

## Educational Determination of Traumatic Brain Injury

Newport News Public Schools:  
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TBI Committee Members:  
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## History of Work Group

- Anne Hearth and Wanda Council were part of region 2 Cohort
- TBI work group of school psychologists and supervisor was formed
- Presented TBI informational presentation to various staff groups
- Initially reviewed records of students identified with TBI

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## History (cont)

- Development of educational determination protocol
- Utilized our ADHD and Autism guidelines for educational determination
- Goal: Identify students who would qualify under the category of TBI in the absence of a medical diagnosis

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## Protocol

- Child Study
  - Prompts to begin health history or medical questionnaire
- Teacher information
  - Evidence of Executive Functioning Deficits
  - Documentation of educational impact and interventions implemented
- Referral for evaluation
  - Indicate on PWN that a TBI educational assessment will be included as part of evaluation

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## Referral

- Make sure to include appropriate assessments in referral
- If TBI is suspected as a possible consideration, indicate that evaluation will include a TBI educational assessment

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## Required Information

- Record Review
  - Pre-Injury Data
- Observation
  - Use as an observation and/teacher interview
  - Appendix B
- Psychoeducational
  - Processes most impacted by TBI: Attention/Concentration, Memory, Processing Speed, and other EF and/or sensory skills

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## Required Information

- Social History
  - Structured interview (pre and post injury behavior)—See appendix C
  - EF rating scales for parent

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## Important Components

- Ideally to have pre and post injury data
- Rating Scales by at least 2 different raters (school and home) relating to EF
- Assessments

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## Other disabilities

- Differentiating from other categories
- Such as
  - ADHD
  - SLD
  - ID

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## NNPS Guidelines for Traumatic Brain Injury (TBI) Educational Assessment

**The following guidelines apply when the Child Study Committee suspects the presence of Traumatic Brain Injury and there is NO MEDICAL diagnosis of TBI available:**

1. The medical information questions asked as a routine part of child study and/or responses from the Commonwealth of Virginia School Entrance Health Form, resulted in the administration of the Newport News Traumatic Brain Injury Screening Form (Appendix A). Results from the NN TBI Screening Form indicate a potential brain injury, as reported by the parent.
2. When a student has evidenced significant characteristics of a potential brain injury over a long period of time, but no TBI diagnosis is available, then the Child Study Committee may request a TBI educational assessment to be completed as part of the full special education evaluation.
3. Before the Child Study Committee requests that a TBI educational assessment be included as part of the full special education evaluation, the student's teachers must have documented evidence showing that the student's educational performance as negatively affected by executive functioning skills such as difficulties with attention/concentration, memory, processing speed, initiating/organizing tasks, and/or emotional regulation. Sensory issues can also be present with a TBI. Pre-injury/post-injury data must be considered, when available.
4. Before a TBI educational assessment can be requested by the Child Study Committee interventions relating to the student's problems with executive functioning and/or sensory skills must have been implemented in the classroom. The student's responses to the interventions should be documented (i.e. through the child study process).

**Procedures for Requesting a TBI Educational Assessment as part of the full special education evaluation:**

When the Child Study Committee determines that a TBI educational assessment is appropriate based on the guidelines above:

- On the Permission to Evaluate form: check other and write in TBI Educational Evaluation. Note: this is done in **addition to (not instead of)** the areas typically checked as part of the full special education evaluation.

- On the Prior Written Notice form, under Action Proposed, note that the “team proposes to conduct a comprehensive evaluation for consideration of special education services. A TBI educational assessment will be included as part of the comprehensive evaluation.”

**Required information to be gathered as part of a TBI educational assessment:**

- A thorough record review and collection of information from staff, conducted by the assessment team, to include any **pre-injury data** such as grades, test scores (DRA, PALS), attendance history, formal testing, discipline referrals, and teacher observations.
- A structured classroom observation conducted by the school psychologist, the **Brain Injury Observation Form** (see Appendix B) will be completed. Some items from the form will not be directly observable during the formal observation; gather additional information in consultation with teacher through interview to complete the form. The results will be included in the psychoeducational report.
- Inclusion in the psychoeducational report of assessments which target the processes/functions most often impacted by the presence of TBI, to include:
  1. **Attention/Concentration** (Suggested assessments: WJ4 - COG, WISC5 – Cognitive Proficiency, NEPSY 2 – Attention/Executive Functioning subtests, BASC3 subtest scores of Attention and Hyperactivity, WRAML2, Conners3)
  2. **Memory** (Suggested assessments: DAS2, WISCV, WJ4 -COG, UNIT, KABC2, WPPSI4, Stanford-Binet 5, WAIS4, WRAML2, NEPSY2 – Memory and Learning subtests,)
  3. **Processing Speed** (Suggested assessments: DAS2, WISCV, WJ4-COG, Academic fluency from achievement measures, WPPSI4, WAIS4, CTOPP2)
  4. **Other executive functioning and/or sensory skills** such as shifting tasks, emotional regulation, impulse control, initiating tasks, planning/organizing tasks, monitoring, motor, visual-spatial, and auditory processing (Suggested assessments: BRIEF, CEFI, BASC3 certain subtests, NEPSY2 – inhibition subtest, sensorimotor tests, Bender, VMI, behavioral observations)
- Inclusion in the sociocultural report of information concerning TBI type behaviors and/or symptoms that are present in the child to include:

1. Structured interview, (**Traumatic Brain Injury Parent Interview Questions**) which looks at both the nature of the injury and pre-injury/ post-injury behavior (see Appendix C)
2. **Administration** of the BRIEF parent/caregiver rating scale
3. **Administration** of either Vineland (when ID is suspected) **or** the BASC3, parent scale

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## Child Study suggestions for possible Traumatic Brain Injury

<b>Tier II Interventions/Accommodations</b>	
<b>Poor attention/concentration</b>	
Reduce distractions—sunglasses, ear plugs	Cue attention with written and verbal cues
Seat student near instructor	Have student repeat information to ensure understanding
Teach in small groups	Teach self-regulating strategies
Use a study carrel	Provide breaks
Avoid fatigue	Use external devices to cue attention
Divide work into manageable chunks	Nonverbal signal to cue attention
Use visually simple materials	Adapt worksheets through the use of larger type and contrast between print and background
Highlight key directions and vocabulary to provide visual cues for relevant versus irrelevant details	Self-check strategies (e.g. teaching the student to create mindful moments—slow down, take a deep breath, and ask questions such as “What am I doing now?” or “What do I need to do first, second, or last?”
<b>Poor Memory</b>	
Present information through multiple sensory modalities-capitalize on strengths	Use an assignment sheet, check it regularly
Frequently repeat information	Allow tape recording of lessons
Summarize often	Have student repeat information to ensure understanding
Provide connection with previously learned material	Use external aids such as notes, memos, daily schedules, and assignment sheets
Teach the use of association, visualization, and categorization	Provide additional review
Use fact cards and cue sheets	Use multiple choice format
Use visual imagery to supplement oral instruction and verbal content	Give pass/fail grades rather than letter grades
Teach the student to chunk information	Teach mnemonics to help students remember information
Recite information aloud	Develop checklists/picture schedules in order to help the student remember daily schedules, routines, etc.
<b>Decreased Organization</b>	
Follow a daily schedule	Color code materials by class
Display activities schedule	Use checklists
Designate a specific place to turn work in	Prime student daily with a schedule
Develop a system to show that work has been turned in	Provide an outline for class lectures
Break tasks into steps	Help student make a “to do” list daily
Use a daily organizer	
<b>Decreased Ability to Follow Directions/Process Information</b>	
Reinforce key points	Slow pace of instruction

## Child Study suggestions for possible Traumatic Brain Injury

Repeat frequently	Allow extra time for tests/assignments
Reinforce key points	Limit amount of information presented at one time
Repeat frequently	Break complex directions down into smaller steps
Use visual and auditory directions	Allow more time for response
Model tasks	List steps in written and/or pictorial form
Clear, concise presentation of information	Use written backup for oral instructions
Check for understanding by having the student verbalize and demonstrate	Highlight text/study guides
Reduce homework	
<b>Fine and Gross Motor Skills</b>	
Use a word processor for assignments	Allow extra time for assignment completion
Preferential seating	Allow audiotaping of lessons
Planned seating for the bus, lunch room, auditorium, ...	Provide note taking assistance-assign a buddy to take notes, provide a photocopy
Teach positive rules for use of space	Alter physical arrangement of room
Use graph paper	Build up handles/knobs for easier handling
<b>Impulsiveness</b>	
Reduce potential distractions	Teach mental rehearsal before beginning
Frequently restate and reinforce rules	
<b>Receptive Language</b>	
Use simple language	Limit the amount of information presented
Present directions one step at a time	Have the student repeat instructions
Use concrete language	Preteach vocabulary
Teach student to "stop and think"	
<b>Expressive Language</b>	
Teach the student to look for cues from listeners	Teach silent rehearsal strategies
<b>Pacing</b>	
Allow breaks	Allow extended time
Vary activities	Send home texts for preview
<b>Sensory</b>	
Use large print	Use green lines to delineate "go" and red lines to delineate "stop" when writing
Reduce input—sunglasses, ear plugs	Use contrasting colors of paper and print
Reduce the print on the page	Use graph paper
<b>Social Interaction</b>	
Create activities to promote social interaction	Assign a peer advocate
Focus on the social process, not the outcome	Assign a peer tutor
Use cooperative learning	Structure shared experiences
<b>Behavior</b>	



## Child Study suggestions for possible Traumatic Brain Injury

Avoid fatigue-be aware of physical limits	Prime before changes
Limit distractions	Allow ample time to adjust
Avoid surprises	Teach explicit expectations
Be clear and consistent with expectations	Provide a social coach
Provide frequent feedback	Modify activities to prevent expectations
Avoid criticism	Teach and model acceptable alternate behaviors
React to aggression to a neutral approach	Provide verbal and visual prompts and warnings
Alternate activities to prevent frustration	Define personal space visually
Be flexible	Minimize triggers
Limit choices	Create a behavior contract that is negotiated between parties
Schedule preferred activities after nonpreferred activities	Conduct an informal FBA to identify antecedents or triggers for behavior in an attempt to eliminate environmental stresses
Limit the number of participants in an activity	Model, cue, and rehearse appropriate behaviors with students
Establish routines	Teach social communication skills such as greetings, conversation turn taking, sharing, etc.
Teach students to recognize when they are becoming upset and appropriate coping strategies	Peer buddies as mentors
<b>Fatigue</b>	
Provide breaks	Shorten the day
Provide extra time for transitions	Shorten assignments
Alternate activities and rest periods	

# NEWPORT NEWS TRAUMATIC BRAIN INJURY SCREENING FORM

Student's Name:  
Date of Birth:  
Student's Grade:  
Today's Date:

Student's ID:  
Student' School:  
Student's Teacher:

Your Name:  
Relationship to Student:

Has your child ever been in a car accident, suffered a blow to his/her head, had a bad fall, and/or lost consciousness?

Yes \_\_\_\_\_ (Describe)  
No \_\_\_\_\_

Describe: (include when, where, how, medical interventions or diagnoses, possible changes in behavior)

## **TBI Screening Questions**

**Ask the parent:** "Has your child ever..." Been in a motor vehicle crash? Been hit in head during sports or play? Seemed dazed, confused, unlike "normal" self for a period of time? Had a concussion; been knocked out, or lost consciousness? Had difficulty understanding a question, depending on the wording used? Had whiplash? Played sports which involve contact with the head? Been hit on the head and seemed confused or had changes in vision, hearing, tired easily or had memory problems afterward? Fallen from a significant height? Been hospitalized for a blow to the head?

## **Detailed Interview**

**When, Where and How** questions should be asked multiple times and in a variety of ways to establish details of the TBI and consistency. Details about medical intervention should be thoroughly discussed; if medical intervention was not sought, get specific details regarding child's behavior immediately following the injury/accident. **(Ask parent for a copy of any diagnostic information they may have)**

**Use the following questions as a guide:**

1. Has the child ever hit his/her head or gotten hit on the head? \_\_\_\_\_ Yes \_\_\_\_\_ No
2. Has the child ever lost consciousness? \_\_\_\_\_ Yes \_\_\_\_\_ No (Reason)
3. Has the child ever been seen by a doctor in the ER? \_\_\_\_\_ Yes \_\_\_\_\_ No (Reason)
4. Has the child been hospitalized for any significant illness? \_\_\_\_\_ Yes \_\_\_\_\_ No (Reason)
5. Has the child ever had a diagnosis of head injury of any kind? \_\_\_\_\_ Yes \_\_\_\_\_ No

If yes, at what age (s) \_\_\_\_\_ & **Explain, When, Where, and How**

6. If the Child has had a head injury or been hit or fallen on his/her head, did they experience any of the following problems such as: (circle all that apply)

Headaches, dizziness, irritability, anxiety, depression, increased fatigue, difficulty concentrating or problems with attention, difficulty remembering day-to-day events, difficulty with homework, poor judgment/problem solving, changes in relationships with family and friends.

7. Have you seen changes in your child's behavior since the injury? Please provide specific details of changes.
8. Additional information regarding possible head injury. (This could include reports of head injury of child to parents by day care providers).

# Brain Injury Observation Form

Less positive ..... More Positive

ATTENTION SUBTYPE	1	2	3	4	5
<b>SELECTIVE/FOCUSED</b>	Significantly Below Average	Slightly Below Average	Average	Slightly Above Average	Significantly Above Average
Focuses on teacher lecture					
Attends to detail					
Orients to speaker/staff					
Looks at board appropriately					
Responds to questions with on-topic answers					
Resists subtle classroom distractions-noise, lights					
<b>SUSTAINED</b>					
Focuses for long periods of time					
Completes in-class assignments					
Looses train of thought when talking or writing					
Looses place when working on task or when reading					
<b>SHIFTING/DIVIDED</b>					
Can multitask-note taking while listening					
Can attend to more than one task at a time appropriately					
Switches from activity to activity appropriately					
Responds when watching audio or video activities					
<b>OTHER</b>					
Overall attention capacity					
Energy level when performing long academic tasks/tests					
Organized with materials					
Organized thoughts- (analyze writing samples)					
Initiates tasks without prompts					
Time management (e.g. keeps schedules /dates)					
Impulsivity					
Talking / Verbal interruptions					

# Brain Injury Observation Form

Less positive ..... More Positive

MEMORY	1	2	3	4	5
<b>SHORT TERM MEMORY</b> (When student appears to be paying attention rank the following)	<b>Significantly Below Average</b>	<b>Slightly Below Average</b>	<b>Average</b>	<b>Slightly Above Average</b>	<b>Significantly Above Average</b>
Can repeat back simple information just presented					
Can copy from board without frequently looking up					
Asks for statements to be repeated					
Can complete simple 2-step problems					
Follows directions correctly					
Can repeat/explain simple activities previously learned on same day					
<b>WORKING MEMORY</b>					
Completes thought process in writing assignments					
Summarizes story/text (names characters, setting, details)					
Multi-tasks with accuracy					
Completes multistep problems- especially in math/science					
Copy from board/note-taking while being taught					
<b>LONG TERM MEMORY</b>					
Explains previously learned material / facts					
Recalls school events from previous week					
Remembers where classroom materials are stored					
Remembers routines					
Remembers vocabulary words					
Draws / recognizes previously learned pictures or diagrams					
<b>OTHER</b>					
Auditory: short term-repeats back 4 words in order (>8 years old)					
Working Memory: repeats back 3 given numbers in reverse order (>7 years old)					
Visual: student can name pictures / objects that are exposed for a 5-6 seconds					

# Brain Injury Observation Form

Less positive ..... More Positive

PROCESSING SPEED	1	2	3	4	5
PROCESSING SPEED	Significantly Below Average	Slightly Below Average	Average	Slightly Above Average	Significantly Above Average
Responds to verbal directions/questions quickly					
Keeps pace with class					
Slow reading (control for comprehension)					
Completes tests/tasks on time					
Quickly finishes timed tasks accurately					
Recalls simple information quickly					
Writing or drawing speed					
Speech rate					
Physical movement					
Sometimes seems confused after simple information is provided-not due to attention or memory					
Other:					
COGNITIVE FATIGUE <small>**Note change of ranking criteria**</small>	Observed Frequently	Observed sometimes	Average Compared To Peers	Not Observed Often	Never Observed
Completes morning / earlier academic tasks easier than later tasks					
Simple word retrieval consistent throughout day					
Attention capacity consistent throughout day					
Behavioral changes after moderately difficult test/task					
Cognitive changes after moderately difficulty test/task					
Reports of fatigue/physical complaints after long tasks					
Blank starrng					
States feeling in a "fog" or feeling "sluggish"					
Sensitive to lights / noise after moderate exposure					
Other:					

# Brain Injury Observation Form

Less positive ..... More Positive

EXECUTIVE FUNCTIONS (EF)	1	2	3	4	5
PLANNING, ORGANIZATION, COMPREHENSION, FLEXIBILITY	Significantly Below Average	Slightly Below Average	Average	Slightly Above Average	Significantly Above Average
Organization of materials					
Organization of thoughts in writing / speech					
Shifts appropriately from subject to subject					
Is able to keep and utilize planner or schedule					
Transitions well to different activities					
Writes or draws a basic outline of process (ex. logical paragraph)					
Difficulty learning new concepts					
Difficulty understanding simple stories or concepts					
Can explain plans to meet an assignment, task, deadline, or activity					
After a short assigned problem, can explain logic used in problem solving					
Focuses for appropriate period of time					
When engaged in a problem solving task, uses feedback to help in the process (monitors progress)					
Can quickly adjust to changes in routine					
Keeps track of place when working on task or when reading					
EF RELATED BEHAVIOR					
Motivation					
Impulsivity					
Transitions from school activity to activity appropriately					
Common sense/judgment					
Perspective taking/empathy					
Follows rules					
Overall attention					
Emotional/behavioral regulation					
Creativity/concept formation					
On-topic reciprocal dialog					
Sudden / inappropriate emotions					

# Brain Injury Observation Form

Less positive ..... More Positive

Sensory/Tactile/Visual/Motor	1	2	3	4	5
<b>SENSORIMOTOR</b>	Significantly Below Average	Slightly Below Average	Average	Slightly Above Average	Significantly Above Average
Posture					
Walking / running difficulties					
Fine motor (pencil grip / graphomotor) Picking up small pieces					
Gross motor					
Balance / muscle tone					
Touches each finger separately					
Mimics simple body movements (hand gestures, knock and taps)					
Traces or copies figures					
Identifies simple objects placed in hand with eyes closed					
If clumsy , awkward, unusual movements mark box					
<b>VISUAL-SPATIAL / PERCEPTUAL</b>					
Skills puzzles / blocks					
Understands right vs. left and Up vs. Down					
Ignores one side of paper while writing or drawing/coloring					
Grossly distorted drawings that are directly copied					
Spatial breaks in drawing					
<b>TACTILE/AUDITORY/VISUAL</b>					
Light Sensitivity					
Noise Sensitivity					
Touch Sensitivity					
Color Blindness					
Hearing (ex. Responds to name)					
Sees details/writing on board from back of room					
Sensitive to temperature					
Complains of numbness or odd Sensations					
Other:					