked about the birds resting and incubating their eggs. That would make you think that the island is safe. Let's look at the sentences after. Can anyone figure out how those sentences might help to figure out the word's meaning? This sentence says there are

no humans or animals on the island or nearby and the island is so far away that it is a place where the birds can rest, build their nests, and incubate their eggs. These are good clues. Does this give you an idea of what remote means?

Riley: That no one is around?

Teacher: That's excellent, Riley. Sometimes it is difficult to get a word's meaning from context because of all the different information the author has provided. But here, remote means far away from everything. Excellent! Did you ever hear the phrase, "in the middle of nowhere"? If we say a place is "in the middle of nowhere" it means it is in a remote location because it is far away from everything! Now you can figure out how to learn the meaning of words by reading and thinking through a text.

4. Teach prefixes and suffixes to help students derive meanings of words.

Instructional strategies from the examples

- Teach the meaning of prefixes and suffixes.
- Start with commonly used prefixes and suffixes and move on to less frequently used ones.
- Teach students to isolate the base word, prefix, and suffix and determine each meaning separately.
- Practice determining the meaning through prefix and suffix.

South Carolina standards alignment

ELA: 3-5.RL.LCS.10, 6-8.RL.LCS.10, 9-12.RL.LCS.10, 3-5.RI.LCS.9, 6-8.RI.LCS.9, 9-12.RI.LCS.9, 3-5.RL.P.3, 6-8.RL.P.3, 9-12.RL.P.3, 3-5.RI.P.3, 6-8.RI.P.3, 9-12.RI.P.3 **TEACHER:** INST.MS.1, INST.PIC.2, INST.PIC.5, INST.PIC.6, INST.PIC.7, INST.AM.1, INST.Q.1, INST.Q.2, INST.Q.3, INST.Q.4, INST.Q.5, INST.Q.6, INST.Q.7, INST.Q.8, INST.TH.1, INST.TH.2, INST.PS.1, PLAN.SW.1, PLAN.SW.3

Knowledge of prefixes and suffixes will help students in reading multisyllabic words (**Recommendation 1**). Knowing the meaning of prefixes and suffixes will help students understand the meaning of these multisyllabic words.

Teach the meanings of prefixes and suffixes, especially those that students will encounter in the text. 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) or on to ones that are more difficult.

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.

Include practice on determining the meaning of words with a base word and prefix or suffix.

Frequently occurring prefixes		
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
6	non-	not
7	in-, im-	not
8	over-	too much
9	mis-	wrong
10	sub-	below
11	pre-	before
12	inter-	between
13	fore-	toward
14	de-	down
15	trans-	across, changed
16	super-	above, beyond

17	semi-	half
18	anti-	against
19	mid-	middle
20	under-	not enough

Frequently occurring suffixes		
Rank	Suffix	Meaning
1	-s, -es	plural
2	-ed	past tense
3	-ing	act of
4	-ly	having the qualities of
5	-er, -or	person who
6	-ion, -tion, -ation, -ition	state, quality of being
7	-able, -ible	capable of being
8	-al, -ial	related to
9	-у	characterized by
10	-ness	state of being
11	-ity, -ty	quality of
12	-ment	condition of
13	-ic	of/related to
14	-ous, -eous, -ious	full of
15	-en	made of

16	-er	comparative
17	-ive, -ative, -tive	having the nature of
18	-ful	full of
19	-less	without
20	-est	superlative

Other prefixes and suffixes that are frequently used in academic words		
Prefixes	Suffixes	
con- ad- ex- e- pro- ob- a- per- ab-	-ate -ize -ism -ent -ary -ist -ure -ant -logy	

5. Teach the meaning of Latin and Greek roots.

Instructional strategies from the examples

- Explicitly teach the meaning of Latin and Greek roots.
- Share examples of words that have a particular root and explain how the meaning of the root is part of the meaning of the word.
- Develop a word map for each root and add new words as they come up in reading.

South Carolina standards alignment

ELA: 3-5.RL.LCS.10, 6-8.RL.LCS.10, 9-12.RL.LCS.10, 3-5.RI.LCS.9, 6-8.RI.LCS.9, 9-12.RI.LCS.9, 3-5.RL.P.3, 6-8.RL.P.3, 9-12.RL.P.3, 3-5.RI.P.3, 6-8.RI.P.3, 9-12.RI.P.3

TEACHER: INST.MS.1, INST.PIC.2, INST.PIC.5, INST.PIC.6, INST.PIC.7, INST.AM.1, INST.Q.1, INST.Q.2, INST.Q.3, INST.Q.4, INST.Q.5, INST.Q.6, INST.Q.7, INST.Q.8, INST.TH.1, INST.TH.2, INST.PS.1, PLAN.SW.1, PLAN.SW.3

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). Lists of Latin and Greek words can be found on the following websites: yourdictionary.com and wikipedia.org.

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. Start by providing a definition of a root. For example, ambi- means both or both sides.

Share two or three examples of words that have the root and explain how the meaning of the root is part of the meaning of the entire word. For example, ambi- is part of the words *ambidextrous*, *ambiguous*, and *ambivalent*. The meaning of all three words includes both sides of something. Ambidextrous means having the ability to use both hands; ambiguous means open to both sides or more than one side, choice, or meaning; and ambivalent means having both feelings, mixed feelings, or contradictory ideas. Knowing the meaning of the root ambi- helps clarify the meaning of these words.

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. Have students add words to the word map, as they come across them during their lessons. Integrate these words into other activities, such as writing and spelling, to provide continued exposure to the words.

Teacher helping students understand the meaning of words with the root biousing a word map

Teacher writes bio- on the board.

Teacher: Bio- means life.

Teacher writes biology on the board and underlines bio in the word biology.

Teacher: I know that bio- means life, and so this word has to do with life. We learned before that -ology means study of, so biology is the study of living things, like plants, animals, and humans.

Teacher writes biography on the board.

Teacher: Now let's look at another word, biography.

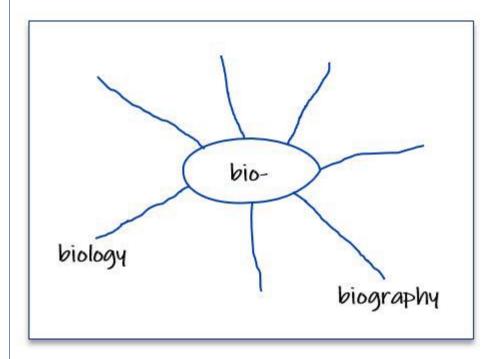
Teacher underlines bio- in biography.

Teacher: Biography. What do you think this is about now that we know the meaning of the root bio-?

Stanley: It has something to do with life.

Teacher: Yes, we know that this word has something to do with life because it includes the root bio-. The second part -graphy is related to writing. Biography means writing about someone's life. The common root in both these words is bio-. Both words have to do with life. One word—biology—is the study of living things, and the other—biography—is about writing about someone's life.

Teacher draws the word map.



Teacher: When we come across more words that include the root bio-, we can add them to this word map.

Students copy the word map in their log. In subsequent lessons the teacher asks students to add more words to the word map. They add the words biofeedback, biographical, and biodegradable. Each time a word is added the teacher asks the students to separate the word into parts. The teacher talks about the other part of the word and its meaning. The students put the two parts together to determine the meaning and then use the word in a sentence.

Potential roadblocks and how to address them

Roadblock	Suggested Approach
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.
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. For example, "Here in this sentence, massive means very large and heavy. Jose was having a hard time carrying his massive backpack." Also, it can be helpful to show students how to use dictionaries and thesauruses, including web-based ones, and functions within Word and in common internet browsers. These tools allow students to quickly locate the meanings of words or their synonyms. However, the definitions that appear can be difficult for students to understand. Students may need help figuring out how the definition applies to the text. Thesauruses may help students understand the meanings of words by providing words that make more sense to them.
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.



Reference: Vaughn, S., Gersten, R., Dimino, J., Taylor, M. J., Newman-Gonchar, R., Krowka, S., Kieffer, M. J., McKeown, M., Reed, D., Sanchez, M., St. Martin, K., Wexler, J., Morgan, S., Yañez, A., & Jayanthi, M. (2022). Providing Reading Interventions for Students in Grades 4–9 (WWC 2022007). Washington, DC: National Center for Education Evaluation and Regional Assistance (NCEE), Institute of Education Sciences, U.S. Department of Education. Retrieved from https://whatworks.ed.gov/.