NEURO INSTITUTE

Continuing Education for Rehabilitation Professionals

Return to School Following TBI

Rob McDaniel, MS

Regional Vice President, NeuroRestorative

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The case studies presented in the audio portion of this webinar are fictional examples created to illustrate the concepts presented. They do not reflect real individuals.

Prevalence & Etiology

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- Children and Adolescents make up the greatest proportion of people surviving TBI
- Estimated incidence doubles between the ages of 5 and 14
- Peaks for both males and females during adolescence to early adulthood - approximately 250 per 100,000
- 1/3 to 1/2 of adolescents are injured in motor vehicle accidents
- In younger children, pedestrian traffic accidents are the leading cause followed by falls

Time Frame / Focus Following Pediatric - Adolescent TBI

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Immediate Concerns

Obviously medical in nature

Short-term Focus

Physical characteristics and abilities

Most Common Long-term Effects

Learning, memory and behavior

Neurobehavioral Outcome Sequelae

- Injury may obliterate previously learned skills
- There may be a reduction in the efficiency of skill performance
- May be a reduction in the developmental potential thereby altering the future of skills not yet obtained

Common Problems

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- Mental and physical fatigue
- Transition periods involving process and content shift
- Immediate and sustained attention
- Acquisition of new information
- Difficulty with peer integration
- Skill and compensatory generalization
- Short-term memory
- Routine auditory comprehension and processing
- Awareness of deficits
- Dysfunctional behavior patterns
- Problems with executive functions
- Impulsive and disinhibited responding

Frequent Misconceptions

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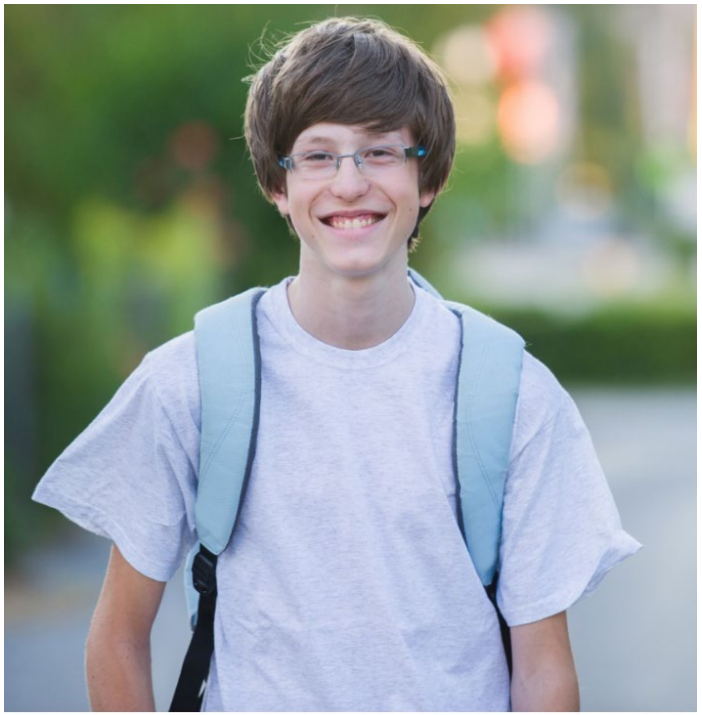
- Younger students usually bounce back
- Students with brain injury always present as significantly impaired
- Significant problems and deficits always surface early
- If the student performs well in one area - he/she should perform well in other areas
- The school psychologist and/or counselor will always be able to guide me in the right direction
- Excesses and/or decreases in behavior are volitional
- Students with brain injury can't learn



Common Modification Needs

- Environmental re-structuring within the classroom
- Reduced assignments (total and length)
- Presentation and assessment tailored to hemisphere dominance
- Scheduled breaks/rest periods
- Additional time allowance
- Descriptive outlines for assigned tasks
- Written instructions with accompanying checklists
- Daily coordination with the teacher aide
- Frequent checks on status of work performance and completion

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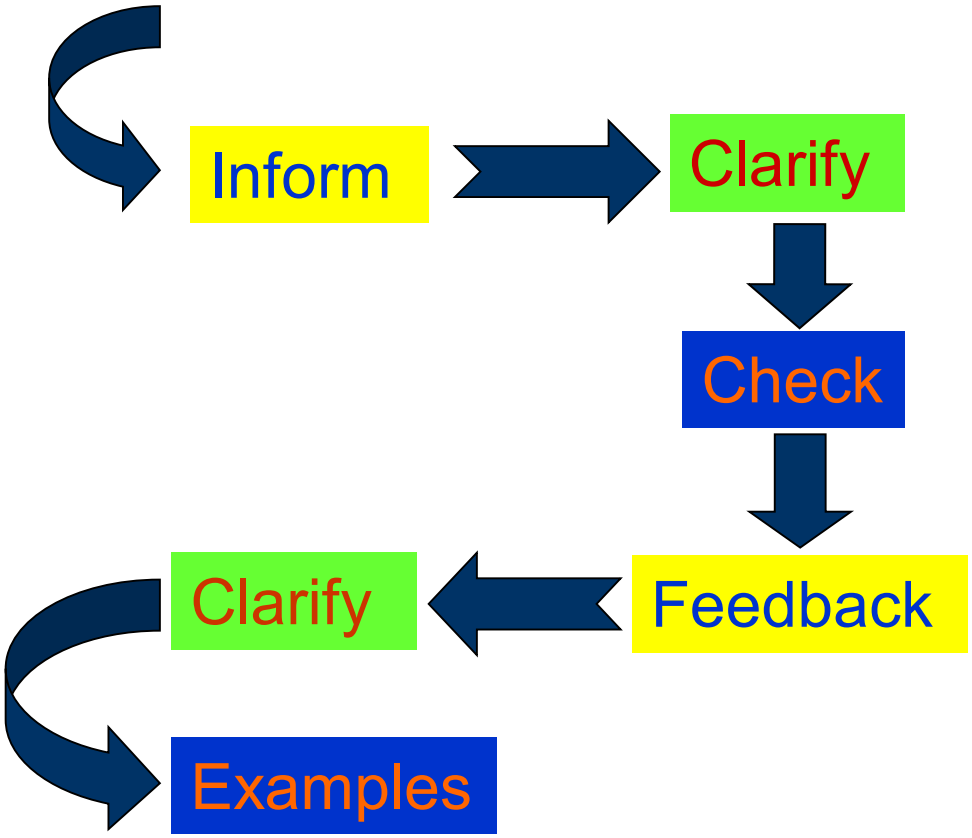
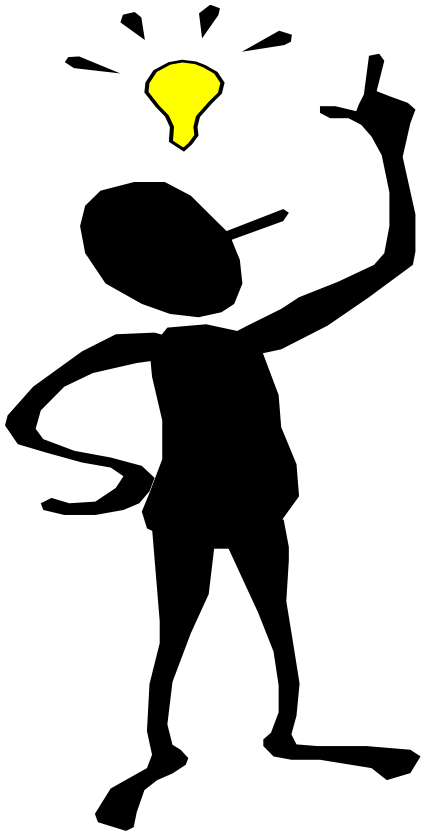
Provide Specific Instructions



Teach Self Evaluation



Generalization

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Stimulus Generalization

Refers to the generalization or transfer of a response to situations other than those in which training takes place

Response Generalization

The reinforcement of a response increases the probability of other responses which are similar

Generalization Following Brain Injury

- The consequences of traumatic brain injury frequently involve decreased attention skills and difficulty establishing associations, which in turn, diminish the salience of existing cues and prompts within varying environments. Both stimulus and response generalization are therefore hampered.

- Generalization enhancement should be planned and programmed with domain specific training that provides explicit prompts that are systematically faded.

Assessment Considerations

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Students who have sustained traumatic brain injury have the potential to test fairly normal on standard educational and rehabilitative assessment measures including intelligence and achievement tests, and occupational therapy, physical therapy and speech therapy evaluations. It is critical that treatment providers have specialized knowledge regarding assessment of this patient population and perform domain-specific evaluations to assess the magnitude of the subjective functional complaints.

Neuropsychological evaluations are excellent diagnostic tools - but they are not infallible

On The Other Hand

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Students who have sustained a severe brain injury may present with surface profiles quite similar to those of an individual with an intellectual disability. It is important to consider the specifics of the profile in order that these students can be served appropriately. Unless the child was injured at an early age, established skills typically exist which can be accessed for training purposes.

Neuropsychological assessments with corresponding consultation can be a valuable resource.

Future Considerations For Special Education
Increased Adoption of Behavioral Teaching Techniques

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- Discrete trial training
- Systematic use of massed, spaced and distributed trial training
- Learn unit presentation
- SAFMEDS training
- Precision teaching

Questions?

If you have questions after the live webinar, please feel free to email them to institute@neurorestorative.com.