

# Helping Students with **ADHD & Language Disability**

by Linda E. Spencer, PhD

**EDUCATIONAL DEMANDS FOR LANGUAGE PROCESSING** present ongoing challenges for students who have ADHD and problems with language comprehension. The prevalence of co-occurring ADHD and language processing disorder is substantial: About twenty to thirty percent of students with ADHD will also have some form of challenge in the area of language, and twenty-five to fifty percent of students coded with speech/language disability also have ADHD. When the primary concern is ADHD, problems with language processing may be attributed incorrectly to the ADHD. As a result, students may not receive effective interventions and other educational supports.

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Children who are “late talkers” (fewer than fifty words at twenty-four months of age) usually are referred to early intervention specialists, where they receive services from a speech-language pathologist and other specialists. The majority of late talkers are using sentences that are similar to those of their peers by the time they complete kindergarten, and often they no longer qualify for special services. Still, many students with an early diagnosis of language impairment continue to underperform compared to age-matched peers, even when they no longer qualify for school services (Rescorla, 2009). We are coming to regard language impairment as a lifelong problem for many of our children who were late to start talking, just as we now are recognizing ADHD as a lifespan challenge. These challenges affect the students’ ability to understand and produce sentences and longer language units, to recall factual information from text, to explain concepts, and to write responses.

### **Attention, memory, and language comprehension**

Listening to longer sequences of language requires the ability to sustain attention, and students with attention problems tend to do worse on listening comprehension tasks (Zentall, 2006). Moreover, limitations in auditory working memory are relatively common in individuals who have ADHD, a trait shared by individuals who have language disability. That means that as they listen to others speak, they aren’t able to hold as many words in memory as others of the same age.

The types of sentences associated with verbal problem solving tend to be relatively long, and by the time the student hears the end of the sentence, he may not remember the words at the beginning of the sentence. Students who have difficulty holding a lot of words in mind as they think about a story may miss the subtle distinctions among conjunctions that are used in problem-solving statements, such as “because” or “if,” so they may not be able to determine what type of response is required. (If you want more information about current curriculum expectations, go to the website for your state’s department of education and search for the Common Core State Standards.)

### **Therapy vs. accommodations**

Students who are diagnosed with language disability may require direct therapy (intervention), classroom modifications and accommodations, or a combination. The most familiar model for intervention is “pull-out” service, where the student works with the speech-language pathologist in another room. The advantage is that the student has private time with the therapist and can take chances without the other students in the class listening in. The disadvantage is that skills learned in a separate room may not be used by the student on returning to the classroom. In today’s classroom, the speech-language pathologist may be integrated into the classroom to support students with language challenges.

Regardless of where intervention is provided, objectives are for-

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mulated to reflect both the demands of the curriculum and the student’s own developmental level for language. For example, many students with language impairment are not able to formulate complex sentences. If the grade-level curriculum specifies that students will explain cause-effect relationships, then objectives will specify that the student will learn to formulate sentences that contain, for example, conjunctions that help to express cause-effect relationships.

Here are some other types of language and communication skills important for school progress that might be targeted for direct intervention (Nelson, 2009):

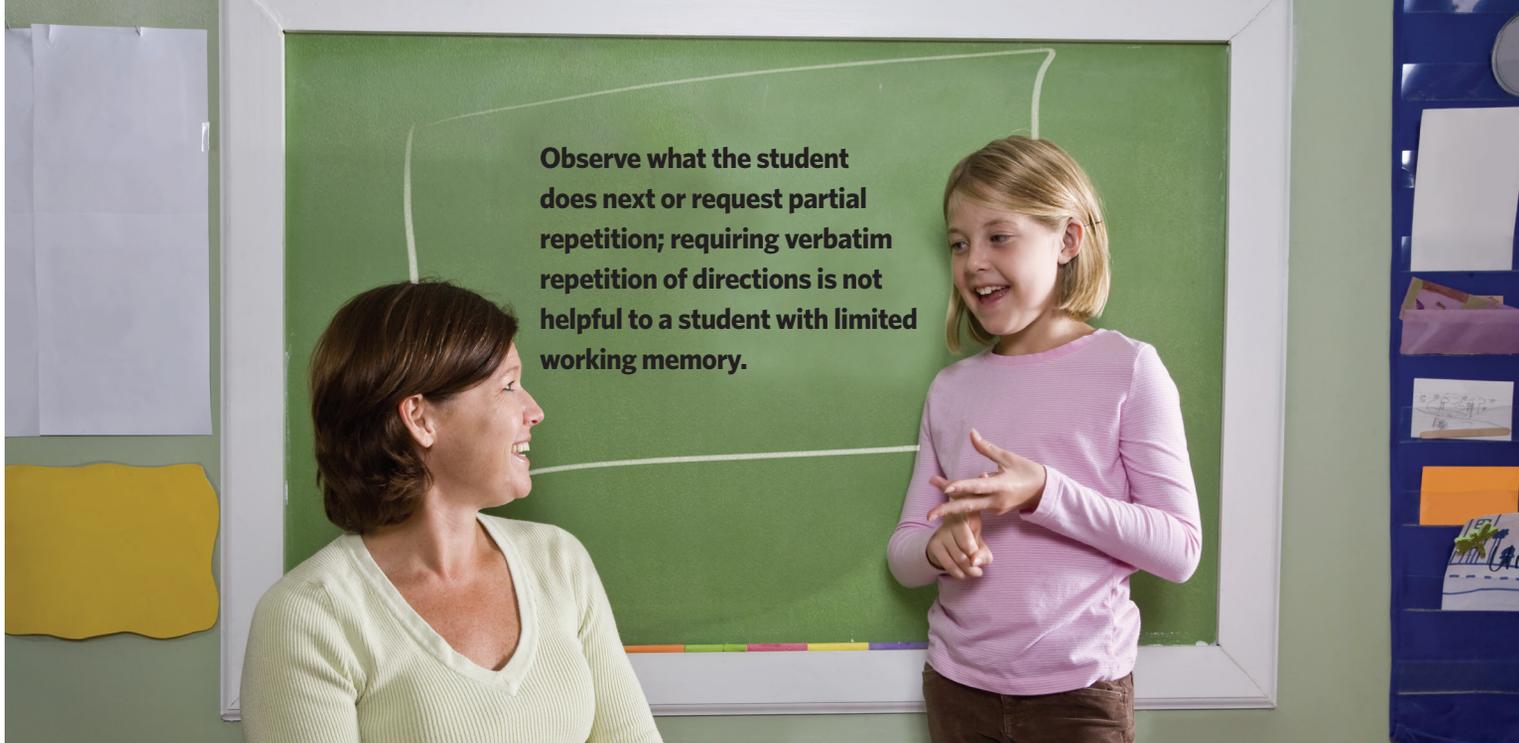
- **Classroom discourse:** Some students are not aware of the types of verbal and nonverbal communication required to be a successful student. The speech-language pathologist could target skills such as observing what other students are doing in order

to understand the pacing of the lesson, know when and how to volunteer an answer, or what kind of body language is appropriate in the class.

- **Peer discourse:** Students who do not understand when to talk to peers and when to listen, how to use slang, or how to enter or leave a peer group will miss much of what is important in the learning environment. These skills are the basis for later cooperative learning in school and success on the job.
- **Narrative versus expository discourse:** The language used for narratives (stories) is different from that used for fact-based (expository) discourse. Students who have challenges understanding and using complex language may have difficulty making the transition from story language in the lower grades to fact-based language in the upper grades.

Another way to support students is through what often is referred to as “indirect” or “consultative” service. In this model, the resource staff member, such as the speech-language pathologist, works with the classroom teacher to identify the needs of individual students who require language supports in order to be successful. Here are some ways that oral and written language can be modified to meet the needs of students who have difficulty processing complex language:

- Use shorter sentences.
- “Chunk” sentences by saying part of the sentence, pausing to be sure the student is on track, and then saying the next part.
- “Recast” a long and complex sentence by repeating portions of the sentence using less complex grammar.
- “Scaffold” by chaining shorter sentences, one after the other, to lead the student to an understanding of the type of response that is required.



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- Use explicit language (reduce the amount of inferential reasoning required).
- Repeat/rephrase key information.
- Observe what the student does next or request partial repetition; requiring verbatim repetition of directions is not helpful to a student with limited working memory.
- Break down large amounts of written information into smaller, visually distinct sequences; add graphics.
- Provide explicit definitions for new vocabulary.
- Make it easier for students to find information in text by placing comprehension questions on the same page as informational text.

Here is an example of a relatively short question that might challenge a student who has problems comprehending language:

➤ **“Why didn’t the boy tell his friend what happened?”**

A “why” question requires a problem-solving response that must reference at least one event that occurred in the story. For a student with limited working memory, that can be a challenge. The next word, “didn’t,” requires the student to remember not only what the character *did* do, in order to determine what he *did not* do. Again, memory is required, and the linguistic processing load is fairly high for this negative verb form. The student also must remember the two characters in the story while retrieving other information. The original question could be recast to place fewer demands on recall by targeting one critical element at a time and using shorter sentences.

- **“What happened?”** (The student identifies only the event.)
- **“Did the boy tell his friend?”** (The student responds with “yes” or “no.” No need to require a complete sentence for the response to be accurate. Younger children might need to see a picture showing both characters.)
- **“Why? Why did he do that?”** (Or, “Why not?”) (The student completes the verbal reasoning question without having to reference the event or the characters at the same time.)

We are beginning to see evidence of which supports are helpful to students. Julia Starling and her colleagues (2012) recently examined how well secondary students with language impairment fared

when their teachers learned to use specific language modifications for written language, oral language, information processing, and direct vocabulary instruction. These students made significant improvement in written expression and listening comprehension (but only “some” improvement in oral expression, and no improvement in reading comprehension). A matched group of language-impaired students whose teachers did not receive the training did not make the same gains.

Many students with ADHD have challenges in the area of language, as well as working memory deficiencies, that make it difficult for them to understand and respond appropriately in the classroom. New curriculum standards stress higher levels of verbal problem-solving skill, requiring memory and language that many of our students struggle with. If the problems with communication experienced by students with ADHD are attributed just to the ADHD, the students may not receive school supports that can help them with curriculum challenges. However, there is evidence that direct intervention and classroom supports for instruction are effective. 🗨️

## References

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