



Teaching Strategies for Students with Brain Injuries

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Introduction

Children with traumatic brain injuries (TBIs) often have a variety of long-term physical, cognitive and psychosocial difficulties. Teachers, therapists and parents frequently ask how they can help these students succeed in the classroom. Because each child is unique, there is no one teaching program that applies to all students with brain injuries. By adapting instruction or modifying the environment, however, the student can have greater opportunities for success in the classroom and community.

The effects of brain injury often are confused with learning disabilities. Before the creation of a special category of traumatic brain injury under the Individuals with Disabilities Education Act (IDEA), many of these students were misidentified as having learning disabilities. This confusion is understandable because they have many common characteristics. Both groups of students can have difficulty with sustaining attention, memory, controlling impulses, organizational skills, integrating skills, generalization, abstract reasoning and social judgment. Many of the teaching methods and compensatory strategies that teachers use with students with learning disabilities also can be used for students with brain injuries. For example, the student with organizational difficulties can benefit from verbal cues and written checklists.

There are, however, critical differences between these two conditions. The onset of a brain injury is sudden, often the result of a car crash, fall or blow to the head. Brain injury can occur at any age and interrupts the development of the child's brain. Because of this, there may be marked "before and after" changes in this student's physical, academic and social skills. Beyond the immediate changes, some consequences may not appear for months or years after the injury, as the brain matures and schoolwork becomes more complex.

By contrast, a learning disability often is diagnosed early in the child's development and schooling. Although the cause of learning disabilities is not understood fully, it is thought to be a birth-related or congenital disorder, usually accompanied with occurrences throughout the family history. With learning disabilities, there is not the dramatic before and after comparison observed in students with brain injuries. Also, students with learning disabilities usually show consistent overall patterns of difficulties in school, and trouble with math or reading may impair overall learning. By contrast, students with brain injuries often show marked discrepancies in their abilities—doing well in some areas and poorly in other areas. This discrepancy makes their progress more uneven and unpredictable.



The ability to learn new information often is compromised in the student with a brain injury, while previously stored information remains intact and easier to recall. This often is confusing to teachers as test scores may indicate higher abilities than indicated by classroom performance for this student. The student with a brain injury may rely on previous learning strategies, even though they are no longer effective. By contrast, students with learning disabilities can learn new information more readily and recognize how it relates to previously learned information.

Strategies for the classroom

This article gives examples of teaching strategies that can be used to help students with brain injuries in the classroom. Many of these strategies already are in the repertoire of most teachers' practices and being used successfully with other students. They can be used to support the student with a brain injury who has difficulty with attention and concentration, memory, organization and following directions.

Attention/Concentration

Many students with brain injuries find it hard to pay attention or concentrate, especially over an extended period of time. They may not remember the question that was asked or all the parts of the homework assignment. A task may not be finished, because the student is distracted easily or moves onto something else. Strategies for improving attention and concentration can include:

- Reduce distractions in the student's work area (i.e., remove extra pencils, books)
- Divide work into smaller sections (i.e., have the student complete one section at a time; suggest times and expectations for completion)
- Ask the student to summarize information orally that has just been presented
- Use cue words to alert the student to pay attention (e.g., "listen," "look," "name")
- Establish a nonverbal cueing system (e.g., eye contact, touch) to remind the student to pay attention

Memory

This is the ability to mentally record and store information and recall it when needed. Yet short-term memory often is affected by a brain injury. Strategies for teachers to help improve students' memory skills include:

- Frequently repeat information and summarize it
- Have the student carry an assignment sheet to each class and check that it is correctly filled out
- Teach the student to use devices such as post-it notes, calendars and assignment books as self-reminders
- Teach the student to categorize or chunk information to aid retention



- Demonstrate techniques such as mental rehearsal and use of special words or examples as reminders
- Link new information to the student's relevant prior knowledge
- Provide experiential presentations of instructional materials

Organization

The ability to arrange information, materials and activities in an orderly way is essential to learning. Otherwise, the student may seem hopelessly lost and unable to sort things out. When organizational abilities are affected by brain injury, teachers can help by providing the student with:

- Additional time for review
- Written checklists of steps for complex tasks with instructions for checking off each completed step in an assignment or task
- Written schedule of daily routines and reinforcements for referring to schedule
- An assigned person to review the schedule at the start of the school day and organize materials for each class
- Written cues for organizing an activity (i.e., first you do this, next you do this)
- Practice sequencing material
- Outline based on class lectures
- Color-coded materials for each class (i.e., book, notebook, supplies)
- Help planning a class activity, party or after school event to practice organizing an activity

Following Directions

Formally defined as the ability to execute a series of steps to accomplish a task or assignment, following directions is critical for completing class assignments and homework. Teachers can help the student who has difficulty in this area by:

- Providing oral and written instructions
- Asking the student to repeat instructions back to the teacher or a peer
- Underlining or highlighting significant parts of directions or written assignments
- Rewriting complex directions into simple steps
- Giving directions, asking student to perform the task, checking for accuracy and then providing immediate feedback
- Slowing down the pace of instruction



Conclusion

All of the areas referenced above are related closely. Attention, concentration, memory, organization and following directions depend on complex brain functions that are interrelated. Each brain injury affects each student differently. These strategies can be used readily and easily at home and in the classroom, although it usually takes some trial and error to figure out which strategies are most effective, and time is needed for the student to learn how to use these strategies. But the success that can result as the student succeeds in school is well worth the effort.

This article includes information from a tip card titled, Teaching Strategies for Students with Brain Injuries, that was written by Janet Tyler, Jean Blosser and Roberta DePompei. Marilyn Lash, MSW, chairs BIA's Special Interest Group on Children and Adolescents with Brain Injury.

