

## Auditory Processing Disorders

Definition: Processing is the ability to interpret or attach meaning to auditorially received information, and to formulate an expressive response. The processing problem is not as a result of English as a second language, hearing impairment, ADHD, cognitive deficits or emotional difficulties.

### Characteristics of Language Processing Disorders

- Problems with word retrieval: The student can't think of the word they want to say.
- Incomplete sentences or thoughts
- Recognizes language errors but can't fix them.
- Delayed response to questions.
- Frequently states "I don't know."
- Requires extensive review and repetition of previously learned material.
- Can't recall information from stories.
- Has difficulty recalling the sequence of events in a story.
- May not be able to process the main idea of a story and instead focus on specific details.
- Has difficulty following multi-step directions.
- Often asks for information to be repeated.
- Misunderstands what has been said.
- May have difficulty following or keeping up with conversations.
- Has difficulty answering WH questions

### Characteristics by Age Level

#### Early Childhood/Preschool:

- Delayed expressive language
- Reduced vocabulary repertoire
- Difficulty understanding spoken language
- Difficulty remembering simple stories or songs
- Unusual sensitivity to noise
- Reduced ability to follow one step directions
- May have difficulty understanding classroom/home routines

#### Elementary School Age:

- Following directions is difficult
- Reduced ability to retain names and curricular vocabulary
- Difficulty understanding lengthier stories and answering questions pertaining to stories.
- Difficulty identifying the main idea of a story
- Difficulty retaining the sequence of events in a story
- Reduced ability to engage in inferential reasoning tasks
- Doesn't understand figurative language such as idioms and metaphors

- May not be able to summarize a story they have read or has been read to them
- Reduced rhyming, reading and written expression

## Teenagers/Adults

- Difficulty remembering lists
- Difficulty with retaining the sequence of events
- Reduced ability to understand and follow along with the classroom lecture/information
- Doesn't retain directions/instructions
- May focus on one specific detail in the story but not understand the main idea or be able to summarize the story
- Inability to remember and follow the steps to solve math problems
- Difficulty understanding idioms, metaphors, and figurative language
- Reduced ability to make predictions and infer information
- Weakness in being able to understand similarities and differences and to relate one subject to another
- May exhibit inappropriate or off topic responses to WH questions
- May have difficulty going back into the text in order to find information or answer WH questions
- Delayed processing. The class may have moved on to the next topic while this student is still processing the first lecture.
- Weakness in organization of thoughts for both verbal and written expression. Stories are disjointed and difficult for the listener to follow.

## Strategies

- Gain the child's attention before presenting information, reading stories or giving directions.
- Give directions one step at a time.
- Ask the child to repeat the directions/information back to you.
- Provide visual cues whenever possible.
- Allow the child time to formulate a response.
- **For younger children:** use exaggerated facial expression and gestures when conveying information or reading stories.
- After each page ask who the story is about, what that character is doing, what is happening and/or why something happened?
- Provide a visual schedule of activities to be completed during the day
- Reduce the rate of speech in order to facilitate the child's processing
- **For older children:** Help your child learn to underline and highlight important information
- Ask children to re-auditorize (repeat/rephrase) the information that is being presented.
- Use color coding for memorization tasks. For example: spelling words should have the vowels in red and the consonants in green. For math facts, the problem should be in green and the solution in red. Color can make information stand out more and gives the brain another method of retaining information.
- Divide complicated directions into parts
- Tape record lectures
- Develop the strategy of internal visualization (see a picture of the story/information in your mind).
- Find a study buddy

## Attention Deficit Hyperactivity Disorder

ADHD is **not** a true processing disorder but the child with ADHD may appear to have processing issues because they don't attend to the stimulus in order for processing and retention to occur.

### Inattentive Type:

- Inability to pay attention to details: i.e. confuses letters, confuses +/-, doesn't use capitals or periods, fails to recognize when one sentence ends and another begins when reading.
- Reduced ability to sustain attention to task: distracted by background noise, outside noise, movement, heater turning on, own clothes and thoughts
- Appears not to listen
- Only retains one step directions
- Reduced ability to organize themselves and their environment: messy room, messy desk, loses homework and other personal items, can't seem to get started on homework, or stay focused and homework may take hours.
- Appears as though they are listening and attentive but lost in their own thoughts
- Appears to have memory problems but really didn't listen to the information to begin with.
- Class work is inconsistent. Some days this student will get great grades and then the next day act as though they have never learned the information
- Performs better in a quiet environment
- Able to retain the general information from a story but can't remember lists, spelling words, vocabulary words or simple directions/messages.

### Hyperactivity Type

#### All of the above and in addition:

- fidgets in seat, can't remain seated, kneels in seat, or gets up and walks around the room
- difficulty playing quietly
- always in motion
- excessive talking and moves from one thought or subject to the next very quickly
- blurts out answers
- difficulty with turn taking
- interrupts
- impulsive: acts without thinking, begins assignment without waiting for instruction

### Strategies

- Provide a quiet study or homework area free of distractions.

- Create a homework routine: try to follow the same schedule every day. Agree on a time of day for homework or you may want to have 2-3 shorter homework sessions. For example: 4-4:20 is spelling; 6-6:20 is for math/reading
- Use a timer so that the child knows that they only have to sit for a short period of time but if they don't complete their work then they must come back later to complete the task.
- Get organized. Provide a homework folder, or for older children, have color coded folders for each subject area.
- Provide a checklist that children/students can maintain themselves. For younger children this may be pictures of hanging up their coat, getting papers out of their backpack, having a snack and then sitting at the table doing homework. This same strategy works for bedtime routines, cleaning their room, etc.
- For longer assignments (such as 30 math problems) cover up half of the paper so that the child is not overwhelmed with the amount of work.

### Resources:

LDonline

American Speech and Hearing Association

Learning Disabilities Association of America

National Center for Learning Disabilities

National Attention Deficit Disorder Association <http://www.add.org>

[www.superduperinc.com](http://www.superduperinc.com)

[www.education.com](http://www.education.com)

[www.ehow.com](http://www.ehow.com)

<http://learningdisabilities.about.com>