

# Memory Challenges

People with memory challenges struggle recalling information, connecting previous learning to new learning, following directions, and understanding what they've read.

Memory challenges are very closely related to challenges in executive functions (like working memory, for example). Having a strong memory allows students to hold on to new information so they can then use it in some way. Students need this ability to perform well in school.

A great example is this: Your child's math teacher asks the class to add 21 and 13 in their heads, and then subtract 6 from the sum. Working memory enables your child to hold on to and visualize the numbers the teacher has called out. It also allows her to remember what the sum of 21 and 13 is, so she can then take away 6 (taken from understood.org). Students with memory challenges, despite being academically capable of this question, would struggle to hold the information in their heads long enough to formulate an answer.

## TYPES OF MEMORY CHALLENGES

- **Short-term memory:** characteristics include trouble remembering information exposed to within the last twenty-four hours; for example, remembering directions, what others have said, or what they have just read; these challenges can be auditory, visual, or kinesthetic
- **Long-term memory:** characteristics include relying heavily on rote memorization, trouble recalling previously learned information and connecting to newly learned information, and taking a long time to recall previously learned facts or procedures; these challenges can be categorized as auditory, visual, or kinesthetic
- **Working memory:** characteristics include trouble following directions (especially if they are given in multiple steps to complete), completing tasks that require many steps, reading comprehension, written expression, problem solving, and comparing and contrasting

## COMMON ISSUES WITH MEMORY CHALLENGES

- **Difficulties following directions:** Students may have difficulties following oral and/or written directions, particularly if they are multi-step.
- **Reading comprehension:** Students may struggle with remembering what they have read, what the question is, previously learned comprehension strategies, and how best to say or write an answer.

- **Written expression:** Students may have difficulties planning and organizing their writing as well as remembering grammar and punctuation rules.
- **Math skills:** Students may struggle remembering math facts, how to perform mathematical operations, or how to solve word problems.

## HOW WE SUPPORT STUDENTS WITH MEMORY CHALLENGES

- ✓ Using personalized reference sheets of what students have learned to transfer skills to all environments (e.g. classroom, home)
- ✓ Whenever possible, adapting what is to be learned to connect with the individual's prior experiences, emotions, or passions
- ✓ Teaching strategies for following written, oral and multi-step instructions successfully involving visual, auditory, and kinesthetic methods of learning simultaneously
- ✓ Including mnemonic aids and math tricks to encourage retention
- ✓ Establishing advanced organizers, like concept maps, anticipation guides, or outlines to direct student's attention

**"Every time I go to answer the question I forget where in the story I saw the answer, and then by the time I find that, I forget where the question is."**

- Anonymous



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