

What is language processing?

Language processing is the ability of the brain to interpret or attach meaning to auditory information, and then come up with an appropriate expressive (spoken or written) response.

As students get older, more **language processing** demands are placed on them in both the school and home environments. More complex tasks will require higher degrees of processing skills. That is why language processing disorders are **often identified between second and fourth grades**, as this is when school subjects tend to tackle more abstract concepts, rather than just memorization of facts. Typically developing students are able to handle these increased processing demands, but we will see signs of struggle in students with language processing disorders.

Signs & Symptoms

- Generally has at least average vocabulary and grammar skills
- Forgets or does not seem to understand multi-step directions
- Difficulty getting thoughts to paper
- Difficulty organizing thoughts
- Telling stories or events out of sequence
- Difficulty staying on topic in conversation
- Word finding difficulties (overuse of non-specific words such as *stuff* or *thing*); frequently uses gestures instead of words
- May mix up similar sounding words or sounds in words (ex: *mawn lower* for *lawn mower*) with little awareness of errors

Language Processing Hierarchy

Certain tasks require more processing skills than others. Here are some examples of language processing tasks, from **easiest** to **hardest**:

- **Labeling** – state the name
- **Function** – tell what something does
- **Categorization** – understand what group it goes in and what other things go with it
- **Similarities** – compare it to other items/ideas
- **Synonyms** – provide another word that means the same thing
- **Differences** – contrast it to other items/ideas
- **Antonyms** – provide a word that means the opposite
- **Multiple Meanings** – understand that words can mean more than one thing
- **Describing** – tell someone about it in a logical fashion with relevant details



This is a cat.

It chases mice.

It is a type of animal.
Dogs and fish are other kinds of animals.

Cats are like dogs because they both are pets and have tails.

Cats are different from dogs because cats meow and dogs bark.

A cat is an animal that can be a pet. It could be black, grey, tan, or white. They are usually smaller than dogs. Baby cats are called kittens. They have four legs, a tail, and fur. You could find one at a pet store or at a house.

How do language processing disorders affect academics & the school setting?

Students with language processing disorders often have difficulty with:

- Following **multiple step directions** – may frequently seem unprepared or distracted
- **Word problems** in math – determining relevant information can be difficult
- **Reading comprehension** – especially when required to infer answers that aren't explicitly stated in the text
- **Writing assignments** – may have run-on sentences that tend to ramble and veer off topic
- Identifying **main ideas**
- **Higher level vocabulary skills**, such as synonyms and antonyms or giving definitions for multiple meaning words, despite repeated practice

How Can I Help?

- Allow students extra time to listen, think, and process verbal responses. It may take a longer period of time than other students, but that doesn't mean he/she isn't paying attention.
- Try to limit auditory directions. Make sure to focus on the important information, and give those in small, short steps.
- Make sure your student understands what to do by having him/her repeat the directions back to you.
- Use multiple modalities when possible. Visuals and hands-on activities are helpful for students who have difficulty processing spoken directions.
- Try giving choices where possible, rather than open-ended questions. This limits the processing demand on the brain.
- Break down larger reading assignments into smaller sections; highlight important concepts or vocabulary.
- Limit background distractions where possible. If the hallway is noisy, try to keep the classroom door shut. It may be helpful to make sure the student is seated near the teacher.