

# Memory Problems

## OVERVIEW

### Description of the problem

Following a brain injury, memory can be affected in many different ways, including inconsistent memory and deficits in long-term and short-term memory. Memory problems can present a variety of challenges in a classroom situation for students.

### Causes

TBI can compromise memory systems by specific injuries to particular parts of the brain by microscopic injuries throughout the brain. Sometimes deficits are lifelong and serve; other times they are relatively minor and improve over time.

### Solution

Understand the different memory problems commonly seen in TBI and implement compensatory strategies. The strategies you use to help your student will vary depending on how the problem presents and the needs of the individual student.

## STRATEGIES

### Understand the problem

Students who struggle with memory problems often have difficulty with learning, storing, and retrieving information. Often, memory impairments affect new learning without damaging a student's ability to recall things learned before the injury. Students can also have inconsistent memory problems: They remember one day, but forget the next. This can be very frustrating for a teacher!

### Plan appropriate accommodations

Accommodations need to be based on a student's ability to learn and recall new material. In memory, the rich get richer; the more you know about a subject, the easier it is to learn new

things about the same subject. When teaching, relate new information to things students already know. Building associations can also help with retrieval by creating multiple paths to the information.

Example: If you are teaching a lesson on chemical reactions, first draw on previous knowledge that relates to the subject. You might ask the students if they have ever baked bread or mixed vinegar and baking soda. Pointing out these are chemical reactions creates associations with previously learned materials and experiences.

## **Use errorless learning**

Students with compromised learning systems learn best when almost all learning trials are correct. Trial-and-error learning, where the student is allowed the opportunity to make choices and then given feedback if an error is made, can lead to incorrect learning among students with memory impairments as the error may be what sticks in the student's mind. Instead, set your student up for success by providing coaching or modeling a task while they are first learning a new concept, activity or behavior.

Example: To give your student a spelling test, first provide a spelling list containing only two words. After the student looks at the words ask him/her to cover them up and write them out on his/her paper without looking. Next, uncover the words and compare. Gradually add more words following the same model: look, cover, copy, compare.

## **Use external reminders and organizers**

Whether the students can use datebooks, appointment calendars or memory books (paper or electronic) on their own with adult help will depend on their abilities. Prospective memory (remembering things that will happen, like an appointment or assignment deadline) tends to fare worse in a brain injury than retrospective memory (remembering things that have already happened). Therefore, external aids to organize what a student needs to do can be vital to school success.

Example: Help create a class assignment calendar for the student with a brain injury. Ask the

student to check the calendar every day for daily tasks as well as look ahead for tasks that are coming up. Monitor the use of the calendar with the student as needed.

## NOTES: