BRAIN INJURY AND THE SCHOOLS

A GUIDE FOR EDUCATORS

Brain Injury Association of Virginia
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Educational Implications

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Educational Implications of Brain Injury

The effects of a brain injury are dependent on the location and severity of the injury. Resulting impairments can be multi-faceted and can include cognitive, behavioral, and/or physical deficits. Impairments can be mild or severe, temporary or permanent, resulting in partial or total loss of function. Because these deficits are so varied and unpredictable, it is difficult to forecast the recovery for a student with a brain injury.

Brain injury is often referred to as a "silent epidemic" because many children have no visible impairment after a head injury.
-Brain Injury Association of America

Most students with brain injury will return to school. However, many education professionals are unaware of the issues surrounding brain injury and how they can affect the student's abilities in the school setting. Many times, these students are wrongly classified (e.g., learning disability or mental retardation) and may not receive the services and supports that are needed. The educational implications of brain injury are many and varied; therefore it is essential that all staff who work with the student with a brain injury become aware of the issues and strategies for success.

This section provides an in-depth overview of the potential cognitive, behavioral, and physical impairments resulting from a brain injury and outlines several strategies to consider when working with a student with a brain injury.

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Cognitive Deficits Following Traumatic Brain Injury

- **Difficulty focusing & sustaining attention**
- **Delayed response time**
- **Decreased ability to organize information**
- **Difficulty with simultaneous processing**
- **Limited ability to generalize**
- **Rigid/concrete problem solving**
- **Decreased concept formation**
- **Altered perceptual/spatial function**
- **Decreased judgment**

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Executive Functioning and Cognitive Issues

The cognitive consequences of brain injury often surface after discharge from rehabilitation and/or upon return home, when additional demands are made of the child with a brain injury. Most want to return to their home and school activities as soon as possible, expecting to resume 'normal' roles. However, as they resume these social and daily living activities, the difficulties and changes surface and become apparent to the child and those around him/her (McKinlay & Watkiss, 1999). Things may not be what they seem, as cognitive skills may manifest themselves in any number of ways. The most common of the cognitive impairments include attention/concentration, memory, loss of language function, and learning. Organization and planning, thinking and reasoning, judgment and problem solving, intelligence, academic achievement, and new learning may also be impacted and are often referred to as executive functioning.

The following serves to illustrate the interrelationship of executive function relative to typical classroom instruction. Reflective of efficient working memory, it involves the ability to understand a concept while it is read or heard, while simultaneously keeping in mind background information provided in previous sentences, calling up relevant knowledge to increase understanding, and inhibiting distractions in the surrounding environment. It reflects focused and simultaneous attention, language comprehension, planning, problem solving, decision-making and reason.

Attention and Concentration

Attention is defined as the ability to receive incoming information. Concentration is the ability to perform mental work while attending. Without attention, information cannot be processed. Attention deficits can impair learning and daily living functions. Persons who have sustained a brain injury often exhibit poor concentration and divided attention. They may also display "mental slowing" and often can't continue what they have started or focus on the problem at hand.

There are various subcategories of attention, including:

- Sustained attention-the ability to maintain attention for a long time;
- Selective attention-the ability to filter stimuli and pay attention to what is important ;
- Divided attention-the ability to respond to several things at one time;
- Alternating attention-the ability to switch back and forth between tasks (Senelick & Dougherty, 2001).

Memory and Learning

A study by Levy (2001) proposes that incoming information passes through the sensory-perceptual system, where it is processed and registered. The piece of information to be stored then moves

into short-term, or active memory. This is where information is manipulated; it is limited in terms of amount. Information that can be processed by our mind at one time is 7 items +/- 2 and duration is 3-30 seconds. It is divided into primary and working memory. Primary memory is where the information is stored. Working memory is where it is given meaning; it encompasses things like staying oriented to a schedule, process, or activity, and taking lecture notes. Long term memory includes information stored for recall and is composed of episodic (i.e., personally relevant facts), semantic (i.e., beliefs and principles), and procedural (i.e., automatic behaviors). Episodic long-term memory has 3 subsets; these are recent (i.e., events that just occurred), remote (i.e., memory of important dates and events), and prospective (i.e., remembering to do something in the future). Recall is the ability to retrieve a particular piece of information by means of a deliberate conscious search of long term memory stores, without the assistance of externally provided associational cues. Recognition is a form of retrieval that is reflected in the ability to match information presented to us with information in our memory stores.

Deficits in memory skills can significantly impact learning; information that is learned one day may be forgotten by the next. In a study by Hawley, Ward, Magnay, and Mychalkiw (2003), half the students studied with either mild or moderate brain injuries had problems with memory, attention, and subsequently, schoolwork. The study revealed a significant relationship between memory problems and difficulties with schoolwork, with 94.4% of the students with memory problems demonstrating difficulty with school assignments. Using the Children's Memory Scale (CMS), the study also found that approximately one third of students with severe brain injury were impaired or borderline for both immediate and delayed recall of verbal information and over one quarter were impaired or borderline for recall of visually presented information.

Organization and Planning

The ability to order and act on information is critical for task achievement. It consists of the abilities to break a task into its component parts or categories, to sequence the steps of the task, and determine the course of future action. It may manifest in decreased initiation for task performance, which may be due to the lack of a plan to tackle the problem.

Thinking and Reasoning

One of the most integrated areas of cognition, the ability to reason requires concept formation, categorization and a grasp of the relationships between objects and themes, understanding abstracted levels of meaning, and drawing conclusions from facts presented. It involves the analysis and synthesis of information and generalization of information from one situation to another. Understanding of the application of various rules (e.g., grammar, math) and perceiving one's own strengths and needs in an objective manner are dependent upon these functions. With damage to the frontal lobes in particular, the ability to be aware of, monitor, and evaluate one's behavior may be impaired. This leaves the student with an unawareness of the effect of his or her behavior on others, thus creating a propensity for inappropriate social behavior, offensive comments, and miscommunication of intentions.

Judgment and Problem Solving

Problem solving is one of the most difficult executive functions and is the one that generally requires intervention. Effective problem solving requires many cognitive functions including independent thinking and cognitive flexibility to generate a solution. It also requires the ability to transfer learning and to change solutions based on changing situations. A student with a brain injury may find these skills particularly challenging. It is important that the student develop planning, organization, and prioritization skills (Semrud-Clikeman, 2001).

Judgment is a critical component of self awareness and is a necessary skill in analyzing situations, interpreting the actions and intentions of others, and monitoring and correcting behavior. It is critical for the student with a brain injury to develop good judgment; if they are unable to judge their situation they may be unaware they have a problem (Senelick & Dougherty, 2001).

Language

Topical and social conversation problems often present themselves as behavioral issues. Expression and comprehension of language is an area of difficulty for many children with brain injuries. An inability to find the right word and fluency disorders are the most common of the expressive disorders. Aphasia refers to the impairment in the ability to use or comprehend written or spoken language. Anomia is impairment in word finding, particularly in naming objects. Bucco-facial apraxia, which is not a language disorder, but a deficit in motor planning, may impair the student's ability to form words. Comprehension deficits include the student's ability to understand verbally presented information and the rate at which they are able process that data. Written language may also be affected because of apraxias (see perception section) or poor understanding of syntax.

New Learning and Intelligence

Learning new information can be very challenging to a student with a brain injury, while previously learned information remains intact and is easier to recall. A student with a brain injury is often challenged to re-learn information they lost due to the injury, while trying to keep up with peers to learn new information. He or she is faced with the dilemma of re-learning and new learning all at the same time.

Frontal lobe development continues in a child until around 16 years of age. Disturbances to growth in this area can cause problems, some of which do not become apparent until later stages of development. The student may encounter increased challenges in math, difficulty with higher level learning in high school, and trouble in college.

It is important to understand that grades attained in school in the early years are not a good indicator for the future as parts of the brain that were damaged may not be called upon until later years. These issues may be very confusing to classroom teachers as student test scores may be not be an accurate reflection of classroom performance.

Cognitive Treatment Strategies

Direct retraining of underlying neuropsychological weaknesses is a meta-cognitive approach, in which the student has to think about the thinking process, making the student more aware of his/her deficits. However, this approach is time consuming, results are inconsistent, and it is not appropriate for all students.

In order to achieve optimal results in a timely manner, compensatory training is the preferred approach. Compensatory training is the functional restoration of an activity via the development of systematic strategies to substitute for impaired skills. These include the use of external aids, such as checklists, timers, beeping watches, memory books, and calculators. Internal strategies, such as mnemonics, decision making, behavioral control, and meta-cognitive analysis, can be used as well.

The Process-Specific Approach of Sohlberg and Mateer (2001) integrates direct retraining and the compensatory approaches. Hierarchically arranged cognitive skills are addressed via repetitive direct skill retraining. When functional restoration is not possible, compensatory strategies are then developed and the student is trained in their use.

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Cognitive Processing Hierarchy

Basic cognitive functions are critical to successful academic learning. A student must be able to perform basic cognitive skills, the foundations of learning, in order to respond to academic requests.

The cognitive processing hierarchy that follows breaks down the cognitive components of learning from the simpler (bottom) to the increasingly complex (top). It is important to note that a student must master the simpler cognitive components before moving up the hierarchy to the more complex.

Modification of Response	Ability to produce a modified response, if necessary
Assessment of the Need for Change	Ability to determine need for modification
Comparison of Output to Intention	Ability to compare product to intention
Attention to Output	Ability to attend to product
Execution	Ability to transmit the sequence as planned
Analysis and Synthesis	Ability to determine the appropriate sequence of behavioral events
Integration	Ability to integrate newly acquired knowledge with other information
Association and Memory	Ability to relate new information to old information
Temporal Order, Retention, and Categorization	Ability to determine the whole on the basis of its parts
Discrimination	Ability to recognize the differences between stimuli
Selective Attention	Ability to repress irrelevant stimuli
Attention Span	Ability to attend for increasing spans of time
Attention	Ability to attend to a stimulus

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Common Behavioral Issues with Students with a Brain Injury

It is important to note the transient nature of many of these behavioral issues in students with traumatic brain injury. Some students will demonstrate some of these behaviors…some of the time. Unlike other disorders, traumatic brain injury manifests itself most predictably in unpredictability.

- **Poor self control, impulsivity**
- **Limited insight into deficits**
- **Lack of initiative**
- **Non-compliance**
- **Depression**
- **Decreased understanding of social rules**
- **Irritability, agitation, aggression**
- **Low threshold for overstimulation**
- **Emotional lability (i.e., shifts in emotional state)**
- **Low frustration tolerance**

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Things to Keep in Mind When Addressing Behavioral Issues

- The very nature of brain injury creates disordered thinking which may lead to challenges that don't become evident for some time post injury.
- Behavioral characteristics are one of the most significant determinants to successful role re-entry relative to school, work, family, and peer relationships.
- Environments and circumstances in which learning occurs make all the difference as to whether learning takes place or not.

At any given time, a person is doing the best they can, given their unique skills, personality, environment, and circumstances.
-Ann Deaton

Why do students experience behavioral issues after a brain injury?

The Neuroanatomy Factor: Damage to the frontal and temporal lobes is common with traumatic brain injury.
Damage to the frontal lobe may cause:

- **Disinhibition** (i.e., inability to inhibit their behavior)
- **Impulsivity** (i.e., tendency to act without considering consequences)
- **Perseveration** (i.e., inability to discontinue a particular thought or action)
- **Amotivation** (i.e., lack of motivation or initiation),
- **Difficulty with initiating and terminating activities**
- **Emotional dyscontrol** (i.e., poor control over emotions).

Damage to the temporal lobe may result in:

- **Lower frustration tolerance**
- **Altered mood states**, usually depression.

Lack of Awareness: These traits, when combined with lack of insight and ability to self-monitor, leave the student unable to see the effects of their behavior on others or to make judgment as to the appropriateness of their behavior. This is NOT denial; to deny the existence of something means that one is aware of what it is that is being denied.

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Sensory Issues: Sensory dysfunction can lead to behavior issues when:

- Students are overwhelmed by too much stimulation and withdraw or explode to protect themselves.
- Students receive stimulation differently and try to modulate the stimuli they receive in both usual and unusual ways.
- Students have difficulty getting enough stimulation and seek more extreme input.

Cognitive Issues: Cognitive dysfunction can lead to behavior issues when:

- Students cannot do the work, so they may engage in maladaptive behavior.
- Students cannot understand what is expected of them or cannot remember long enough to carry out what is expected.
- Students cannot attend to what's important in their environment.

The greater the mismatch between a student's strengths and the demands of the environments, the more frustration and/or feelings of low self-esteem.

Opportunities for success are DECREASED by:

- Decreased expectations.
- Isolation from peers.
- Lack of recognition for effort.
- Lack of support.

Opportunities for success are INCREASED by:

- High expectations.
- Adequate structure and feedback.
- Collaboration with peers.
- Collaboration with teachers.
- Self-esteem enhancement.
- Academic skill enhancement.
- Competency based curriculum.

Any child would rather be viewed as BAD rather than DUMB.

Richard LaVoie

There is nothing more unequal than the equal treatment of unequals. It is the squeaky wheel that *needs* the grease.

Richard LaVoie

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Behavioral Issues

Behavioral problems can create barriers to growth in academic and cognitive skills and are often the most worrisome to educators and family members (Semrud-Clikeman, 2001). While behavior is a function of maturity, and adolescents are known to have their own issues, problems are generally more profound in those who are recovering after a brain injury. The very nature of brain injury creates disordered thinking and this may lead to behavioral disorders that do not become evident for quite some time some post-injury, regardless of the age of the child.

Behavioral difficulties often are not resolved as quickly as other deficits and may continue to disrupt the student's progress for an extended period of time (Semrud-Clikeman, 2001). Also, some of the consequences of brain injury, such as memory problems, poor insight into deficits, apathy and tiredness, depression, language and non-verbal communication difficulties, and planning and organization deficits may be interpreted as behavioral difficulties which can lead to frustration for both the student and educators (McKinlay & Watkiss, 1999).

Knowledge of the anatomy of the brain, as well as a review of pre-morbid behavior and coping styles can help understand the consequences of brain injury. This can also assist in distinguishing whether current behaviors are organically or environmentally generated, or a combination of the two. For example, damage to the frontal lobe may cause disinhibition, impulsivity, perseveration, apathy, and impaired judgment (Semrud-Clikeman, 2001) These traits, when combined with lowered frustration tolerance and a lack of insight and ability to self-monitor, leave the student unable to see the effects of his/her behavior on others or to make judgments as to the appropriateness of his/her behavior.

While sustaining a brain injury doesn't create new behaviors, it may present a more intense set of behaviors. Another factor in the expression of behavioral activity is age. Preschool and primary school aged students are more likely to demonstrate hyperactivity, distractibility, and emotional dyscontrol. Older students are more likely to have somatic complaints (e.g., headache, fatigue), exhibit irritability and agitation, and have difficulty inhibiting verbal responses. According to Semrud-Clikeman (2001), in addition to the previously mentioned manifestations, substance abuse tends to be more common with adolescents.

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Common Strategies to Promote Adaptive Behavior

The most effective behavioral management strategy is one that addresses not only specific goals but also incorporates a student's individual motivators. A comprehensive program that is uniformly reinforced by everyone involved is most beneficial to the student's progress (Deaton, 1999). Behavioral intervention can be a wonderful chance to learn, teach, and treat, and if viewed as opportunities to seek solutions, can create a positive experience for all involved. The following is a brief listing of some topical issues.

Antecedent-Behavior-Consequence

It's important to understand the context and environment in which behavior occurs. On a short-term basis we can work to identify events that occur immediately prior to the behavior (i.e., antecedents) that may make it more or less likely to occur. For example, the student may be more likely to begin his or her school assignment when he or she enters a quiet classroom rather than a noisy classroom. Similarly, events that occur immediately following a behavior (i.e., consequences) may increase or decrease the future likelihood of that behavior. For example, how likely are you to give up your free time to help someone with a problem if they subsequently blame you for the problem? Alternatively, a student who becomes easily frustrated with an assignment is likely to continue to work if he or she receives very frequent positive feedback as their work progresses.

On a longer term basis, understanding the context of a student's environment will create a higher probability of success in serving them; issues occurring prior to or after interventions may be affecting their mood, performance, and general behavior. Similarly, the student may really strive to do well in class, but their efforts do not carry over at home because the family does not value the education. Understanding these factors can help educators be more successful in programming the environment and in approaching people to help improve each student's chances for success. It is critical to work with both the immediate and long term factors that affect behavior.

Communication

Words have a powerful influence over our perceptions of, and reactions to, people and situations. The first and most important tool for facilitating improved behavior is improved communication, as many times communication problems can lead to behavior issues. Communication is more than verbally expressed language; it encompasses the ability to express thoughts and ideas and to comprehend what others are saying. Communication disorders can involve both verbal and non-verbal skills. An individual may be able to understand what is being said but may not be able to respond in an appropriate manner or may be capable of reading but unable to write down his or her thoughts. They may be able to follow a conversation but may say whatever comes to mind, even if it is not socially appropriate because they have lost their "social censor" (Senelick & Dougherty, 2001).

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Verbal and non-verbal communication has to deliver the same message. Be very specific with praise or requests for improved behavior. It is important to respond to all undesirable behaviors with a specific statement as to what is and is not desired. Without specific examples of the desired behavior, the student may not know how to respond, adding to his/her frustration.

Neuropsychology

Another tool for addressing behavioral issues is the involvement of a pediatric neuropsychologist. Neuropsychology is an extension of clinical and educational psychology, as it applies the science of psychology to the study of brain-behavior relationships. These professionals can help determine specific weaknesses that might affect educational approaches, help determine whether an academic or vocational track is the most appropriate course, assist with the development of compensatory strategies, and give suggestions as to how best teach the student. Very often, neuropsychological assessments will be done when the child is involved in a formal rehabilitation program, and these should be accessed when the child is returning to school.

Positive Supports

Most problem behaviors can be avoided and each student helped by focusing on what he or she does well and building on his or her abilities. This requires an honest evaluation of each student's abilities and limitations and development of a successful program utilizing these skills. With time and patience, as the student's abilities further develop, so can the curriculum. This is very different from programming that emphasizes a student's deficits as a means of "improving" these problem areas. Such approaches often lead to high frustration and failure. Instead, work with each student to help him or her find their strengths and build from these areas. Use collaborative and mentoring models of teaching to directly involve each student in their work. With help, each student can communicate how to better recognize their opportunities for achievement, meet their goals, and build their self-esteem.

Re-direction

When faced with frequent frustration and failure, it is often better to redirect the student to another task or behavior than to directly confront the issue. The issue can always be revisited when the teacher and the student are refreshed. If a student has been working on a topic area unsuccessfully for some period of time, switch to another topic, or at least to another teaching technique. If a student begins to engage in socially undesirable behavior, ignore that behavior and focus on socially appropriate behaviors in which they are engaged. This process is called differential reinforcement of other behavior (DRO) and it is very effective in redirecting individuals to more productive forms of engagement.

Reinforcement

Reinforcement is the process of presenting a consequence following a selected behavior which results in its increased future likelihood of occurrence. Most frequently positive reinforcement is used to strengthen behavior. The reinforcer does not have to be large or cumbersome; social praise and approval are two highly effective reinforcers. In other situations, access to preferred activities, being able to choose the sequence of events, brief periods of free time for work well done, or time with someone of special value are often effective. For people who are more concrete, simple point or token systems may work as long as they are backed up with more tangible reinforcers.

The key to successful reinforcement is that the selected reinforcers are of value to the student, that reinforcement occurs consistently and immediately following the behavior of interest, and that reinforcement occurs frequently. When using positive reinforcement always remember to "catch them being good!"

Structure, consistency, and repetition

Everyone needs structure and consistency to be successful, but different people need different levels of support. Oftentimes a problem or inappropriate behavior is a response to a lack of structure and consistency that the individual needs and not the other way around. In effect, it's not the "bad" behavior that establishes the need for structure, but the lack of structure that causes the problem behavior. Think about the levels of support and structure needed in different situations. It may be very little for familiar tasks or situations, but support needs may be much higher when attempting a new skill, when under pressure, or experiencing emotional duress.

Consistency and structure begin with the way that staff plan for the school day. Does the staff have effective curricular materials? Are the school and classroom policies reasonable and comprehendible? Does staff share a similar mission and philosophy? Is staff consistently assigned to the same students in order to build positive rapport and provide continuity of instruction? Are practical outcome measures used to evaluate progress on an ongoing basis? Structuring an educational program around these key practices will help staff focus on success rather than problem behaviors.

Finally, day to day recognition of people and events can be impeded by memory deficits. Confusion often leads to anxiety, which may be expressed through misbehavior. In order to facilitate memory and decrease anxiety, daily repetition of names, events, schedules, and other information should be a matter of course. Many different strategies can be used to improve a student's ability to remember, but frequent reminders to utilize these compensatory strategies are absolutely necessary to diminish anxiety. When possible, use collaborative techniques to engage the student in this process. This will make the compensatory strategies more relevant and increase the student's motivation to participate.

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Time-Out

Time out can help students remove themselves from a problem situation in order to regain focus and then successfully return to the setting. Everybody uses time out. For example, during a heated conversation, stepping away for a few minutes to calm down, taking a deep breath, and refocusing before returning to the discussion. When a student is upset, divert their attention to something else for a while to help them calm down and then deal with the problem more effectively.

Time out can occur in many different settings. Sometimes the student leaves the room. Sometimes the student simply moves away from the group. At other times the student may stay in the situation but use "self-talk" (i.e. internal dialogue, talking to yourself) to mentally remove themselves from the situation while being physically present. Learning how to step away from a problem situation, refocus, and then successfully return to address an issue are important skills.

Important Considerations Regarding Time Out

- Time out is not designed to be a punishment, a consequence for "bad behavior" that students don't like. It is solely to help the student remove themselves from situations where they are losing control so they can regain personal stability, confidence, and follow verbal direction.
- Time out does not need to occur in a time out room. It can occur in most any situation where the student can disengage themselves from the problem, refocus, and then successfully reengage in a positive and productive manner. This sometimes includes staying in the situation if the student can remain calm.
- Time out doesn't have to be long-only long enough for the student to regain self control and consistently follow verbal direction.
- Time out is only successful if the student returns and positively engages in their daily activities. We do not measure the success of time out by the fact that a student is removed from a specific setting or that they have to go to a specific room.
- Time out is used to disengage a student from a problem situation. Placing and keeping a student in a room for a set amount of time after they misbehaved, especially when they are now positively engaged in other activities, is not time out.

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The Four E's of Responding to Negative Behaviors

Event: When you (kick the desk in front of you, tap your pencil, talk out loud…)

Effect: It (distracts your classmates, violates the rules, interferes with someone else's efforts…)

Emotion: And it makes me feel (frustrated, confused, angry…) *(share label for feelings but don't show rejection)*

Expectation: I like it better when you (ask to be excused, raise your hand, sit quietly and work on your assignment…)*(emphasize alternative, positive behavior)*

If the four E's are not sufficient after several efforts, consider the fifth E:

or Else: If you continue to … instead of…, then (you'll be moved to the front of the room, asked to stay after school, your parents will be called…)

The "or else" contingency needs to be:
- Fair
- Reasonable
- Proportional
- Firm
- Enforceable
- Related to the behavior

Don't try to handle behaviors alone. Use available resources.
- Fellow teachers
- Student
- Guidance counselor
- School psychologist
- Parents
- Peers

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The Disadvantages of Punishment – "The Stick"

Punishment refers to an event or consequence intended to temporarily decrease or weaken a behavior. Some punishments are naturally occurring (e.g., getting sick after eating too much junk food). Other forms of punishment are those arranged by others (e.g., verbal reprimands, restrictions, disapproval, time-out, or isolation).

When improperly used, punishment is an ineffective method for modifying behavior because it:

- Can produce social withdrawal.
- Can produce aggressiveness.
- Can produce emotional side effects (e.g., shyness, anger, withdrawal).
- Can become addictive to the punisher because it often has immediate, short-term effects.
- Does not eliminate behavior; it only suppresses it, particularly when a replacement behavior is not taught.
- Does not teach the individual what they should do.
- Leads to results that are usually temporary. When the punishment stops, the behavior returns, often in worse form than before.
- Can inhibit behaviors other than those targeted.
- Leads to situation and student -specific behavior (e.g., once the punishment or punisher is away, the behavior returns) rather than generalized effects.

When the goal is to help individuals develop pro-social, productive, and long lasting behavioral changes,

USE THE "CARROT", NOT THE "STICK".

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Try Praise Instead
99 Ways to Say "Good Job!"

- You're on the right track now!
- You've got it made.
- SUPER!
- That's right!
- That's good.
- You're really working hard today.
- You are very good at that.
- That's coming along nicely.
- GOOD WORK!
- I'm happy to see you working like that.
- That's much, much better!
- Exactly right.
- I'm proud of the way you worked today.
- You're doing that much better today.
- You've just about got it.
- That's the best you've ever done.
- You're doing a good job.
- THAT'S IT!
- Now you've figured it out.
- That's quite an improvement.
- GREAT!
- I knew you could do it.
- Congratulations!
- Not bad.
- Keep working on it.
- You're improving.
- Now you have it!
- You are learning fast.
- Good for you!
- Couldn't have done it better myself.
- Aren't you proud of yourself?
- One more time and you'll have it.
- You really make my job fun.
- That's the right way to do it.
- You're getting better every day.
- That's the best ever.
- You've just about mastered it.
- PERFECT!
- That's better than ever.
- Much better!
- WONDERFUL!
- You must have been practicing.
- You did that very well.
- FINE!
- Nice going.
- You're really going to town.
- OUTSTANDING!
- FANTASTIC!
- TREMENDOUS!
- That's how to handle that.
- Now that's what I call a fine job.
- That's great.
- Right on!
- You're really improving.
- You're doing beautifully!
- SUPERB!
- Good remembering.
- You've got that down pat.
- You certainly did well today.
- Keep it up!
- Congratulations. You got it right!
- You did a lot of work today.
- Well look at you go.
- That's it.
- I'm very proud of you.
- MARVELOUS!
- I like that.
- Way to go!
- Now you have the hang of it.
- You're doing fine.

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• You did it that time! • That's not half bad. • Nice going. • You haven't missed a thing! • WOW! • That's the way! • Keep up the good work. • TERRIFIC! • Nothing can stop you now. • That's the way to do it. • SENSATIONAL! • You've got your brain in gear today. • That's better. • That was first class work. • EXCELLENT! • I think you're doing the right thing.	• Good thinking. • You are really learning a lot. • Good going. • I've never seen anyone do it better. • Keep on trying. • You outdid yourself today! • Good for you! • I think you've got it now. • That's a good (boy/girl). • Good job, (student's name). • You figured that out fast. • You remembered! • That's really nice. • That kind of work makes me happy. • It's such a pleasure to teach when you work like that!

Note. Adapted from "99 Ways To Say Very Good: For Those Days When You Can't Think of What To Say", Career Lab, Englewood, CO, www.careerlab.com/99ways.htm.

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Negotiating a Behavioral Contract

A contract is <u>negotiated</u>. Imposing a contract on a person will not work. Imposed agreements are not contracts if one party has not had the freedom to determine the terms.

The exact form of a contract is not important as long as the following components have been included:

- Date the agreement begins, ends, and is renegotiated
- Behavior targeted for change (must be clear, honest, and positively phrased)
- Amount and kind of rewards or reinforcers to be used
- Schedule of the delivery of reinforcers
- Responsibilities of other parties and consequences for their action or inaction (recommended addition by Harvey Jacobs, Ph.D.)
- Signatures of all parties involved
- Bonus clause for sustained or exceptional performance
- Statement of the penalties that will be imposed if the specific behavior is not performed

If your contract is not producing the desired results, check the following:

- Was the contract comprehendible to all parties, according to their abilities? (recommended addition by Harvey Jacobs, Ph.D.)
- Was the target behavior clearly specified?
- Did the contract provide for immediate reinforcement?
- Did it ask for small increments toward the desired behavior?
- Was the reinforcement frequent and in small amounts?
- Did the contract call for and reward accomplishment rather than mere obedience?
- Was the performance rewarded after its occurrence?
- Were the terms of the contract fair, honest, and realistic?
- Was the contract worded in a positive way?
- Was the contract, as a method, being used consistently?
- Was the contract mutually negotiated?
- Was the penalty clause too punitive?
- Was the bonus clause motivational, reasonable, and attainable?

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Temper Tantrums

A temper tantrum is an expression of frustration or anger. It is often displayed as an outburst or a violent expression ranging from crying, to screaming, to throwing oneself on the ground. Temper tantrums are a normal part of growing up, happen at different times and for different reasons, and are used to get attention. The important thing to remember is that while there are no cures for temper tantrums, there are different techniques that can be used to effectively handle them.

There are three basic categories of temper tantrums:

- **Child is unable to contain emotions -** These may include anger, frustration, or disappointment. Many times this tantrum may occur when the child is overtired or over stimulated and is not able to cope with their feelings. The tantrum is not used to manipulate, but as a means for the child to release all the tension that has built up inside him/her.
  Intervention suggestion: Maintain contact with the child and help him/her feel safe. Support the child by sitting with them or holding them while they are going through the tantrum.
- **Child is not allowed to show feelings -** Children naturally have strong emotions and, unlike most adults, are not yet able to control these emotions. Children must be allowed to express these feelings appropriately. If not allowed, they will need to release these bottled-up feelings and this may be in the form of a tantrum.
  Intervention suggestion: Allow child to express feelings appropriately so they can learn from them.
- **Child is attempting to control a situation or a person -** Children are learning how to best have their needs met. Sometimes children will have a tantrum to test the limits of their behavior and see if they can get what they want.
  Intervention suggestion: Utilize a firm approach and acknowledge the child's feelings, but do not give into their demands. Guide the child on the most appropriate way to get what they want.
  Note: Adapted from Smart Medicine for a Healthier Child: A Practical A-Z Reference to Natural and Conventional Treatments for Infants and Children, (2nd ed.), (p. 282), by J. Zand, R. Rountree, R. Walton, B. Rountree, 2003, Garden City Park, NY: Avery Publishing Group.

Other suggestions for dealing with temper tantrums:

- Remain calm.
- Distract the child's attention.
- Ignore the tantrum when possible.
- Remove the child from the situation.
- Wait until the child calms down to discuss the situation and behaviors.
- Comfort and reassure the child.
- Help the child learn appropriate, acceptable strategies and behaviors (Iowa State University, 2003).

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Intervention Plan: the ABCs

This form can be helpful in identifying what triggers certain behaviors and how to handle them when they arise.

A. **Antecedent Behavior (Causes):** What happened before the behavior started? There is always some sort of trigger, and it may not be readily apparent. It can be something that happened hours before the demonstration of behavior, but something in the immediate environment has caused it to appear. It can identify what kinds of things may cause the behavior to occur in the future.

B. **Behavior:** How exactly did the behavior manifest itself? How long did it last? Document everything that will help describe what happened.

C. **Consequences:** This refers to the consequence of the behavior. What happened as a result of the behavior? What worked to de-escalate it?

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General Strategies for Managing Behavior for Students with TBI

√ **Establish cooperative relationship.** Behavioral challenges often result from the interaction between the child and the school environment. It is important to determine how the student with TBI and the school can work together.

√ **Provide feedback to the student.** The teacher is encouraged to provide direct, immediate feedback (in private) about the impact of the student's behavior.

√ **Encourage alternative behaviors.** Teachers can utilize a number of effective methods such as modeling, cueing, and rehearsing appropriate behaviors.

√ **Provide clear structure and predictable routines.** Students with brain injury need consistency class to class, school to home, and school to school.

√ **Pace instruction accordingly.** Be cautious not to overload the student with cognitive demands as this may lead to frustration.

√ **Set reasonable expectations.** Be specific about the expectations, communicating them in writing and in class discussion.

√ **Allow rest periods.** Students with TBI often experience fatigue, headaches, and dizziness. The student is often unable to meet the challenges of school which may contribute to behavioral problems.

√ **Consider modification of school environment.** Several environmental factors, such as noisy hallways and crowded classes, can lead to over stimulation and trigger negative behaviors.

√ **Include peers in the process.** Others in the school, such as peers and teachers, are encouraged to be part of the solution. They can be encouraged to speak slowly, provide social support, and assist by taking notes for the student.

√ **Involve the family in any behavior management plan.**

Note: Adapted from Students with Traumatic Brain Injury: Identification, Assessment and Classroom Accommodations by M. Hibbard, W. Gordon, T. Martin, B. Raskin, & M. Brown, (2001), New York: Research and Training Center on Community Integration of Individuals with Traumatic Brain Injury.

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Physical Conditions That May Result From a Brain Injury

Vision & Hearing Loss

Loss of or change in motor, sensory and/or perceptual abilities

Seizures

Headache

Reduced Stamina

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Motor-Sensory Deficits

Although there have been advances in recent years in the medical care for survivors of brain injury, neurological conditions are statistically unchanged. Depending on the location and extent of brain damage, motor and sensory deficits are possible and can be quite debilitating. Typically, motor problems resolve to a greater extent than do sensory ones. Motor abilities can be improved through a variety of means, usually involving therapeutic intervention and durable medical and adaptive equipment. Sensory deficits are not often as amenable to external aids and usually require the use of compensatory strategies to ameliorate the functional impairments (McDonnell, 2003). The descriptions that follow below are very simplistic in nature and do not fully cover the neuroanatomic basis of the problems.

Motor Deficits

Brain injury can result in a variety of motor disorders, such as gait disturbance, incoordination, and imbalance (Katz & Black, 1999). Ataxia is the most often observed motor deficit following brain injury in children; persistent spasticity is also common (Ylvisaker, Chroazy, Feeney, & Russell, 1999). A mix of motor disorders may be present, especially with injuries that cause disturbances in multiple motor systems. The severity of deficits is affected by the depth of the anatomical lesions sustained as well as the location and severity of injury. Recovery of the deficits tends to be variable but typically occurs quicker than recovery of cognitive function (Katz & Black, 1999).

Lower limb functions tend to recover to a greater extent than do upper limb functions for a variety of reasons. There are several theoretical models for why this occurs; the most simplistic explanation and readily apparent reason is that upper extremity musculature is smaller than those of the lower extremities and that the motions performed by the upper extremities are more complex than those of the lower extremities (McDonnell, 2004).

Common motor deficits following brain injury include the following:

- **Apraxia** is often referred to as motor planning. Praxis is the ability to determine the appropriate type and sequence of movement needed to complete a particular task. Apraxia is the inability to carry out learned volitional movement or skilled and complex movements; it is not due to paralysis, ataxia, sensory changes, or confusion. Prior to voluntary motion, action is conceptualized and the motor sequence is planned; apraxia is a breakdown in this process, and often manifests itself in object-use confusion. It may affect different movements of the structures of the mouth and face (i.e., bucco-facial), unilateral or bilateral limbs, or the whole body. It may manifest itself in different ways:
  - Ideational- inability to carry out complex sequential motor acts. Students may understand the use of an object in isolation, but may display deficits in planning more complex motor acts with the object.
  - Ideomotor-inability to imitate gestures or perform purposeful motor acts.

  - Constructional-inability to copy, draw, or construct two or three dimensional designs, either spontaneously or upon command.
- **Ataxia** causes incoordination and affects balance, fine motor skills, and dexterity.
- **Dysarthria** is lack of control over the muscles that control articulation, creating slurred speech.
- **Dysphagia** is lack of control over muscles that control swallowing. This also includes the muscles that control the lips and tongue, which affect the ability to keep and move food and liquids inside the mouth. Dysphagia also has a sensory component, in that persons with decreased sensation often are unaware of aspiration and do not cough.
- **Fatigue** is a common problem with this population. There is often a prolonged period of inactivity in the early phases of injury, followed by activity focused on improving functional abilities. Strength and cardiovascular status beyond what is required for daily tasks can be of secondary concern. Inadequate physical conditioning, deviated movement patterns, and negative changes in body composition will limit endurance. Pain from musculature and orthopedic deformities can also severely impact energy reserves.
- **Hemiplegia** (i.e., paralysis of one side of the body) and **hemiparesis** (i.e., weakness of one side of the body) are often associated with a range of motion deficits or contractures.
- **Hypertonicity** is increased muscle tone. There are 2 types: rigidity, which is high tone of groups of muscles that perform opposite motions (i.e., flexors and extensors), and spasticity, which is increased tone of one of the muscle groups, usually flexors. This abnormality of muscle tone affects volitional movement and balance. Contractures can be quite painful for the child and may affect attention and learning. Oral medications, injections, or nerve blocks are often used to treat the impairment.
- **Hypotonicity** is decreased muscle tone. The lack of response in the muscle creates instability of the trunk and extremities. Joint protection and prevention of deformity are the primary concerns in managing this problem.
- **Spasticity** is an involuntary increase in muscle tone (i.e., tension) that occurs following injury to the brain or spinal cord, causing the muscles to resist being moved. Characteristics may include increase in deep tendon reflexes, resistance to passive stretch, clasp knife phenomenon, and clonus.

Sensory Deficits

- **Seizures**-Few of the after effects of brain injury are as unpredictable and embarrassing as seizures. Typically, seizures will happen within the first week after injury, however, they may not begin occurring until a year or two after the injury. For those prone to seizures, once two or three years have passed since the last seizure, the individual may be declared free of symptoms. But even then, there is still a chance of one occurring at a later time. This is all part of the unpredictability of seizures (Senelick & Dougherty, 2001). Factors associated with increased propensity for post-traumatic epilepsy include penetrating injuries and intracranial bleeds and infections (Evans, 2002).

- *Generalized (or Grand Mal)* seizures will involve a loss of consciousness, usually without warning. These are accompanied by muscle contractions of the entire body, occasional urinary and bowel incontinence, and changes in breathing patterns.
- *Partial complex* seizures involve rhythmic twitching of the face, hand/arm, and/or leg on one side of the body. The child may not be aware of the environment, but there is usually no collapse or loss of consciousness. They may walk around, as if with purpose; repetitive, non-purposeful acts may be seen.
- *Temporal lobe* seizures are another type and are often the easiest to misinterpret, as their manifestations can be atypical of usual seizure activity.
- *Petit mal or absence* seizures are characterized by loss of flow of speech and conversation and a blank stare.
- *Psychic phenomena* seizures do not have external signs, but the child may feel a sense of fear or detachment, or have some type of sensory confusion (e.g., odd smells and sounds, nausea).
- *Automatism* seizures are characterized by stereotypical motions that are generally purposeless and inappropriate to circumstances.

The duration of any seizure may be several minutes, after which the child may be sleepy, confused, fatigued, or agitated. Some children may experience some type of warning or "aura".

- **Taste/smell-**The cranial nerve that is responsible for olfactory and gustatory sensation is one of the most commonly injured, thus reducing the ability to perceive smell and taste.

- **Vision-** Vision may be the most intricately woven motor sensory system, as motor output is highly reliant on the interpretation of sensory information. With traumatic brain injury, the cranial nerves that are among the most frequently injured are those that control muscles that move the eyes. This diminished function affects the child's ability to follow moving objects (pursuits) and read (saccades) and may create diplopia or double vision due to a muscular imbalance.

  Injuries to the eyes themselves can create blindness or blind spots. **Hemianopsia**, which is blindness in half of the visual field of each eye, is often due to damage to the visual pathways. Disorders of visual perception not due to actual visual system damage will be discussed in the section on perception.

- **Hearing-** Auditory imperception, which involves difficulty using what is heard, may be experienced by children with brain injury. Children may experience difficulty with auditory processing, auditory discrimination, and sound-symbol relationships.

- **Tactile**- Reduction in the ability to perceive touch and temperature sensations may be seen in children with neurologic damage as a result of brain injury. Disorders of muscle tone often exacerbate the problem. The most significant concern with these children is the potential for injury due to aperception of hazards.

Perception

Perception is the interpretation of stimuli, a process by which distinctive features and patterns in stimuli are analyzed and synthesized into a meaningful whole. With experience, recognition of salient features becomes automatic. When stimuli are unfamiliar or complex, one attends to it in detail until distinctive features and patterns emerge. Persons with perceptual losses often demonstrate attentional and visual deficits that impair these skills, leading to an inability to get around in the world and manipulate components of the environment.

Developmental studies of perception in children three years of age and older indicate that as attentional control and knowledge develop, it becomes increasingly inappropriate and misleading to isolate perception from other aspects of cognition, such as memory and organization (Flavell, Miller, & Miller, 2002).

Depending on the location and severity of the injury, deficits may include perceptual, visual, and/or perceptual-motor skills. Manifestations of these deficits vary widely and tend to be more apparent when the student is under a time limit (Semrud-Clikeman, 2001).

The most common perceptual deficits are:

- **Body Scheme** - Inability to perceive the location and relationship of body parts
- **Figure Ground** - Difficulty distinguishing the foreground from the background
- **Visual Closure** - Lack of recognition of an object when only part of it is visualized
- **Topographical Orientation** - Impairment in the ability to find one's route with or without the use of maps
- **Spatial Relations** - Inability to perceive the position of objects in relation to self or other objects
- **Agnosia** - Difficulty recognizing familiar objects by touch (i.e., tactile), by sight (i.e., visual), or by words or sounds (i.e., auditory)
- **Neglect** - A tendency to ignore stimuli from the affected side; usually associated with right brain damage
- **Right/Left Discrimination** - Difficulty differentiating right and left on self, others, and objects

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Strategies for Educators Serving Students with Brain Injury

Often it is difficult for teachers not to focus directly on academic progress. However, for students with brain injury, it is typically more effective to use academic materials to develop general cognitive skills such as flexible thinking, expressive organization, and on-topic responses than to focus on academic content. These students must have cognitive ability in place before academic progress can be made. Previously learned skills are usually superior to current abilities to learn and integrate new information.

General Strategies

- Arrange for preferential seating
- Use small group instruction
- Increase structure and predictability of learning environment
- Allow increased response time
- Repeat and simplify verbal instructions
- Pair verbal instruction with visual cues
- Minimize distractions
- Impose individualized behavioral management system
- Chart daily progress
- Modify test delivery
- Provide peer tutors
- Require memory log to record facts that may be forgotten
- Highlight key points in content reading
- Shorten school day or reduce course load
- Communicate with student's other teachers
- Assign a note taker
- Solicit consultation from expert in traumatic brain injury (TBI)
- Seek services of resource teacher
- Use self-paced instruction or computer assisted learning
- Provide word processor and computer access
- Offer use of suitable software programs
- Permit use of calculators and tape recorders
- Reduce complicated tasks into smaller steps
- Refer for vocational assessment and training
- Refer for counseling services
- Maintain contact with parents
- Redirect inappropriate behavior

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Strategies for Serving Students with Cognitive Deficits

Poor Attention/Concentration

- Cue student to pay attention with both written and verbal cues.
- Reduce distractions in area; use earplugs to help eliminate external noise.
- Seat student near instructor.
- Teach in small groups.

Poor Memory

- Provide information through multiple sensory modalities; utilize modalities that capitalize on student's strengths.
- Frequently repeat and summarize information; have student repeat information as well to ensure understanding.
- Use an assignment sheet; have student bring to each class and check to see that it is completed correctly.
- Teach compensatory strategies such as use of highlighters, post-it notes, calendars/day planners, mnemonics, mental rehearsal, and visual imagery.
- Allow the student to tape record lectures; seat near electrical outlet.

Decreased Organization

- Color code material for each different class.
- Use checklists done via task analysis, with place to check off steps as completed.
- Use daily schedules that specify routine, times of activities; review with student daily; display classroom activities schedule.
- Provide outline for class lectures.
- Help the student make a "to do" list, use daily organizer.
- Designate a specific location to return homework; develop system to show that work has been turned in.

Decreased ability to follow directions/process information

- Slow pace of direction.
- Allow extra time for test/in-class assignment completion.
- Limit amount of information presented at one time; break complex directions down into smaller steps.
- Reinforce key points; repeat frequently.
- Give student more time to respond to questions; do not rush.

Note. Adapted from Special Needs Opportunities Windows (SNOW), Acquired Brain Injury: Integrating Students in the Classroom, (1999), Online Workshop, Retrieved April 21, 2005 from http://snow.utoronto.ca/prof_dev/tht/abi/abigroup/abidraft/a4_3.htm; Students with Traumatic Brain Injury: Identification, Assessment and Classroom Accommodations by M. Hibbard, W. Gordon, T. Martin, B. Raskin, & M. Brown, (2001), New York: Research and Training Center on Community Integration of Individuals with Traumatic Brain Injury.

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Strategies for Carryover at Home

- Work with the family to determine how appropriate programming for the student is selected.
- Work with the student's family to determine family expectations, anxieties, and concerns regarding school placement.
- At planning meetings, educators should provide family members with test results and ideas for instructional strategies.
- Make sure that all instructors are using the same strategies in the same manner.
- Teach family members the strategies and techniques for implantation at home.
- Make sure the family feels welcome to the team and understands the important role they can play in the student's education (DePompei & Blosser, 1999).

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Strategies for Behavioral Issues

Behavior problems following brain injury often have a neurological basis. These students are often unable to plan their behaviors; they also may be unable to foresee the consequences of their actions. They may have memory problems, increased impulsivity, and impaired judgment leading others to see their behavior as aggressive or belligerent (Special Education Service Agency, 2005). The following suggestions can assist the student as well their peers and teachers to deal with the student's behavior.

- Avoid fatiguing student – be aware of their physical limits.
- Limit distractions.
- Allow student ample time to adjust to new situations or activities.
- Avoid surprises.
- Be clear and consistent with behavior expectations.
- Provide frequent positive feedback and avoid criticism.
- React to aggression with a neutral approach.
- Provide an explicit explanation of expectations prior to an activity.
- Model appropriate behavior.
- Assist peers in understanding and supporting student.
- Provide a social coach who can help prepare the student for various social events and situations.
- Modify activities to decrease frustration.
- Be flexible.
- Limit choices – some students may be overwhelmed with too many choices.
- Teach and model acceptable alternate behaviors (e.g., verbally expressing anger instead of hitting).
- Schedule preferred activities after non-preferred to give the student something to work towards.
- Limit the number of students in an activity – some students do no react well to overcrowded situations.
- Reduce distraction and clutter.
- Establish routines and follow them.
- Provide verbal or visual prompts or warnings.
- Help student define personal space by using hula hoops or tape on the floor.

Note. Adapted from "Considerations When Including Students Who Have Experienced Traumatic Brain Injury (TBI)", Special Education Service Agency (SESA), Anchorage, AK, Retrieved April 7, 2005 from http://www.sesa.org/sesa/agency/docs/incltbi.html; "Strategies for Challenging Behaviors" by M. Rush, 2000, Inclusion... Yours, Mine, Ours, Jacksonville, FL, www.rushservices.com/Inclusion/strategies_for_challenging_behav.htm.

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Strategies for Cognitive Retraining

Cognitive retraining refers to the recovery of thinking, reasoning, and perceptual functions following a brain injury. This approach is based on the theory that the parts of the brain that were not injured reorganize to carry out the affected functions in a new way. This approach should be outcome based, utilizing a progress monitor to determine the success of the student.

Memory Strategies

- Repeat information frequently and provide a summary.
- Have the student take written notes and assure the notes are accurate and complete.
- Provide a connection between new material and the student's prior knowledge.
- Teach the student to use items such as post-it notes, daily planners, daily assignment sheets, and calendars.
- Have the student use a tape-recorder for lengthy materials/conversations.
- Teach the use of association, visualization, and categorization to aid with retention.

Attention Strategies

- Reduce distractions in the classroom and at the student's desk.
- Avoid fatigue; allow student to take mental breaks.
- Teach student to use self-talking to stay on track.
- Divide work into manageable pieces; make checklists for lengthy tasks.
- Teach student to double check all work.
- Develop a non-verbal system to alert the student to pay attention (e.g., "look", "listen").

Organizational Strategies

- Have the student use checklists.
- Provide additional time to review material.
- Prepare the work area with necessary materials and eliminate clutter.
- Have the student prepare a written plan of daily activities.
- Assign someone to review the schedule and organize materials prior to class.
- Encourage student to prioritize tasks and pace work according to energy level.

Note. Adapted from "Becoming Well Again Though Cognitive Retraining" by L. Muller, J. Brown, A. Halfman, K. Kaminky, & S. Porter, 2005, American Brain Tumor Association, Chicago, IL, www.abta.org/wellagain2.php; "Teaching Strategies for Students With Brain Injuries," by M. Lash, 2000, TBI Challenge, 4(2).

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Tips for Inclusion of Youth with TBI in Regular Classrooms

Receptive language

- Limit the amount of information presented at one time.
- Provide simple instructions for only one activity at a time and use concrete language.
- Have the student repeat instructions.

Expressive language

- Teach the student to rehearse silently before verbally replying.
- Teach the student to look for cues from listeners.

Maintaining attention

- Provide a study carrel or preferential seating.
- After giving instructions, check for proper attention and understanding by having the student repeat them.
- Teach the student to use self-regulating techniques to maintain attention.

Impulsiveness

- Teach the student to mentally rehearse steps before beginning activity.
- Reduce potential distractions.
- Frequently restate and reinforce rules.

Memory

- Teach the student to use external aids such as notes, memos, daily schedule, and assignment sheets.
- Provide repetition and frequent review of instructional materials.
- Provide immediate and frequent feedback to enable the student to interpret success or failure.

Following Directions

- Provide the student with both visual and auditory directions.
- Model task whenever possible.
- Break multi-step directions into small parts and list them so that the student can refer back when needed.

Motor Skills

- Have the student use a word processor to complete assignments.
- Allow extra time for completing tasks requiring fine motor skills.
- Allow the student to audiotape the lecture or assign someone to take notes for the student during lectures.

Note. From Traumatic Brain Injury in Children and Adolescents: Sourcebook for Teachers and Other School Personnel by M. P. Mira & J. S. Tyler, 1999, Austin, TX: Pro-Ed Publishing.

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Ask the Child…

Solicit the child's opinion about needed changes in the school environment.

"You are the best judge of how other people can cause problems for you or help you do better. Answer these 10 questions and let's work together to think of some helpful solutions."

1. What problems are you experiencing in class (at home, at work)? Briefly describe the problems you are having since you returned to school (your home, work, etc.). _____

_____

2. How do you usually act when you are experiencing problems or frustrations in class (at home, at work)? List some of the ways you act when you are having problems. _____

_____

3. What classroom (home or work) situations cause you the most problems? ❑*Noise* ❑*Temperature* ❑*Other people in the room* ❑*Pictures and wall decorations*
❑ *Other things:* _____

4. List several ways your teachers (family, classmates, co-workers) help you when you experience trouble in class (at home, at work). _____

_____

5. What do you think people should do to help you? _____

_____

6. List several things that your teachers (classmates, co-workers) do to frustrate you or cause you more problems. _____

_____

7. What do you think people should stop doing when they are around you? _____

_____

8. At what time of day do you do your best? Why do you feel this is your best time of day?

_____

9. If you could choose 3 skills to improve, what would they be? _____

_____

10. Tell 5 things that are great about you that you wish other people would know. _____

_____

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Inclusive PPP Adaptation Checklist

Student _____ D.O.B. _____ Date_____

Completed by _____

The following adaptations are appropriate and necessary for this student. Check all that apply.

Pacing

_____ Extend time requirements
_____ Allow breaks
_____ Vary activity often
_____ Omit times assignments
_____ School texts sent home for summer preview
_____ Home set of materials for preview/review
_____ Other_____

Environment

_____ Preferential seating
_____ Planned seating: _____ Bus _____ Classroom _____ Lunchroom _____ Auditorium
_____ Alter physical room arrangement
_____ Defines areas concretely
_____ Reduce/minimize distractions:
_____ Visual _____ Auditory _____ Spatial
_____ Movement
_____ Teach positive rules for use of space
_____ Other _____

Presentation of Subject Matter

_____ Teach to student's learning style:
_____ Linguistic _____ Logical/Math
_____ Musical _____ Spatial
_____ Bodily/Kinesthetic _____ Interpersonal
_____ Intrapersonal
_____ Model experiential learning
_____ Utilize specialized curriculum
_____ Teacher tape lectures/discussions for replay _____ Provide notes
_____ NCR paper for peer to provide notes
_____ Functional application of academic skills
_____ Present demonstrations (model)
_____ Utilize manipulatives
_____ Emphasize critical information
_____ Pre-teach vocabulary
_____ Make/use vocabulary files
_____ Reduce language level/reading level of assignment

Assignments

_____ Give directions in small, distinct steps (written/ picture/verbal)
_____ Use written backup for oral directions
_____ Lower difficulty level
_____ Shorten assignment
_____ Reduce paper-and-pencil tasks
_____ Read or tape-record directions to student
_____ Use pictorial directions
_____ Give extra cues or prompts
_____ Allow student to record or type assignment
_____ Adapt worksheets, packets
_____ Utilize compensatory procedures by providing alternate assignment/strategy when demands of class conflict with student's capabilities
_____ Avoid penalizing for spelling errors/ sloppiness/penmanship
_____ Other_____

Self-Management/Follow Through

_____ Visual daily schedule _____ Calendars
_____ Check often for understanding/review
_____ Request parent reinforcement
_____ Have student repeat directions
_____ Teach study skills
_____ Use study sheets to organize material
_____ Design/use long-term assignment time lines
_____ Review and practice in real life situations
_____ Teach skill in several settings/environments
____ Other_____

Testing Adaptations

_____ Oral _____ Short Answer _____ Taped
_____ Multiple choice _____ Pictures
_____ Modify format _____ Read test to student
_____ Applications in real setting
_____ Preview language of test questions
_____ Extend time frame _____ Shorten length
_____ Test administered by resource person
_____ Other_____

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_____ Use total communication
_____ Use facilitated communication
_____ Sharing activities
_____ Use visual sequences
_____ Other _____

Materials

_____ Arrangement of material on page
_____ Taped texts and/or other classroom materials
_____ Highlighted texts/study guides
_____ Use supplementary materials
_____ Note-taking assistance: carbonless or photocopy of other students notes
_____ Type teacher material
_____ Large print
_____ Special equipment:
_____ Augmentative communication device
_____ Electric typewriter _____ Calculator
_____ Telephone adaptation _____ Computer
_____ Electronic devices _____ Homemade material _____Video recorder _____
Other:_____

Social Interaction Support

_____ Peer Advocacy _____ Peer tutoring
_____ Create activities to promote social interactions
_____ Focus on social process, not than end product
_____ Structure shared experiences
_____ Cooperative learning groups

Teach social communication skills

_____ Greetings _____ Conversation turn taking
_____ Sharing _____ Negotiation
_____ Other_____

Motivation and Reinforcement

_____ Positive verbal reinforcement
_____ Concrete reinforcement (e.g., tokens, stickers)
_____ Planned motivating sequences of activities
_____ Reinforce initiation _____ Offer choice
_____ Use strengths/interest often
_____ Other _____

Note. Adapted from "The Evolution of Secondary Education", by V.S. Thousand, R.L. Rosenberg, K. D. Bishop, & R. A. Villa, 1997, Remedial and Special Education, 18 (3), p. 282, Austin, TX: PRO-ED, Inc.

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