



Northern Lehigh Athletics

Concussion in the Classroom

What is a concussion? Concussion is a mild traumatic brain injury that occurs when a blow or jolt to head disrupts the normal functioning of the brain. Some people lose consciousness after a concussion but others are just dazed and confused. Concussion is usually caused by a blow to the head, but can also occur after whiplash.

Myths

- If you weren't knocked out, then you don't have a concussion
- Everyone gets better in two weeks
- Once the headache goes away, everything will be fine
- Concussion is a minor brain injury with no long-term effects
- If there's no visible injury, everything's okay
- You should play through the pain--get back into the game!

What is post-concussion syndrome (PCS)?

Post-concussion syndrome is a collection of physical, cognitive and emotional symptoms that last for a varying amount of time after concussion. Some symptoms show up right away, but others may not appear or be noticed for days or weeks after injury. Likewise, some symptoms might resolve fairly quickly, but others-especially fatigue-can persist much longer. The number and severity of symptoms on academic and social functioning will be different for each student.

How do PCS symptoms show up in school?

After concussion, a student may have one or more PCS symptoms that cause difficulties in the classroom. For example, the student might...

- Get tired easily in class and over the course of the day
- Be bothered by bright fluorescent light in the classroom or loud noise in the cafeteria
- Be easily distracted
- Have trouble doing more than one thing at a time, such as listening to the teacher while also taking notes
- Take longer and need more repetition to learn new material
- Remember something one moment but not recall the same thing another time
- Be easily overloaded, especially with a steady flow of information
- Read more slowly due to difficulty with comprehension
- Have a headache that develops or worsens with concentration

- Feel dizzy after sudden movement or lose his/her balance more easily
- Have trouble organizing and remembering homework
- Lose track of time
- Get lost or have trouble finding his/her way around
- Get frustrated or irritated more easily, especially if overloaded.

Concussion is an invisible injury. Because of this, changes in a student's thinking, learning, and behavior may be blamed on other causes. For example, mental fatigue or difficulty concentrating may be misinterpreted as laziness or disinterest. Students themselves might wonder if they're "crazy" because they can't see or feel the brain injury, only its effects. Pressures to return to sports or other activities before complete recovery may cause the student, parent, coach or friend to minimize PCS symptoms.

In general, concussion affects mental stamina more than mental ability. This is because the injured brain must work much harder to accomplish anything, and so the student gets tired more easily. Fatigue and overexertion will often be accompanied by a temporary worsening of post-concussion symptoms.

What are some general strategies?

After concussion, the most significant problem for the student tends to be a decrease in mental energy, like a battery that runs down much quicker than before. The student's energy level will also be more variable due to injury, so what's manageable one day is not necessarily manageable the next. Importantly, it is usually not one specific subject or activity that causes fatigue, but the combined demands over the course of the day or week.

When PCS symptoms get worse, it usually means the student has reached a point of overexertion and needs a break. Some students may need only a short break in the middle of the day, whereas others might need to rest or nap for a couple of hours in the afternoon.

The more important accommodations that can be made for the student are:

- Reduce schoolwork demands to a level that is manageable for the student, including reduced homework and, if necessary, reduced course-load
- Schedule rest periods and provide the student with a calm and quiet place to take a break or a nap, such as the nurse's office
- Remove the student from physical education activities until cleared by appropriate medical personnel
- Allow the student to eat lunch in a quiet room with one or two friends rather than in a crowded and noisy cafeteria
- Extended time on test and assignments to allow for slower processing speeds, especially if there is a significant reading demand
- A quiet room to take tests to minimize distraction
- Preferential seating to minimize distraction and allow better monitoring of attention and energy level

- Reduce light sensitivity by allowing the student to wear sunglasses or a hat with a visor in class
- Break information and assignments down into manageable chunks
- Help the student to stay organized such as keeping track of homework assignments

How can I help with...

Attention and concentration problems?

- Use short and specific instructions and assignments and be sure they get written in the student's planner or assignment book
- Be alert to when the student's attention drifts and use visual or verbal cues to redirect his/her attention without appearing to single him/her out
- Allow rest breaks if the student is having particular difficulty sustaining attention
- Use color coding and underlining to focus attention on important points
- Remove unnecessary distractions in the classroom (limit items on desk, etc.)
- Facilitate transitions from one topic or task to the next

Comprehension and memory problems?

- Provide an overview or outline of material to be learned
- Use a tape recorder to record lessons (ideally placed on the teacher's desk, or provide teacher-generated notes)
- Reinforce lessons with visual images
- Allow the use of fact sheets in order to help reduce the demand on memory
- Encourage the student to restate information in his or her own words
- Teach the student to use mnemonic devices, rehearsal, repetition, association, chunking, and mental visual images to help memorize material
- Teach the student to identify the "wh" questions (who, what, where, when, why) before reading the material
- Help the student relate new information to what he or she already knows
- Use multiple-choice and open-book tests to minimize retrieval demands

Executive functioning problems?

- Assist in planning and sequencing events
- Use diagrams, time lines, and charts to organize information and activities
- Encourage use of organizational strategies such as list, journals, schedules, assignment sheets, or planner, and keep these in a single place
- Encourage goal-setting and self monitoring of progress towards goals
- Encourage student to pay attention to time
- Provide feedback more frequently

Visual and auditory processing problems?

- Provide copies of notes prior to class to reduce demands on visual tracking (moving back and forth between the blackboard and note paper) and auditory processing
- Check student's comprehension of directions or test questions
- Encourage strategies to improve visual tracking such as using a ruler

Behavioral, emotional and social problems?

- Don't put the student on the spot such as asking her to present in front of the class or asking him to answer a question when he has not raised his hand
- When the student is frustrated or over-stimulated, allow the student to leave the classroom and go to a pre-arranged location (nurse's office) where he/she can rest quietly
- Encourage the student to seek help when needed, and allow time for this
- Monitor the student's peer relations
- Prepare the student for changes and transitions, such as by helping to set expectations or rehearsing new routes and procedures

Academic difficulties may continue for quite a while after concussion, and can contribute to poor adjustment and behavioral problems. Because of this, teachers and other school staff play an important role in a student's recovery from concussion. Teachers' sensitivity and understanding towards the student is critical.

[*Adapted from Concussion in the Classroom: A guide for students, parents, teachers, nurses, guidance counselors, school psychologists, and other school staff by SUNY University Hospital, Syracuse, NY]