

OCALI

Comprehensive Program Planning for Students with Traumatic Brain Injury

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Overview of Presentation

- Prevalence of TBI
- TBI Definition
- Comprehensive Program Planning
- Overview of TBI Effects
- TBI Assessment
- Intervention Planning
- Implementation

TBI: The Silent Epidemic

- **30,000** children sustain a TBI each year and have persisting disabilities as a result (*National Trauma Registry*)
- **415,000** children and youth over a 15 year school career (ages 3-5 yrs and 6-18 yrs)
- Only **23,805** students were identified under IDEA nationwide in 2007
- **391,995** missed or misidentified

Why is TBI a Silent Epidemic?

- Most individuals don't know about brain injury, let alone its consequences or impact on behavior
- Minor blows to the head or "concussions" are often not perceived as "brain injuries," yet 15% of these individuals will have chronic problems post injury
- Most people assume one needs to lose consciousness to have a brain injury

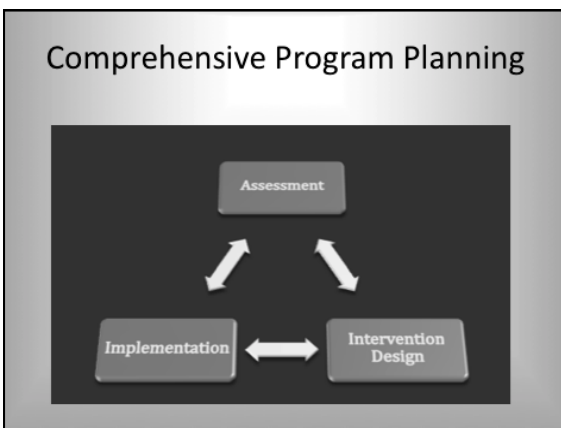
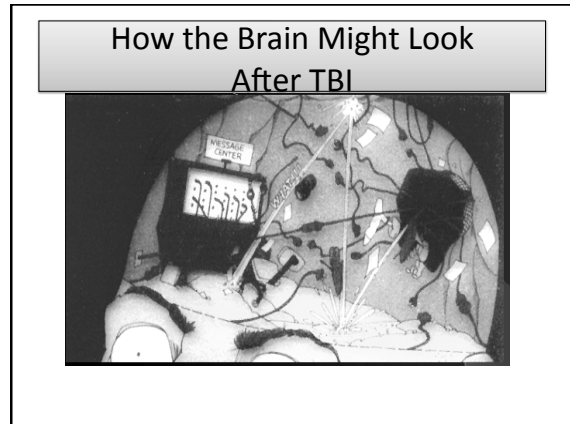
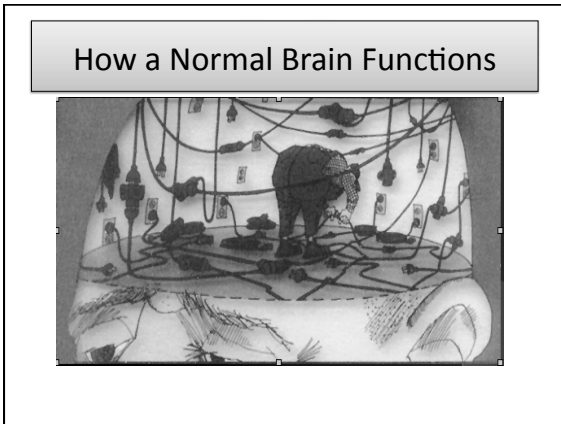
Severity of TBI

Mild	Moderate to Severe
<ul style="list-style-type: none"> • 85% of all TBIs • Seen in ER or MD office • "Identified as a concussion" • Not followed by medical community in many cases <p>Causes: Domestic violence, child abuse, sport injuries</p>	<ul style="list-style-type: none"> • 15% of all TBIs • Typically hospitalized • "Identified as TBI" • Known and followed by medical community <p>Causes: Car accidents Loss of consciousness, coma, skull fracture</p>

Traumatic Brain Injury Defined

- Acquired injury to the brain caused by an external force or by other medical conditions, including but not limited to stroke, anoxia, infectious disease, aneurysm, brain tumors, and neurologic insults resulting from medical or surgical treatments.
- Results in total or partial functional disability or psychosocial impairments or both.
- Does not apply to brain injuries that are congenital or degenerative, or induced by birth trauma.

Ohio's 2008 Ohio Operating Standards, p. 19



Steps for Developing A Comprehensive Plan

Assessment	Intervention Design	Implementation
1	2	3

- Executive Functioning
- Planning
 - Organization
 - Timing/pacing
 - Self-regulation
 - Attention/concentration
 - Getting things done
 - Information processing speed
 - Memory—short term, working, long term
 - Shifting focus or attention, topics



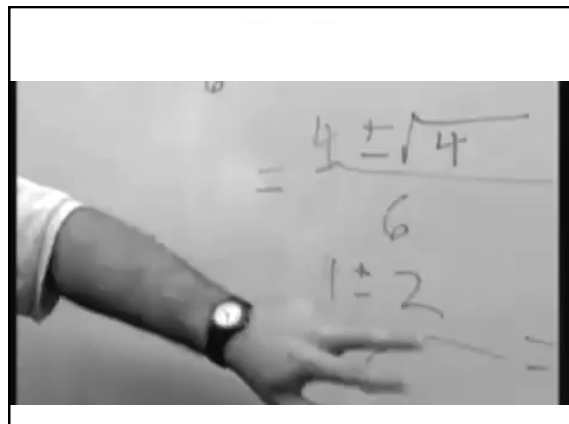
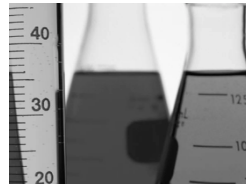
Social/Emotional Functioning

- Difficulty attending to social cues
- Misinterpreting social skills
- Emotional Lability
- Personality changes
- Irritability
- Depressed
- Anxiety
- Low motivation
- Disinhibition




Cognitive Functioning

- Language processing
- Thinking abstractly
- Problem solving
- Academic deficits
- Difficulty with new learning
- Inconsistent/irregular performance



Physical Difficulties

- Headaches
- Dizziness
- Chronic pain
- Seizures
- Decreased coordination
- Vision problems
- Sensory limitations



Major Educational Approaches for Students with TBI

- Teaching new skills and concepts;
- Teaching student to use compensatory strategies;
- Making environmental changes to help the student compensate for losses in physical and cognitive abilities; and
- Adapting instructional approaches.

Planning for the Educational Environment

- Environmental factors (e.g., distances between classes, architectural barriers, distractions in the classroom)
- Scheduling (fatigue and attention factors may require frequent breaks, shortened periods or day, re-sequencing of academic subjects)
- Adaptations of material and assistive technology (e.g., communication devices, computers, calculators, tape recorders)

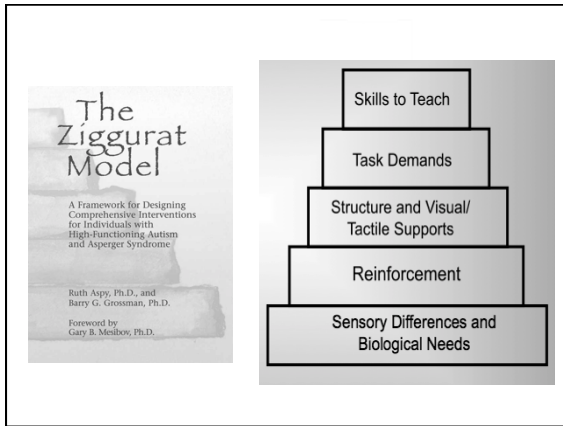
Planning for the Educational Environment, cont.

- Staffing needs
- Transportation
- Support to assist with organizational skills
- Curriculum expectations and performance requirements (written, spoken, assignments, etc.)

Supported Interventions

- Modified schedule
- Peer to assist in note taking, locating classes,, etc.
- Rest breaks
- Teacher to provide notes or outlines of unit information
- Tape recorder to assist in remembering lessons and assignments
- Classroom aide for behavior or academic assistance.
- *** Initially, it is beneficial to provide more intensive support in order to minimize stress, frustration, and failure.**

Traumatic Brain Injury Checklist	
Student: _____	Grade: _____ Date of Injury: _____
School: _____	Current Date: _____
Please rate the student's behavior (in comparison to same-age classmates) using the following rating scale:	
Not at all Occasionally Often Very Often	Not at all Occasionally Often Very Often
Not at all Occasionally Often Very Often	Not at all Occasionally Often Very Often
A. Orientation and Attention to Activity	
Confused with time (day, date), place (classroom, bathroom, schedule changes), and personal information (first name, address, phone, schedule)?	
Seems "in a fog" or confused	
Seems flustered	
Appears sleepy or fatigued easily	
Fails to finish things started	
Cannot concentrate or pay attention	
Distracted or gets lost in thoughts	
Inattentive, easily distracted	
B. Starting, Changing, and Maintaining Activities	
Confused or requires prompts about when, how or when to begin assignments	
Does not know how to initiate or maintain conversation (walk away, etc.)	



Characteristics

- Executive Functioning
- Social/Emotional Functioning
- Cognitive Functioning
- Physical/Motor Deficits
- Sensory Differences

Interventions

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Intervention Design Planning Sheet		
Characteristics	Skills to Teach	Interventions/Accommodations/Modifications
Fatigues easily	Teach student how and when to request for break; Self-monitor "body" needs	Frequent breaks; scheduled "home base"/rest breaks; class locations scheduled in close proximity to one another
Cannot concentrate or pay attention		Provide short/concise instructions; Provide redirection (physical, visual cues); Use "key" words to cue student (ie: "important for test, Must know information")
Easily distracted		When possible, enroll in classes with smaller class sizes; Allow "private work stations"; Preferred seating (front of class)
Gives up quickly on challenging tasks	Teach student to use coping strategies; Request for help	Build in preferred/valued reinforcement; Provide coping strategies/cues; Power Cards
Forgets classroom materials, assignments	Teach student to routinely using planner	Daily/Class planner; Verbal/visual reminders of assignment deadlines/requirements
Forgets information learned from day to day	Teach student to categorize or chunk information to aide retention, use mental rehearsal or special words as reminders	Tape recorder/mp3 player with speakers to record lessons
Difficulty understanding complex or lengthy discussion		Provide written/picture cues for steps of complex task; Provide written outline or summary of information discussed
Processes information slow	Teach student to appropriately ask for teacher to repeat information	Present verbal information at a slow pace, with pauses, and then repeat; Underline or highlight significant information
Difficulty with note taking	Teach student how to use word processor;	Word processor; peer provides notes using Carbonless Notebook (Onion Mountain); teacher provides notes or outline
Difficulty with sequential steps of task	Teach student to break tasks into steps;	Establish priorities of what has to be done 1 st , 2 nd , 3 rd , etc.; Rehearse what is expected (ie: First, I need to do x, and then I need to do y; Provide written directions of tasks
Problems organizing materials		Peer support; Color-coded materials for each class

Implementation Plan					
Time of Day	Characteristics	Class/Activity/Task	Skills to Teach	Interventions	Data

Implementation Plan					
Time of Day	Characteristics	Class/Activity/Task	Skills to Teach	Interventions	Data
7:15-7:30am	Problems organizing materials; poor motor dexterity	Locker Routine: Manipulating lock; Unpacking backpack; organizing books/materials for classes	Teach student how to organize materials from home and for classes each day; how to use checklist	Use key lock vs. combination lock; Visual checklist hanging on inside of locker door of what to take to each class; organized by a.m., and p.m. classes; use color coded books/folders/folders	Student has all materials for each class
7:35-8:15am	Difficulty concentrating; Difficulty understanding complex or lengthy discussion; Difficulty with sequential steps of task	Math Lecture/Direct Instruction; Independent Work; Small Group/Hands-On	Teach how and when to request information to be repeated; Teach student how to break tasks into steps to complete	L/D: Repeat pertinent information; Pause frequently; Use key words; Outline/notes provided; Preferential seating; Tape recorder or Mp3 player I/W: Provide step-by-step directions for activity/task; Provide redirection (ie: physical/visual cues); reduce amount S.G./I/O: Peer support; Concretely define roles in group work; adaptive equipment	Task completion; Group participation
8:25-9:15am	Difficulty with writing/motor dexterity; Process information at a slow pace; inattentive	English Literature Reading Passages Discussion; Written Responses	Teach compensatory strategies (ie: using interventions)	R/P: Highlight significant information; Provide modified text materials (Word-Antonyms); Provide list of key words or concepts in reading materials D: Provide list of concepts for discussion; W.R: Word Processor; Graphic organizers	Mastery of major concepts; Completion of written assignments
9:25-10:05am	Fatigues easily				
10:05-10:45am		Rest time/Resource time			
		World History			

Tips for Teachers

- Teachers will work to improve the child's deficits and teach the child how to compensate for skills he or she may never regain.
- Students with newly acquired TBI may make change rapidly. Therefore, the child's IEP goals and objectives must be developed initially for achievement over short periods of time, 4-6 weeks, rather than six months to a year as is traditionally done.
- Ensure regular communication occurs between the child's parents, medical personnel including the neurologist and rehabilitation personnel, any outside therapists the child is seeing, social workers, and school staff.

Tips for Teachers, continued

- The student may need more frequent informal assessments than other children with disabilities.
- Because the student may not have memory skills and/or lack the ability to determine cause and effect, any behavior intervention plan must be concrete and short-term.
- Educators must consider a student's physical protection. Whether because of loss of balance, impaired judgment, or an increase in impulsive behavior, these children are prone to additional head injuries.

TBI Resources

- Brain Injury Association of Ohio www.biaoh.org
614.481.7100
- Nationwide Children's Hospital
www.nationwidechildrens.org/research
614.722.3142
- Ohio Valley Center for Brain Injury Prevention & Rehabilitation (OSU) www.ohiovalley.org
614.293.3802
- Brainline brainline.org
- TBI Educator www.tbied.org

TBI Resources

- Brain Injury Association of America, Inc.
<http://www.biausa.org>
- Traumatic Brain Injury Internet Resource
www.traumaticbraininjury.com
- National Resource Center for Traumatic Brain Injury
www.neuro.pmr.vcu.edu
- North American Brain Injury Society
www.nabis.org

THANKS FOR LEARNING WITH



Please visit our website for resources on
ASD, AT and low incidence disabilities:
<http://www.ocali.org>