

Providing Reading Interventions for Students in Grades 4-9

Practice Guide Summary

What Works Clearinghouse™

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Virtually every teacher works with students who struggle to read on grade level. The 2019
National Assessment of Educational Progress
(NAEP) reported that over a third of fourthgrade students and a quarter of eighth-grade students read at a level below NAEP Basic. Low reading scores in these grade levels are particularly troublesome when considering that so much of the curriculum in grades 4-9 (and beyond) requires the ability to read and understand increasingly complex texts. Recent research has demonstrated that interventions can help improve the reading level of students in grades 4-9 with reading difficulties.

This practice guide, developed by the **What Works Clearinghouse**™ (WWC) in conjunction
with an expert panel, distills this contemporary
research into easily comprehensible and
practical recommendations for educators to use
when providing reading interventions. The
recommendations outline evidence-based
practices that can help teachers meet the needs
of their students with reading difficulties. These
recommendations will also help educators
address the requirements of two federal laws,
the Elementary and Secondary Education Act
(ESEA) and the Individuals with Disabilities

Education Act (IDEA), that favor the use of evidence-based instructional practices relevant to student needs.

This summary introduces the four recommendations and supporting evidence described in the full practice guide.

Recommendations in this practice guide:

- Build students' decoding skills so they can read complex multisyllabic words.
 - Strong Level of Evidence
- Provide purposeful fluency-building activities to help students read effortlessly.

Strong Level of Evidence

3. Routinely use a set of comprehensionbuilding practices to help students make sense of the text.

Strong Level of Evidence

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.

Moderate Level of Evidence

Introduction

Recommendation 1 and Recommendation 2

focus on practices to improve students' ability to read words accurately and automatically, while **Recommendation 3** and

Recommendation 4 focus on practices for helping students to understand the text they read. The recommendations are grounded in high-quality evidence based on research studies focused on reading interventions and have the potential to improve reading and comprehension.

These recommendations are designed to be used by educators providing reading intervention or those who oversee multi-tiered systems of support (MTSSs) in reading. These educators include special educators, general education teachers, intervention teachers,

reading specialists, reading coaches, and trained volunteers. These educators are referred to as "teachers" throughout this summary.

The recommendations may also be useful 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.

For more details about the recommendations and more implementation tips, download your free copy of the full practice guide from the What Works Clearinghouse website:

https://ies.ed.gov/ncee/wwc/PracticeGuide/29.

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

As students progress in school, words that appear in grade-level texts become more difficult to read. In early-elementary grades, texts often include monosyllabic words, such as bat and ball, as well as simpler multisyllabic words, such as outside and under. By upper-elementary and middle school grades, texts include more complex multisyllabic words, such as disorganization and equilibrium. Many of these difficult multisyllabic words are essential for understanding the meaning of the texts. For that reason, adequate word-reading skills are essential for understanding the more complex texts that appear in these higher grade levels.

The goal of this recommendation is to prepare students with the skills needed to break apart and accurately sound out multisyllabic words.

How to carry out the recommendation

1. Identify the level of students' word-reading skills and teach vowel and consonant letter-sounds and combinations, as necessary. It is important to gauge students' word-reading abilities to determine where to begin instruction. Ideally students' word-reading skills would be assessed prior to the intervention, and information from the assessment would be used to place students with similar needs in intervention groups. Use students' performance on a word-list reading measure to get a sense of the word-reading skills of the students in each intervention group.

Students need a solid mastery of vowel and consonant letter-sounds and combinations to read longer, more difficult words.

Resource 1.1 provides a list of important sounds students need to learn.

esource 1.1. Common vowel sounds and vowel combinations				
long vowel sound	vowel sound as in me, labor, polar			
short vowel sound	vowel sound as in <i>c<u>a</u>p</i> , <i>d<u>igg</u>er</i>			
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 <i>c<u>ar</u>, f<u>ur</u>, p<u>er</u>sonable</i>			
consonant-le	consonant sound as in <i>bat<u>tle</u>, belit<u>tle</u></i>			

Recommendation 1

When teaching word-reading, introduce vowel and consonant letter-sounds and combinations one at a time, building on what students already know. Review previously taught sounds and combinations before beginning the lesson. Briefly pronounce the new sound and then demonstrate how to use it to sound out simple monosyllabic words at first and then later multisyllabic words. Start with two-syllable words and work up to words with three and more syllables.

- 2. Teach students a routine they can use to decode multisyllabic words. The panel recommends choosing one routine to teach students to read a multisyllabic word. There are numerous routines that can be used to break down and decode multisyllabic words, but the panel recommends choosing one routine and explicitly teaching it to students during the intervention. Rather than teaching a wide array of rules, choose a routine that provides simple steps for breaking words into parts and blending those parts together to sound out the word. The routine can be used flexibly across different multisyllabic words.
- 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. 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.
- 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 a routine to build automaticity, the ability to recognize words instantly and effortlessly. Initiate practice by reading word lists out loud as a group. 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.

Students will need multiple exposures to the words they are learning to read. Practice should include more than word lists. Equally important is having students read multisyllabic words in sentences and brief paragraphs.

Knowing the meanings of words can also help students read words in the future. If the students are unsure of a word's meaning, briefly discuss the meaning after students have used the routine to read the word.

Provide frequent feedback and support to help students persevere. As students apply the routine, consistently provide feedback that affirms what they did well and explain how the students can improve their use of the routine.

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

Fluency is the ability to read text accurately, with ease, expression, and appropriate pacing. This recommendation focuses on improving students' ability to read text with increased ease, while **Recommendation 1** focuses on reading multisyllabic words accurately and fluently. When students read fluently, they can turn their attention from sounding out the individual words to making sense of what they are reading.

How to carry out the recommendation

1. Provide a purpose for each repeated reading. Reading the same passage several times can build fluency, but if not structured well, it can be perceived as a dull and discouraging task, especially for students in upper-elementary and middle school grades. The panel recommends having students reread the same passage a total of 3-4 times, each time with a different purpose. Purposes for rereading can include focusing students' attention on reading at an appropriate pace and with expression, answering questions, identifying words they do not know, or reflecting on what students learned from the text or why they think the group is reading the passage.

For these purposeful repeated reading activities, choose short, content-rich passages at the students' instructional level that include multisyllabic words, vowel and

- consonant sounds and combinations, or vocabulary the students have previously been taught. Using this approach, fluency-building activities provide a cumulative review of the multisyllabic words, word-reading skills, and vocabulary that were previously taught.
- 2. Focus some instructional time on reading with prosody. Prosody refers to reading with expression, appropriate pitch and tempo, and pauses at the right places. Pauses, tempo, and emphasis placed on different words can help readers understand what they are reading.
 - Draw students' attention to what prosody entails by dramatizing why prosody is important. 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.
- 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 are exposed to unfamiliar words and syntax, their reading becomes more fluent. Devote some time each week to reading a wide variety of texts on a range of topics and with varying writing styles.

Recommendation 3: Routinely use a set of comprehension-building practices to help students make sense of the text

Students with reading difficulties often have difficulty understanding what they read. Many of these students view reading as a frustrating task and may rush through a passage, rather than try to figure out its meaning.

By the time students are in upper-elementary grades, reading material in all subject areas conveys information and ideas that students are expected to learn and understand. When students are unable to understand these texts, they miss crucial opportunities to learn gradelevel content.

The goal of this recommendation is to provide teachers with ways to support students as they learn and practice routines and develop reading habits that promote reading comprehension. These supports can be gradually withdrawn as students gain competence in making sense of the text.

This recommendation focuses on improving both world and word knowledge (Recommendation 3, Part A) and comprehension-building practices (Recommendation 3, Parts B, C, and D).

Table 3.1 delineates the four parts of this recommendation. The panel believes all four comprehension-building practices are necessary for students to read with understanding.

Table 3.1. Parts of Recommendation 3

Recommendation 3

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

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

This part of Recommendation 3 focuses on developing both knowledge of the topics discussed in texts ("world knowledge") and knowledge of word meanings ("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 Part A of the recommendation

1. Develop world knowledge that is relevant for making sense of the passage. Students need enough knowledge about a topic to read and understand a text on that topic. 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.

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.
- 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. In this document, these words are referred to as essential words. These are words that appear early or frequently in the passage and might include bolded words. Briefly teach the meaning of a couple essential words before the lesson and quickly provide the meaning of other essential words during reading. Provide examples, non-examples, and/or visual representations of the words to help students understand the meaning. Students will need to work with the words and their meanings to remember them.

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. Once or twice a week, provide additional opportunities for students to work with the words and their meanings after reading.

Recommendation 3, Part A

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. 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.

4. Teach prefixes and suffixes to help students derive meanings of words. Knowledge of prefixes and suffixes will help students in reading multisyllabic words. 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 (e.g., -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.

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. Start by providing a definition of a root. 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.

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

Learning to ask and answer questions will enable students with reading difficulties to integrate information from the passage with the knowledge they have gained from earlier lessons or their reading. These connections will enable students to draw text-based interpretations or inferences about what the author implied. By asking and answering questions about text, students can better interpret its meaning.

How to carry out Part B of the recommendation

 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. **Resource 3B.1** describes the three common question types.

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. Show students how to justify the answer by reading the sentence

Resource	3B	1	Types of	auestions

Question type	Description
Right There Question	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 question are in the same sentence. This type of question can also be referred to as a text-dependent question.
Think and Search Question	The information needed to answer the question is in different parts of the 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.
Author and Me 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 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).

Recommendation 3, Part B

from the text that provides proof of the response. Gradually include students in locating the sentence with the words from the question and answering the question with information from that sentence.

Once students show some facility answering Right There questions, explain that the answers to Think and Search questions are usually not adjacent to each other; the answers to the questions are separated by other information that does not answer the question. Move on to Author and Me questions only after providing ample practice opportunities with Right There and Think and Search questions.

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 that they can answer each type.

Guide students through the process of answering each question type by reminding them of what each type of question requires. Monitor students as they work with a partner to answer questions about the text. If needed, also direct students to the part of the text where the answer could be found, without pinpointing the exact sentence or sentences that will help them arrive at the answer. Remind students that not all

information in the paragraphs will be useful in answering the question. Guide the students in sorting through relevant and irrelevant information. Have students practice justifying their answers for each question type by indicating the portion of the text that helped them answer the question.

3. Teach students to ask questions about the text while reading. When students develop questions about the content of the text, they can gain a deeper understanding of the text's meaning. Developing and answering questions about text will help facilitate students' independence in gaining information from text. Students will gain confidence in digging into the information from texts they read to figure out the author's meaning. To facilitate independence, provide students with prompt cards that include question stems to help students develop various question types.

Developing questions to ask about a text can also help students engage in meaningful discussions with their peers. As students get more comfortable figuring out how to ask and answer questions, provide opportunities for them to discuss questions with their peers with little or no assistance from the teacher. Working with a partner or in small groups requires students to take a leadership role by raising questions and keeping the discussions moving.

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

Generating the gist of a short portion of text is an essential component of building students' comprehension. A gist statement is a synthesis of the most important information in a short one- or two-paragraph section of the text. Some refer to it as the main idea. Gist statements can help students understand what they read and remember the most important information. Generating the gist provides an opportunity for students to separate important information from irrelevant information and to integrate important ideas and connections in the text to determine what the author meant.

How to carry out the recommendation

1. Model how to use a routine to generate gist statements. Having several easy steps to follow in a routine will help students break the process of generating a gist into manageable tasks. Identifying the important information in the text can help students with other tasks, such as answering

comprehension questions. **Resource 3C.1** includes a routine that students can use to generate a gist statement.

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. 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.

Resource 3C.1. Routine for generating a gist statement

- 1. 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.
- 2. Mark and then list the important information about the most important person, place, or thing.
- 3. Synthesize or piece together the important information to formulate a gist statement.
- 4. Write the gist statement in your own words.
- 5. Check that the gist statement includes all the important information in a short, complete sentence that makes sense.

Recommendation 3, Part C

- 2. Teach students how to use text structures 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. Introduce each text structure one at a time. If students do not understand the three text structures or are not able to recognize them, then teach or review the three text structures. After students are proficient in identifying text structures, show students how to use a text structure to generate gist statements.
- 3. Work collaboratively with students to generate gist statements. After modeling how to generate 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. Also, have students identify irrelevant information and provide their reasoning for why they consider the information to be irrelevant. This may be difficult for students at first. Affirm what they do well and provide ideas for improving when they need help.
- In each lesson, repeat the process of discussing the important information and generating a gist statement for each section for a total of 3-4 sections. Students will need a lot of support at first, but as they become more proficient in applying the routine, gradually reduce the amount of support provided.
- As students become more confident generating gists as a group, provide them with additional practice by generating gist statements with a partner. Ask students to share with the group the gist statements they wrote with their partner.

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

Students may not know when they do not understand what they are reading. When students monitor for understanding as they read, they can recognize whether the text is making sense to them. There are several actions students can take when they figure out that they are not understanding the text. These actions can help students make sense of the text.

How to carry out Part D of the recommendation

- 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. Discuss the statements students were not able to understand and which parts caused the problem. 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.
- 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. 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. If they do not understand, they can reread the section slowly and carefully, if necessary.

Read the text as a group and stop periodically to ask the group to think about whether they are understanding the text and what they can do to address their misunderstandings. Ask students questions they should ask themselves and support them in answering the questions. Use prompts and questions to help students move toward independence in asking themselves questions.

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.

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. Alternatively, ask students to answer some comprehension questions instead. Ask students to mark any answers in which they are not confident. This will help students practice identifying when they do not understand what they read.

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

Stretch text refers to reading selections that are challenging for students to read on their own, which means they are typically above students' independent reading level. These texts are often at or just below students' grade level. With appropriate teacher supports, and on occasion technological supports, students can read and understand challenging texts.

How to carry out the recommendation

- 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. Plan when to stop to discuss the text before beginning to read with students. Also create a list of difficult multisyllabic words, proper nouns, and essential words to discuss before and during reading.
- Provide significant support as the group works through a stretch text together.
 Students will need teacher support to read and understand stretch texts. 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.

Use an array of approaches for reading the passage aloud as a group. For example, read aloud and ask students to read along quietly; read a couple of sentences and have a student read the next couple sentences; or read aloud together. Begin with shorter sections of text and gradually increase the length of text. Gradually reduce the number of guiding questions as students get comfortable with the task. Some lessons can focus on determining what a passage is about, while others focus on asking and answering questions or monitoring for understanding.

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. Stretch text lessons should include some comprehension work.

Summary of Evidence by Recommendation

	Recommendation 1 Build students' decoding skills so they can read complex multisyllabic words	Recommendation 2 Provide purposeful fluency-building activities to help students read effortlessly	Recommendation 3 Routinely use a set of comprehension- building practices to help students make sense of the text	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			
Number of Studies							
	32	33	34	15			
Level of Evidence							
	Strong	Strong	Strong	Moderate			
Meta-Analysis Results by Outcome Domain							
Measures of general reading proficiency and English language arts	+	+	+	+			
Passage reading fluency–oral	0	+	†	t			
Passage reading fluency–silent	0	0	†	†			
Reading comprehension	+	+	+	+			
Reading vocabulary	†	†	0	†			
Word and pseudoword reading	+	t	†	t			

^{+ =} Statistically significant positive effect; 0 = Indeterminate effect (i.e., not statistically significant); † = not applicable.

For more practical tips and useful examples, download a copy of the *Providing Reading Interventions for Students in Grades 4-9* practice guide at

https://ies.ed.gov/ncee/wwc/PracticeGuide/29.

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 What Works Clearinghouse™ (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. The expert panel for this guide included Sharon Vaughn, Michael J. Kieffer, Margaret McKeown, Deborah K. Reed, Michael Sanchez, Kim St. Martin, and Jade Wexler.

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References

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