

Vocabulary and Reading Comprehension

The purpose of reading is to understand the meaning of the text. Because students with dyslexia tend to struggle with word-level reading and reading fluency, their vocabulary knowledge and reading comprehension are often affected by the effort and time needed to read the words in a sentence or passage. Vocabulary and reading comprehension are closely linked. In fact, according to some experts, it is difficult to determine how vocabulary and reading comprehension differ (e.g., Kamil, 2004). In other words, if you don't understand the meaning of the words you read—even if you can decode them—your comprehension will be compromised.

Vocabulary Development

Although teachers should teach vocabulary explicitly, students also learn new words incidentally. Reading is a significant source of incidental vocabulary acquisition. Unfortunately, students with dyslexia tend to read far less than their peers without dyslexia, so their vocabulary does not develop at the same rate. The following recommendations include several general research-supported instructional strategies, as well as some specific recommendations for developing oral vocabulary and increasing word and morphological knowledge.

General Recommendations

The National Reading Panel (National Institute of Child Health and Human Development, 2000) synthesis of vocabulary research provided the following eight recommendations:

1. Provide direct instruction of vocabulary words for a specific text that students need to know to comprehend the passage.
2. Provide sufficient repetition and multiple exposures to vocabulary words, with opportunities to encounter these words repeatedly in various contexts.
3. Select vocabulary words that will be useful in many contexts.
4. Restructure vocabulary tasks and activities as necessary.
5. Encourage active engagement.
6. Use computer technology to help teach vocabulary.
7. Provide opportunities for incidental learning by encouraging wide reading, structured read-alouds, and discussion sessions.
8. Remember that dependence on a single vocabulary-instruction method will not result in optimal learning.

Oral Vocabulary

One avenue for increasing vocabulary is introducing the student to words through oral language activities. You can enrich the student's oral vocabulary through a variety of language activities and experiences, including listening to stories and playing word games. The goal is to expand both receptive vocabulary (the words understood when heard) and expressive vocabulary (the words used in speech) so the student recognizes the meaning of a spoken word and can use the word appropriately when speaking or writing. The following are ways to help increase a student's oral vocabulary:

- For preschool and kindergarten students, you can increase vocabulary and engagement in stories by using dialogic reading, an interactive approach that helps build language. This method also can be taught to the child's parents for use at home. The fundamental strategy is the PEER sequence; PEER is an acronym describing a short interaction between a child and an adult after reading content from a book (Whitehurst et al., 1988). The adult
 - Prompts the child to say something about the book
 - Evaluates the child's response
 - Expands the child's response by rephrasing and adding information to the response
 - Repeats the prompt to make sure the child has learned from the expansion

- For older students, use teacher read-alouds that incorporate interactions between the teacher and the students (e.g., questioning, word explanations, activating prior knowledge; explicit instruction on target words). When you are reading aloud, it is helpful to select material that is slightly above the student's instructional reading level.
- Have the student listen to audiobooks to expose them to vocabulary, language, and story structures that are more advanced than what they could encounter when reading independently.
- Relate new words to words that the student already knows.
- Encourage the student to create a mental picture of the word that illustrates its meaning.

Reading Vocabulary

You can expand a student's vocabulary by teaching words directly, as well as by providing multiple incidental opportunities (e.g., wide-ranging independent reading, repeated reading of familiar text, writing exercises, classroom discussions):

- Provide opportunities for the student to encounter new words repeatedly in text.
- Before you ask the student to read a passage, review any of the words that are central to understanding the main ideas presented in the text.
- Ensure that the readings selected for the student do not contain too many unfamiliar or new words.
- Rather than having a student look up definitions in a dictionary, have them write sentences with the words, make word webs, and identify synonyms and antonyms for the word. (A word map or web expands word knowledge. A target word is placed in the middle of the web; then the student writes synonyms and related ideas on lines that radiate from the target word.)
- For younger students, make sure they understand the meanings of high-frequency words, such as those listed on the Dolch word list or Fry's *1000 Instant Words* (Fry, 1999), and teach words for basic concepts (e.g., colors, shapes, time, places, numbers, order).

Graphic Organizers

Graphic organizers are visual aids to facilitate instruction and learning. You may use them to help a student learn the definition of a word, synonyms, antonyms, related words, or concepts. For example, you can use a word web to help a student master a targeted word. Write the word in the center circle. Discuss the meaning of the word. Have the student write related words in the additional circles or have the student write synonyms and antonyms for the word. You can also use a four-square organizer, where the student defines the words in the first square, draws an illustration in the second square, writes an example in the third square, and writes a nonexample in the last square.

Morphological Knowledge

You can help students expand their vocabulary knowledge by teaching them to recognize and understand morphemes. A morpheme is the smallest linguistic unit that has meaning (e.g., *dislike* has two morphemes: *dis-* and *like*; *-ed*, *-ing*, and *-er* are also morphemes). Morphemes may be roots or base words. A root is a word part that cannot stand alone (e.g., the Greek and Latin roots *aud*, *bio*, *phon*). A base word is a word (free morpheme) that can stand alone (e.g., *like*, *sign*). Teach the student a new root or base word and its meaning. Then, add affixes to provide practice with the morpheme and to explain how the addition of these affixes alters a word's meaning. An affix is a word part (prefix or suffix) that is attached to a root or a base word to form a new word or word form; this word part modifies the word's meaning (e.g., *pre-*, *-ness*). A prefix is attached to the beginning of a word to modify the word's meaning (e.g., *re-*, *un-*); a suffix is attached to the end of a word to modify the meaning (e.g., *-ing*, *-tion*). A suffix sometimes changes the part of speech of the target word. For example, you can add the suffix *-tion* to the verb *act* to change the word into a noun (*action*).

Technology-Based Strategies

Use technology to help motivate the student. For example, online vocabulary games may help create motivation. Various websites include free games such as crossword puzzles, word scrambles, and picture-word matches.

Reading Comprehension

As with vocabulary, students benefit from explicit instruction in reading comprehension. Many of the techniques were developed by researchers who observed the strategies that proficient readers used to comprehend text. The following recommendations include several general research-supported instructional strategies, as well as some specific recommendations for enhancing reading comprehension.

Activating Prior Knowledge

Activating the student's prior knowledge about the topic or the story theme can have a positive effect on motivation as well as comprehension. To activate prior knowledge, ask the student about any previous experience related to the story or topic. Discuss how the student's knowledge connects to the text.

When a student reads a narrative or literary text, you may ask them to make predictions such as "What do you think will happen next?" and "What do you think will be the result of the conflict?"

Before the student begins to read an expository text, they may benefit from knowing the purpose for reading a particular text. To help the student know the text's purpose, you can work with them to examine chapter goals (if stated) in the text and to look at the title, headings, and subheadings. In addition, you may ask them to read the first and last paragraphs and to look at the captions, pictures, and words in bold. Request that the student summarize what these text features have in common and how they relate to the chapter goals. This will help the student know what to look for while reading. To ensure the student understands, ask them to repeat the purpose to you.

Active Reading Strategies

Help ensure that the student is an active reader by having them identify the main ideas and supporting details while they read. Help the student develop self-monitoring behaviors (e.g., encourage them to ask for help when they encounter unfamiliar words). Teach a variety of strategies to address comprehension issues that arise. For example, suggest that the student place a check mark beside any word, sentence, or idea they do not understand. For sentences or ideas they do not understand, discuss the

meaning and then have them paraphrase the meaning. Afterward, check the student's comprehension by having them reread the sentence(s).

Visualization

Another strategy to enhance comprehension is to visualize the content; tell the student to make an imaginary movie by thinking how the content details might look and interact. Select a paragraph that uses descriptive language and is at an appropriate reading level. After the student has read the content, ask what images come to mind. Finally, help the student understand the meaning of any pictures, graphs, or diagrams that appear in the text.

Paraphrasing/Summarization

An effective way to build comprehension is to teach the student how to paraphrase and summarize; first, ensure that the materials are at the student's independent reading level so that the focus can be on understanding the text, rather than on word identification. Emphasize how to distinguish the main idea of a passage from the details. For example, present a short newspaper article or paragraph that has a clear topic sentence and explain the supportive details. Ask the student to paraphrase and summarize the passage.

Asking and Answering Questions

Modeling how to ask and answer questions can also improve reading comprehension. Have a student read a short passage and take turns asking and answering questions. When working on answering questions, you can also ask the student to determine if the answer (a) is apparent in the immediate text; (b) requires using background information from the text or the reader; or (c) requires going beyond the information that is presented in the text.

Story Grammar

Teaching students about story grammar can also improve reading comprehension. Story grammar includes the main elements and parts of a story. Graphic organizers can help students visualize the story elements as well as the story structure. The structure can be simple—such as the main characters, the setting, the problem, and the solution. Alternatively, you can focus on the beginning,

middle, and end of a story. A more detailed structure includes these story elements:

- Characters: These are the main character and minor characters.
- Setting: The time and place of the story are described.
- Initiating event: A problem occurs.
- Internal responses: The characters' thoughts, ideas, emotions, and intentions are noted.
- Attempt(s): The main character's goal-related actions are described.
- Resolution: The problem is solved, or a new attempt is proposed.

Multistep Comprehension Methods

Because students with dyslexia have weaknesses in word reading and rate, they have trouble completing and understanding both narrative and expository content, particularly lengthy reading assignments within textbooks. Instruction in specific strategies can deepen understanding of a subject matter text.

Several multistep comprehension models (e.g., SQ3R) have been developed and researched. SQ3R is an acronym for the five steps in this model: Survey, Question, Read, Recite, and Review (Robinson, 1978). All of these multistep comprehension methods require mastery of important steps. One example of a simple technique for building background knowledge and improving comprehension is K-W-L.

K-W-L

For this strategy, create three columns and place a K at the top of the first one, a W at the top of the second one, and an L at the top of the third one (Ogle, 1986):

1. Before students read a passage, have them list what they already know about the topic (K: What I Know).
2. Next, have them write questions about what they want to learn (W: What I Want to Learn).
3. Then, have them read the passage and summarize what they learned (L: What I Learned).

You can also add a fourth column and write an S at the top. Ask what additional information the student would still like to learn (S: Still Want to Learn).