### What Faculty Should Know About Concussions

Concussions are brain injuries and can be serious. Concussions aren't like other physical injuries. You can't see the healing process from the outside and recovery may wax and wane. Concussions can affect students physically, cognitively, and emotionally.

Most students recover within 2-4 weeks, although each concussion is unique. Some symptoms can last weeks, months, or even a lifetime.

In the first few days following a concussion, cognitive and physical rest are needed for the brain to heal. Cognitive rest means not taxing the brain with physical or cognitive demands. This isn't like the flu, where students can complete academic work while at home. The rest period should be short and re-introduction to academics should occur as soon as possible without increasing symptoms.

Every concussion is different. Students heal at different rates. It will be necessary for the student to monitor his/her symptoms and report any worsening symptoms to the Health Center.

Bear in mind return-to-learning is often under-managed and under-recognized, and students are more likely to return to full classroom activity in the setting of a proactive and well-integrated management plan.

## **Common Signs and Symptoms**

Signs (observed by others)	Symptoms (reported by student)		
Physical:	Physical		
Moves clumsily (altered coordination)	Headache or pressure in head		
Exhibits balance problems	Nausea or vomiting		
Loses consciousness (even briefly)	Double vision, blurry vision		
	Sensitivity to light or noise		
	Feeling sluggish, fatigued, or groggy		
	Balance problems or dizziness		
	Numbness or tingling		
Cognitive	Cognitive		
Appears dazed or stunned	Problems concentrating		
Seems confused	Problems remembering		
Forgets instructions	Foggy or hazy feeling		
Is unsure about game, score, opponent			
Responds slowly to questions			
Forgets events prior to hit or fall			
Forgets events after the hit or fall			
Emotional	Emotional		
Shows changes in mood, behavior, or	Just not feeling right or feeling down		
personality			
	Changes in sleep		

#### Rationale for Guidelines

Return-to-learn is a parallel concept to return-to-play, but has received less scientific coverage than its counterpart. The foundation of return-to-learn includes:

- Return-to-learn should be managed in a stepwise program that fits the needs of the individual.
- Return-to-learn guidelines assume that both physical and cognitive activities require brain activity which may be effected by the concussion
- Return-to-learn recommendations are based on consensus statements.
- Return-to-learn recommendations should be made within the context of a multi-disciplinary team that includes physicians and other health care professionals, athletic trainers, coaches and administrators.
- Return-to-learn must be individualized and will vary with each student.
- Like return-to-play, it is not always easy to provide prescriptive recommendations for return-to-learn because the student may appear physically normal but is unable to perform at his/her expected baseline due to concussive symptomatology.

The hallmark of return-to-learn is cognitive rest immediately following concussion. For the college student, cognitive rest following concussion means avoiding the classroom for at least one day. The gradual return to cognitive activity is based on the return of concussion symptoms following cognitive exposure. The prevailing consensus to date includes:

- STEP ONE: No class
  - If the student cannot tolerate 30 minutes of light cognitive activity, he or she should remain at home or in the residence hall.
- STEP TWO: Maximum Accommodations
  - Once the student can tolerate 30-45 minutes of cognitive activity without return of symptoms, he/she should return to the classroom in a step-wise manner. Such return should include no more than 30-45 minutes of cognitive activity at one time, followed by at least 15 minutes of rest. If possible, exams and paper deadlines should be rescheduled.
- STEP THREE: Minimal Accommodations.
  - Full class schedule with exams and papers. May still require extra time, modifications of assignments or support services.
- STEP FOUR: Full return to classes with no accommodations

The levels of adjustment needed should be decided by a multi-disciplinary team that may include the physician, athletic trainer, faculty representative, coach, individual teachers and psychologist. The level of multi-disciplinary involvement should be made on a case-by-case basis.

#### Different Academic Procedures

The procedures above form the core of the prevailing consensus for return-to-learn guidelines. The majority of students who are concussed do not need a detailed return-to-learn program because full recovery occurs within two weeks. Return-to-learn management becomes more difficult when the student has ongoing symptoms for greater than two weeks.

**Academic adjustment** - a student's academic schedule requires some modification in the first one to two weeks following concussion. In this case, full recovery is anticipated, and the student will not require any meaningful curriculum or testing alterations.

Academic accommodation - the student has persistent symptoms for more than two weeks following concussion. Because the student has not recovered in the anticipated period of time, he or she may require a change in the class schedule and special arrangements may be required for tests, term papers and projects. Although there is no fixed timeline for academic accommodation, this generally applies to students who have more prolonged concussion symptoms, or who may be suffering with post-concussion syndrome. Post-concussion syndrome is not the same as prolonged recovery from concussion, and should be suspected in any student who has ongoing symptomatology two or more weeks following concussion. Post-concussion syndrome is a neuropsychiatric condition that is best managed in a multi-disciplinary manner with active intervention. Passive management such as prolonged physical and cognitive rest is counter-productive in post-concussion syndrome.

**Academic modification** - a more difficult scenario in which the student suffers with prolonged cognitive difficulties, which thereby requires a more specialized educational plan, usually within the construct of an *individualized education plan*. An individualized education plan is a formal educational plan for an individual, and is protected under the Individuals with Disabilities Education Act. This plan is more prescriptive than a 504 plan, which refers to Section 504 of the Rehabilitation Act and the Americans with Disabilities Act. A 504 plan covers students who are not eligible for an individualized education plan but who require academic modification because of a documented medical condition.

## **Campus Resources**

The successful implementation of return-to-learn depends on several variables:

- Recognition that concussion symptoms vary widely among students, and even within the same individual who may be suffering a repeat concussion.
- Identification of a point person or case manager for the student.
- Identification of co-morbid conditions that may further impair recovery including, but not limited to migraine, attention-deficit hyperactivity disorder, anxiety and depression.
- Identification of campus resources that can help assure that students are provided their full rights during this transition period.

Campus resources at Trinity include the following:

- **Office of Disability Services.** Concussion and mild traumatic brain injury are covered under ADAAA. Contact Lori Clapis at lori.clapis@trincoll.edu
- **Counseling Center.** The Counseling Center can provide support to students as they recover from concussion, including emotional support.
- **Health Center.** The Health Center can help to identify an appropriate physician for evaluation of concussion and can monitor physical symptoms.
- Concussion Awareness and Support Organization. A student-run group that provides support and education to other students. Contact Sarah Wolcott sarah.wolcott@trincoll.edu

Once a student is identified as having a concussion, the college will identify a point person for that student.

For more information all faculty are strongly encouraged to take the Concussion for Educators training at: http://brain101.orcasinc.com/2000/

#### References

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# ACADEMIC ADJUSTMENTS FOLLOWING CONCUSSION

Following concussion, students who receive academic adjustments without penalty for missed work are more successful and better able to reintegrate into school. Attached are some examples of the kinds of adjustments that might be suggested. The student will bring you the specific list of adjustments that have been deemed appropriate. Please feel free to speak with the concussion management team if the adjustments are just not possible in your class.

GENERAL	COGNITIVE/THINKING	FATIGUE/PHYSICAL	EMOTIONAL
No school until specified To be reviewed on:	Reduce class assignments and homework to critical tasks only. Exempt non-essential written classwork or homework. Base grades on adjusted work.	Allow time to visit school nurse/counselor for treatment of headaches or other symptoms.	Develop plan so student can discreetly leave class as needed for rest.
Adjust class schedule (alternate days, shortened day, abbreviated class, late start to day).	Provide extended time to complete assignments/tests. Adjust due dates.	Allow strategic rest breaks (e.g., 5-10 minutes every 30-45 minutes) during the day.	Keep student engaged in extra-curricular activities. Allow student to attend but not fully participate in sports practice.
No physical activity (Including weight training, aerobics, yoga, dance) until cleared by a healthcare professional.	Once key learning objective has been presented, maximize cognitive stamina (e.g., assign 5 of 30 math problems).	Allow extra time to move between classes	Encourage student to explore alternative and appropriate activities of nonphysical nature.
Avoid noisy and overstimulating environments (e.g., large classes with individual group work) if symptoms increase.	Allow student to respond to assignments online or in other ways as an alternative to in class assignments	Allow student to wear sunglasses indoors. Control for light sensitivity (e.g. draw blinds, sit away from window, hat with brim).	Develop an emotional support plan for the student (e.g., identify adult to talk with if feeling overwhelmed).
Allow student to drop non- major classes without penalty if accommodations go on for a long period of time.	Provide written instructions for homework/classwork that is deemed essential.	Allow student to study or work in a quiet space away from visual and noise stimulation.	Provide quiet place to allow for destimulation.
Allow student to audit class (i.e., participate without producing or grades).	Provide class notes by teacher or peer. Allow use of computer, smart phone, tape recorder.		
Remove or limit testing (e.g., midterms, finals, standardized) or high stakes projects.	Allow utilization of notes and/or word banks for test taking due to memory issues.	Provide a quiet environment to take tests.	
Alternate periods of mental exertion with periods of mental rest.			