Guidelines for Educating Students
With Traumatic Brain Injury/Concussions

A Collaborative Project of the Texas Education Agency and Low Incidence Statewide Leadership
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Purpose

This document is a resource for educators and families who are providing support to students who have experienced a traumatic brain injury/concussion and are returning to school. Specifically, this document will answer the following questions.

- What is a traumatic brain injury (TBI) and how does it differ from a concussion?
- What changes might occur as the result of a TBI?
- What is the process for reentry to school following a TBI?
- What are the crucial considerations a school should explore in developing a plan for a student’s return to school following a TBI?
- What are the cognitive/behavioral/physical changes that might occur following a TBI, and what are the accommodations and strategies that might be helpful in supporting the student’s return to school?
- What type of form can schools use to document occurrences of head injury in a student’s health record?

Students who have experienced a TBI/concussion may have a diverse range of physical, cognitive, behavioral, and social needs. A team effort is required to effectively address and respond to these needs. The student, the family, school personnel, and service providers must collaborate to ensure that the student receives the support necessary to successfully reenter school. This resource document provides information to assist in promoting the importance and value of an integrated delivery of services.
What is a TBI?

The Center for Disease Control and Prevention (CDC) defines a TBI as a disruption in the normal function of the brain that can be caused by a **bump, blow, or jolt** to the head or a penetrating head injury (Centers for Disease Control and Prevention, 2014). A disruption in the normal functioning occurs when any **one** of the following symptoms occurs:

- Any period of loss of or decreased consciousness;
- Any loss of memory for events immediately before or after the injury;
- Neurologic deficits such as muscle weakness, loss of balance or coordination, disruption of vision, change in speech and language, or sensory loss;
- Any alteration in mental state at the time of injury such as confusion, disorientation, slowed thinking, or difficulty with concentration. (Centers for Disease Control and Prevention, 2014)

**There is a difference between Acquired Brain Injury (ABI) and Traumatic Brain Injury (TBI).** An acquired brain injury is brain damage caused by events after birth, rather than as part of a genetic or congenital disorder, while a traumatic brain injury occurs only when an external force traumatically injures the brain. A traumatic brain injury **is** a type of acquired brain injury, but all acquired brain injuries are **not** traumatic brain injuries.

A TBI can be classified as mild, moderate or severe, depending on the extent of damage to the brain. However, the term “mild” can be deceiving. Even a **concussion** can have long-term effects, especially if additional concussions occur. The effects can be cumulative. With any TBI, symptom manifestations can be delayed or intensified as the student ages and reaches the next developmental level, where cognitive tasks become more complex. For this reason, many times parents and educators may not associate the student’s academic struggles or behavioral changes with a traumatic brain injury that occurred years before.

When a student sustains a brain injury, his/her educational and emotional needs are often very different than before the injury. As a result, some, but not all students, may require special education services. Federal regulations and state rules define TBI as a special education eligibility category.
Federal Definition:

Individuals with Disabilities Act (IDEA) 2004
34 Code of Federal Regulations (CFR)
§300.8 Student with a Disability
(c)(12)

Traumatic brain injury means an acquired injury to the brain caused by an external physical force, resulting in total or partial functional disability or psychosocial impairment, or both, that adversely affects a student’s education performance. Traumatic brain injury applies to open or closed head injuries resulting in impairments in one or more areas, such as cognition; language; memory; attention; reasoning; abstract thinking; judgment; problem-solving; sensory, perceptual, and motor abilities; psychosocial behavior; physical functions; information processing; and speech. Traumatic brain injury does not apply to brain injuries that are congenital or degenerative or to brain injuries induces by birth trauma.

State (Texas) Definition:

Texas Commissioner’s Rules
19 Texas Administrative Code
§89.1040 Eligibility Criteria
(c)(11)

Traumatic Brain injury: A student with a traumatic brain injury is one who has been determined to meet the criteria for traumatic brain injury as stated in 34 CFR, §300.8©(12). The multidisciplinary team that collects or reviews evaluation data in connection with the determination of a student’s eligibility based on a traumatic brain injury must include a licensed physician, in addition to a licensed specialist in school psychology (LSSP), an educational diagnostician, or other appropriately certified or licensed practitioner with experience and training in the area of the disability.
Additional State Law Related to Concussions

The Texas Legislature passed HB 2038, and it was signed into law in 2011. HB 2038 defines a concussion as “a complex pathophysiological process affecting the brain caused by a traumatic physical force or impact to the head or body, which may: a) include temporary or prolonged altered brain function resulting in physical, cognitive, or emotional symptoms or altered sleep patterns and b) involve loss of consciousness.” It mandates that each school district have a concussion oversight team that designs and implements the protocol for the diagnosis, treatment, and return to play of any student athlete who sustains a concussion. Texas Education Code (TEC) Section 38.151 – 38.160 clarifies the related expectations for school districts. The University Interscholastic League (UIL) has developed a guidance for compliance document.

What changes might occur as a result of a TBI?

While each brain injury is unique, changes in cognitive ability, behavior, and physical abilities are common. Common changes include the following.

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<tr>
<td>• Organization</td>
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What is the Process for Reentry to School Following a TBI?

To effectively serve students with a TBI, families, school personnel, and service providers must collaborate to ensure that the transition to school is seamless and that the transition plan addresses the unique, diverse, and changing needs of the student. Schools and families need to establish a plan of action prior to the student’s return to school.

The student may be returning to school from a hospital, cognitive rehabilitation unit, a residential placement, a Texas Juvenile Justice Department facility, a detention facility, or a time of recovery at home. Regardless of the environment that the student is returning from, there are certain considerations that the student’s transition team must make. The checklist below will help ensure the proper support for the student as he/she transitions back to school.

- As soon as you know a student has a diagnosis of TBI, designate a school contact person to provide and receive information to and from the team (i.e. family, school staff, residential staff, Texas Juvenile Justice Department facility/detention center staff, etc.).
- Obtain parental consent for release of confidential information between the discharging facility and the school.
- Identify a medical contact person at the discharging facility (e.g., care coordinator or social worker).
- Access updates on the student’s progress and ongoing needs.
- Educate family members and school staff regarding the student’s condition and educational planning.
- Ensure educational services are provided if the student will receive long-term hospital care.
- Establish the student’s follow-up and reevaluation schedules and communicate these schedules to the team.
- Find out the date of the student’s discharge.
  - Notify the discharge planner/social worker/parents of the discharge date in order for everyone to have input in the transition plan.
- Request a school reentry meeting before the student’s discharge.
- Secure the discharge summary – (brain injury screening results, relevant psychological/psychiatric evaluations and notes, and treatment plan).
  - The summary should include necessary information/recommendations from the student’s doctor to inform the Section 504 committee or the admission, review and dismissal (ARD) committee.
  - Identify cognitive and behavioral interventions used in the student’s treatment.
  - Identify what cognitive improvement/decline the student has been experienced.
Review what kinds of therapies/services (i.e. speech, occupational therapy, physical therapy, cognitive therapy, counseling, etc.) the student has received.

Identify all areas of deficits: vision, seizures, hearing, medical, communication, cognitive, fine and gross motor, emotional, behavioral, comprehension, psychiatric, functional limitations, etc.

Define the student’s behavioral and academic needs.

Determine what state accommodations/modifications are in place for academic as well as for extra-curricular activities.

Identify the assistive technology the student was using and discuss transfer of the devices if necessary.

✓ Establish a plan to determine medical benchmarks/medical milestones.
✓ Identify the community resources (CRCG) and support groups that are available to assist the student and the student’s family.

What are the crucial considerations a school should explore in developing a plan for a student’s return to school following a traumatic brain injury?

It is important that schools be well prepared for a student’s return to class following a traumatic brain injury. There are crucial considerations to explore in the areas of information sharing, staff training and family support.

I. Information Sharing

✓ Establish a school team (school psychologist (LSSP)/educational diagnostician, special education teacher, general education teacher, school counselor, administrator, school nurse, occupational therapist, physical therapist, speech pathologist, or any other related service providers) for decision making. Include the student on the team whenever possible.
✓ Secure parental permission to release confidential medical information to the team that would be helpful in supporting the student’s return to school.
✓ Request/review all reports/evaluations as they become available from the facility.
✓ Review existing plan/schedule of current placement and information from the facility.
✓ Translate medical and treatment information to school language, i.e., ensure that medical/treatment information is in language easily understood by school personnel.
✓ Share information with school staff as needed.
✓ Obtain all facility records from hospital, cognitive rehabilitation, residential placement, and correctional or detention placements.
✓ Determine need for additional services; be sure to invite facility representatives if not discussed prior to the student's discharge.
  - See Evaluation Flowchart: Parental Request for Evaluation Flowchart
  - Section 504

II. Training Activities

✓ Train all school staff who have interactions with the student, include information about the unique characteristics of TBI and the types of strategies that are effective with students with TBI.
✓ Follow training with a facilitated discussion to identify the types of instruction and interventions that will be most successful for the individual student.
✓ Utilize the Education Service Center (ESC) as a resource for additional information and training: Education Service Center (ESC) Technical Assistance.
✓ Utilize the Office of Acquired Brain Injury: Office of Acquired Brain Injury as a resource for additional information.
✓ Support school staff by providing training time and resources necessary to differentiate instruction and develop interventions.
✓ Inform and support peers insofar as is allowable under Family Educational Rights and Privacy Act (FERPA).

III. Family Support

✓ Help family members understand educational language and issues.
✓ Ensure parent has an understanding of the special education referral process: Parental Request for Evaluation Flowchart.
✓ Support family members through the grieving process.
✓ Assist in the identification of community resources and support groups and share information with the family.

REMEMBER: The keys to successful transitions for students with TBI are the support, understanding, and acceptance by the student’s family, school, and other significant parties.
What are the cognitive/behavioral/physical changes that might occur, and what are the accommodations and strategies that might be helpful?

Programming issues for students with TBI must focus on educational implications beyond the traditional curriculum. TBI often affects the areas of functioning listed in the table below. The areas can overlap or interact with one another making it difficult to determine the most appropriate accommodation. The age of the student, the time since the onset of the injury, and the demands of the academic setting also may affect how each deficit impacts performance. In addition, the types of accommodations may change as the student recovers.

Although these cannot be easily isolated, difficulties in any one or more of the following areas may result in inappropriate classroom behavior and academic problems and may be misinterpreted as voluntary misbehavior or lack of ability or effort. Inappropriate classroom behavior and academic problems should be addressed as part of programming considerations. The listing below of possible manifestations and accommodations is not exhaustive, but serves as an example of some of the deficits and possible accommodations that would support the student. Please use a team approach and individualize accommodations according to the needs of your student.

<table>
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<tr>
<th>Areas of Functioning</th>
<th>Possible Classroom Manifestations of Deficits</th>
<th>Possible Accommodations</th>
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</table>
| Attention or Alertness | • Falls asleep in class  
 • Appears to be daydreaming  
 • Gets focused on one object or subject; cannot transition  
 • Loses train of thought when talking  
 • Unable to sit still  
 • Looks toward any movement or noise  
 • Cannot tune out distractions – visual or auditory  
 • Displays other off-task behaviors | • It may be necessary to shorten assignments or break tasks down into smaller parts.  
 • Provide breaks between tasks.  
 • Provide cue cards or step by step guides.  
 • Plan to minimize distraction in the student’s auditory/visual space.  
 • Provide preferential seating.  
 • Student may benefit from taking tests in a quiet area and from having additional time for tests.  
 • Schedule difficult tasks to coincide with time of greatest alertness. |
| Visual Perception | • Omits portions of material when reading or copying  
• Cannot find items on a shelf or in text  
• Skips words or lines when reading  
• Runs into people or objects | • Allow student to record lectures for later playback.  
• Provide peer supported reading.  
• Exempt the student from reading aloud in front of classmates.  
• Explore assistive technology devices to help with orientation and mobility in the environment.  
• Provide extra time to move from class to class. |
|-------------------|-------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| Memory & New Learning | • Cannot recall events of the day or previous day  
• Forgets to do or to hand in assignments  
• Loses track of time  
• Gets lost travelling to and from class  
• Recalls information from before the injury, but has difficulty with new information  
• Has difficulty recognizing faces  
• Forgets rules  
• Recalls only parts of directions or assignment | • Use an organizer, assignment book, log of daily activities as an external memory aid.  
• Provide a schedule and review daily routines.  
• Use timers to help keep track of time.  
• Utilize the student’s best modality for learning (visual vs. auditory input).  
• Provide visual cue cards, maps, etc.  
• Post visual of rules.  
• Provide simplified instructions and reduce tasks. |
| Speed of Processing | • Takes excessive time to complete assignments, tasks and tests; overloads easily  
• Asks questions about topics already discussed  
• Requests repeated directions  
• Takes excessive time to respond to questions, resulting in long pauses | • Chunk or reduce tasks.  
• Provide extra time, as needed, for verbal responses, assignments, tests, etc.  
• Modify environment to eliminate distractions.  
• Provide directions in different modalities (e.g., written, visual).  
• Provide anticipatory cuing to prepare responses in advance.  
• Alternate instruction, activity, and rest. |
| Verbal Expression | • Can be nonverbal  
• Uses vague responses or questions  
• Has word finding problems  
• Takes long pauses  
• Seems to have knowledge but cannot express it clearly  
• Has unintelligible speech  
• Has language delays | • Investigate assistive technology supports for speech.  
• Use open ended statements such as “Tell me about . . . .”.  
• Provide processing time.  
• Give verbal cues to communicate intent of conversation.  
• Use simple, direct language; avoid abstract terms and sarcasm. |
| Written Expression | • Unable to write legibly  
• Unable to keep up with note taking  
• Makes spelling and grammatical errors  
• Makes organizational errors  
• Lacks organizational skills  
• Composes in simplistic fashion  
• Lacks proofreading skills  
• Unable to express ideas clearly | • Reduce amount of written work (e.g., multiple choice versus essay questions).  
• Use peer note takers.  
• Use spell check software.  
• Provide graphic organizer.  
• Use large print books with low density on the page.  
• Consider other assistive technology solutions, such as, speech-to-text, graphic organizers, text-to-speech (for proofreading). |
| Social | • Jokes inappropriately  
• Behaves immaturesly  
• Interrupts others  
• Touches others inappropriately  
• Demonstrates poor listening skills  
• Unable to read social cues  
• Chatters inappropriately  
• Displays flat affect  
• Shows little or no emotion | • Provide feedback for social misunderstandings or inappropriate behavior.  
• Teach and use signals to gently redirect.  
• Provide visuals and supports for rules.  
• Use social groups and social stories to teach skills and to provide feedback.  
• Provide supportive counseling. |
<table>
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<tr>
<th>Behavior &amp; Emotion</th>
<th>Physical</th>
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</thead>
</table>
| • Has verbal outbursts  
• Fights  
• Curses  
• Demonstrates mood swings  
• Tends to be negatively influenced by peers  
• Lacks initiative  
• Regarded as egocentric  
• Appears apathetic  
• Lacks awareness of deficits  
• Practices poor hygiene  
• Laughs or cries uncontrollably | • Avoid changes in student’s routine.  
• Provide choices and be flexible in expectations.  
• Keep a diary and review behavior at the end of the day.  
• Use social narrative to teach and reteach skills.  
• Provide a time and place for mental and emotional rest/calming station.  
• Contact the school counselor, social worker, or psychologist for additional assistance in developing coping/problem-solving strategies. |
| • May have related pain  
• May have impairments in any of the following:  
  ▪ Speech  
  ▪ Gait  
  ▪ Coordination & Dexterity  
  ▪ Respiration  
  ▪ Feeding  
  ▪ Vision  
• Hearing | • Be aware of medications, changes in medications, and potential side effects.  
• Consult with experts (e.g., speech therapist, physical therapist, occupational therapist, school nurse) to problem-solve physical difficulties and alert to any changes. |

In summary, the educator must understand that each day may look different as the brain recovers and heals. Providing a structured setting, with consistent routines and flexibility in instruction and assessment, is a necessity. These same types of supports will be necessary in other environments, as well. The transition team must look at possibility of in-home and parent/sibling training in an effort to provide structure, consistency, and flexibility across settings.
What type of form can schools use to document occurrences of head injury in a student’s health record?

The following is an example of a form that could be used to document occurrences of a TBI in a student’s school health record.

**Head Injury Questionnaire**

Student’s Name: ________________________________________ School: __________________________________________

Date of Birth: ________________________ Grade:___________________________ Today’s Date: ____________________

INTRODUCTION: According to the Center for Disease Control and Prevention (CDC), Traumatic Brain Injury in the United States: Emergency Department Visits, Hospitalizations, and Deaths, 2002-2006, “Traumatic brain injury (TBI) is an important public health problem in the United States. Because the complications that result from TBI, such as impaired cognition and memory, are often not readily apparent, and because awareness about TBI among the general public is limited, it is frequently referred to as the ‘silent epidemic’.”

Please answer the following questions:

1. Has your student had a concussion/blow to the head while playing sports or other activity that was treated by a health care professional?
   - Yes □ No □ If yes, when? ________________________________

2. Has your student ever been in an accident in which he/she was unconscious, confused or disoriented?
   - Yes □ No □ If yes, when? ________________________________

3. Has your student ever struck his/her head hard enough in a fall to be unconscious, confused or disoriented?
   - Yes □ No □ If yes, when? ________________________________

4. Are you aware of any instance in early student when, as a baby, he/she was difficult to wake?
   - Yes □ No □ If yes, when? ________________________________
5. If you answered yes to any of the questions above, please answer the remaining questions:

   a) Approximately how long was your student unconscious, confused or disoriented? ______________________

   b) Did you seek medical attention?  
      [ ] Yes  
      [ ] No

   c) Was your student hospitalized?  
      [ ] Yes  
      [ ] No  
      For how long? ______________________

   d) May we have a Release of Information to obtain records from the hospital and/or doctors who treated your student for this head injury?  
      [ ] Yes  
      [ ] No

Name and Location of Hospital(s):  
___________________________________________  ________________________________________
___________________________________________  ________________________________________

I understand that the above information will be entered onto my student’s health record and used only for the purpose of aiding in the creation and maintenance of a comprehensive educational plan. Confidentiality and FERPA laws apply to these documents, which limits access to only personnel working with the student.

Printed Name of Person Completing this Form:  __________________________________________________________

Relationship to Student:  
_______________________________________________________________________________________

Signature:  ________________________________________________________ Date:  _____________________________
Resources

The following are resources to assist in better understanding of traumatic brain injuries.

Federal

United States Office of Special Education Programs
This site provides a "one-stop shop" for resources related to IDEA and its implementing regulations.

Centers for Disease Control and Prevention (CDC)
This site provides a fact sheet for teachers, counselors, and school professionals.

Centers for Disease Control and Prevention (CDC)
This site provides information on concussions.

The Brain Injury Resource Center
This site provides information on issues related to brain injury.

State

Office of Acquired Brain Injury
This site provides information on brain injury education, awareness, prevention and service referral and coordination.

Texas Education Agency
This site provides access to special education rules and regulations

  This guide provides information on the special education process.
- Notice of Procedural Safeguards
  This document explains a parent’s rights under the Individuals with Disabilities Education Act.
- Legal Framework
  This site includes frameworks, publications, and resources helpful in the special education process.
Texas Assistive Technology Network
This site provides information on ways assistive technology devices and services.

Teacher Resources

Brainline
This site provides information on individual education programs (IEPs) and assistive technologies for school as well as return-to-play guidelines and resources for keeping players safe on the field.

Center on Brain Injury Research and Training
This site provides research and training related to improving the lives of children and adults with TBI.

Center for Disease Control and Prevention, “Heads Up to Your Schools: Know Your Concussion ABC’s”
This site provides classroom tips for teachers.

Learning Ally
This site provides audio textbooks and literature to students who have sustained a traumatic brain injury if the injury prevents them from being able to: process, comprehend, see, or hold a standard book.

Nationwide Children’s Hospital: “An Educator’s Guide to Concussions in the Classroom.”
This site provides information along with a return-to-school framework.

NICHCY: Tips for Teachers: Teaching Students with Disabilities
This site provides tips for teachers developed by the National Dissemination Center for Children with Disabilities.

Pennsylvania Training and Technical Assistance Network (PaTTAN) Concussions in the Classroom – Return to Learning
This site provides links and downloads of information on concussions and considerations for return to school.

Texas Council for Developmental Disabilities: Project IDEAL
This site provides teaching strategies for meeting the needs of students with disabilities.
Texas State Athletic Trainers’ Association (TSATA) FAQ and Resource Document for House Bill 2038
This site provides information on the prevention, treatment, and oversight of concussions affecting student athletes.

**Associations and Foundations**

**Brain Injury Association of America, Inc.**
This site provides information related to research, education, and advocacy programs through a national office, a network of state affiliates, support groups, and a helpline.

**Brain Injury Support Groups in TX (Texas Health & Human Services Commission)**
This site provides information for survivors of brain injuries and their families in Texas.

**Brain Trauma Foundation**
This site provides information on current research on traumatic brain injury.

**Brain Injury Research Center of Mount Sinai School of Medicine**
This site provides resources and links to articles on traumatic brain injury.

**The Dana Foundation: Students with Traumatic Brain Injury**
This site provides a general overview of how schools can best meet the needs of students with TBI.

**Traumatic Brain Injury: Hope Through Research**
This site provides a booklet about TBI, or head injury, prepared by the National Institute of Neurological Disorders and Stroke (NINDS).

**NINDS Shaken Baby Syndrome Information Page**
This site provides information about shaken baby syndrome.

**TBI Resource Guide**
This site provides blogs and personal accounts of traumatic brain injury.


Iowa Department of Education and the Center for Disabilities and Development, University of Iowa Hospitals and Clinics, 2004. “School Re-Entry Following TBI.”