



Suzanne M. Foley, M.S., Au.D., CCC-A  
Doctor of Audiology  
7440 N. Shadeland Avenue, Suite 115  
Indianapolis, IN 46250  
[foleyaudiology@gmail.com](mailto:foleyaudiology@gmail.com)

Phone: (317) 573-4445

Fax: (317) 577-7330

### **AUDITORY MEMORY**

Auditory memory is an important part of auditory comprehension and listening comprehension. 80% of classroom instruction is done through the auditory channel. Students with weak auditory memory skills will have difficulties remembering information from classroom teaching and in conversations. In addition, they may also have some of the following difficulties:

Decreased concentration or attention  
Following auditory directions  
Learning new knowledge  
Following instructions such as test instructions  
Be unresponsive to verbal instructions  
Remember rote information-math facts

Recalling details in conversations  
Tell a story in in logical order  
Social function/interactions  
Remember information taught in the classroom  
Say "what" often  
Remember phone numbers

Auditory memory deficits are often a lifelong problem, so the focus on intervention should be to improve auditory memory skills, but almost more importantly, help the student compensate for the memory problems by teaching them strategies.

### **FACTORS AFFECTING MEMORY:**

There are other factors that can affect memory and should be monitored as well.

Motivation  
Attention  
Knowledge of the topic  
Interest  
Emotional status

Language skills  
Complexity of language in message  
Length of the information  
Speed of speech  
Physical Health

### **EXPECTATIONS:**

There are appropriate developmental skills for auditory memory based on a student's age. Please review the following table to determine what a student of a certain age should be able to remember in terms of numbers and sentences. Please make sure that the task for the student is developmentally appropriate for memory skills.

### Median values for digit span and sentence length (Rowe et al. 2004)

Age	Numbers	Sentence Length (words)
4-5	4 digits	7-8 words
5-6	4 digits	9 words
6-7	4 digits	10 words
7-8	4 digits	11 words
8-9	4 digits	13 words
9-10	4 digits	13 words
10-11	5 digits	14 words
11-12	5 digits	14 words

## **CLASSROOM SUPPORT STRATEGIES**

There are several communication strategies that can be used in the classroom to improve a student's access and retention of auditory information. In addition, strategies can be used to improve auditory memory skills.

- Establish “active listening rules” for all students in the classroom such as stopping an activity and facing the speaker.
- Alert the student to listen before beginning the message
- Use short simple sentences for instruction and explanation
- Give time for the student to process each sentence
- Check for comprehension-“Johnny, what did I just ask you to do?”
- Develop routines to replace some instructions that are consistently being repeated. Use visual aids such as pictures to indicate morning routines that can be taped to the desk. Have the student draw the pictures for additional memory.
- Encourage the student to subvocalize an instruction. This means he will quietly repeat the instruction back to himself before responding.
- Use chunking strategies in speech. An example is instead of saying “Put the baby on the bed and the dog in the car”, say, “Put the baby...(delay)...on the bed...(delay)...and the doggy...(delay).. in the car.” You have chunked the information and added a little rhythm.
- Use visual information or written information in addition to auditory teaching.
- Monitor inappropriate responses and ask for clarification on what the student thought they heard.
- Use demonstrations or manipulatives whenever possible; encourage hands-on activities.
- Provide varied and repeated opportunities with the same concepts and material.
- Develop strategies to reduce forgetfulness of homework assignments such as use of parent/teacher portals/websites which may list homework assignments. Use of online textbooks or an extra set of textbooks at home can help if textbooks are forgotten.
- Preferential seating close to where instruction is being given in the classroom.
- Reduce background noise to improve access to auditory information.
- Allow cue cards or written information for recitation of memorized information.
- Remember that anxiety and decreased motivation from consistent difficulties with memory leads to decreased focus.
- Utilize a multi-sensory approach to teaching that includes visual, auditory and tactile stimuli.

## **STRATEGIES FOR IMPROVING AUDITORY MEMORY**

**The chunking method:** If the student is given several different units of information, they should learn to use strategies to organize the information into meaningful chunks for easier recall. For example, memorizing a phone number by dividing it into two “chunks” (i.e. 555-7777 become “555” and “7777”) makes it easier to recall.

**Mnemonic devices:** These can enhance memory of similar units of information. For example, HOMES is used for easy recall of the four Great Lakes (Huron, Ontario, Michigan, Erie, and Superior).

**Repetition:** It may also be helpful to repeat a message or key word over and over, first out loud and then silently, to provide extra cues for memory.

**Key word extraction:** The student should work on extracting the key words from spoken directions instead of the complete phrase to help them recall what needs to be done.

**Music:** The student can use songs or music to sing the information. It is well known that music and rhythm aid memory.

**Visual:** The student can use or make visual information or make pictures (pictures or diagrams) to help remember information.

**Categorize:** Divide information into smaller categories. For example, divide vocabulary words into groups of people/places/things or words with the same beginning letter or words with the same number of letters.

**Use concept imagery:** Create a mental picture or draw a picture of what is to be remembered. For example, Dr. Claire, Jones, a learning disabilities consultant, suggested picturing a bay with pigs wearing a T-shirt with 1961 on it to remember details about Bay of Pigs.

**Rehearsing:** Sometimes writing a word five times or more is not helpful in regards to using repetition to improve memory. The student can also say the word aloud, repeat it five times, record it and listen to review. This can be done with and without the visual word.

**Games and Activities to Improve auditory memory:** Simon says, Simon (have the student say the color that lights up before pushing the panel), Telephone Game, Memory or Concentration (have student repeat the items they turn over).