Table M. Student Characteristic: Brain Injury, including Traumatic Brain Injury

⌘ Symbol represents accommodations that can be considered as use of Assistive Technology

Student Characteristic	Consider the following accommodations for use in instruction*
Sensory & Motor	• Be sure that the student's table and chair provide optimal support to reduce the amount of energy devoted to maintaining balance. • Preferential seating away from visual and auditory stimulation. • Limit visual clutter and auditory stimulation in the classroom-consider the impact of lights, noise, movement, etc. • Provide a quiet space/area for breaks or to allow the student to complete work. • Provide student with the opportunity for physical and cognitive rest breaks during the day (lunch and recess are not rest breaks for a student with a brain injury). • Monitor whether the student can handle the lunchroom or if a less stimulating area should be provided where they can eat with their friends. • Allow use of sunglasses and hats when outdoors for students with light sensitivity.
Attention & Concentration	• Schedule most important work during times when the child has displayed their greatest concentration abilities. • Seat nearest the location of instruction and away from distractions (e.g. doors, windows, high traffic areas, and other off-task children). • Seat next to positive peers with age appropriate attention abilities to help with redirection and understanding of instructions. • Clear desk and area of everything expect what needed for task at hand. • Reduce background noise by experimenting

	with ear plugs, ear muffs/headphones, or introducing background sound such as, white noise or a music device with soft music. • Eliminate interruptions as much as possible. Once students are focused on a task, it is very difficult to get them restarted if inter-rupted. • Allow student to complete work or test in alternate settings where there are fewer distractions. • Make sure to get student's attention when giving directions or cue them when information is really important. • Use verbal and visual cues to refocus student as well as frequent checks for understanding.
Processing Speed	• Give instructions one at a time and focus on the essential or most important parts. • Give time between parts of a direction for the child to process and provide a response. • If the child appears "blank" or is not doing what you have asked, repeat the main points. Do not elaborate or add details. • Provide written directions and combine verbal information with visuals. • Frequent checks for understanding. • Reduce other distractions, so student does not have to screen them out or share his/her focus with anything but your words. • Try not to pressure your student, urge them to "hurry up", or get exasperated. • Allow extra time for processing and providing their responses as well as on assessments and assignments, including tests. • Limit the number of tasks the student is required to complete at one time. • Provide a copy of classroom notes or guided notes/outline. • Provide or teach the use of graphic organizers and checklists.

Memory	- Break instructions and assignments into manageable pieces-limit amount of information, give at one time. - Present information in several ways (verbal, written, visuals, modeling). - Use self-questioning, "wh" questions during reading and discussion (who, what, when, where, why, how). - When possible use thematic learning across content areas. - Teach the concept and then ask the student to teach you or others - having them teach others activates numerous areas of the brain. - Incorporate repetition/practice of new material - allow rest breaks between repetitions. - Provide copies of guided notes. - Allow use of notes and books during assessments. - Modify test format to multiple choice to reduce the need for total memory recall. Give recognition tests not recall tests. - Teach note taking techniques such as highlighting essential information. - Regularly summarize information and ask the student to paraphrase or repeat it back.
Visual-Spatial	- Provide directions and content verbally (verbal focus on learning). - Provide precise and clear verbal directions. - Frequent checks for understanding. - Highlight what visual information needs to be focused on. - Use simplified visual planners; some webs/diagrams may be too confusing. - Enlarge written materials. - Reduce the amount of written work. - Consider if visual presentation of worksheets needs to be modified. - Provide support in aligning math problems. - Provide support in organizing writing from left to right and organizing/expressing thoughts.

	• Teach verbal strategies to interpret visual information such as maps, charts and graphs. • Reduce clutter on student's desk.
Language – Receptive, Expressive, Social Pragmatic	• Give directions slowly and one at a time-use short simple sentences. • Have child repeat back instructions. • Reinforce verbal concepts with visual cues. • Identify targeted vocabulary and integrate throughout classroom lesson. • Reading to the child and discussing provides language models and exposes children to a variety of aspects of language. • Teach listening comprehension strategies to help expand understanding of social and academic language situations. • Ask open ended questions and ask for elaborations. • Model and encourage participation in natural conversations. • Teach the student to rehearse silently before replying. • Provide picture cues to support memory for details and sequencing information when telling or retelling a story or event. • Encourage expression through nonverbal means such as art and music. • Use pictures, photographs, visuals and modeling to teach recognition of emotions based on facial expressions, nonverbal cues, tone of voice, etc. • Take advantage of naturally occurring situations to practice and reinforce social skills (e.g. greetings at the beginning of a day, requesting materials to complete a project, starting and maintaining conversations with peers during free time, etc.). • Role play and model how to behave and communicate appropriately in common social situations. • Use social narratives to support learning

	appropriate and inappropriate verbal and nonverbal behaviors in different situations. •
New Learning	• Teach outlining and highlighting of the most important concepts. • Provide copies of guided notes and outlines. • Extra time to complete tests and assignments. • Encourage student to review what has been learned daily. • Provide student/parents with upcoming topics, notes and materials so they can preview and reinforce concepts at home. • Use real world examples to make new learning meaningful-make connections between new learning and information student already knows. • Teach the concept and then ask the student to teach you or others--having them teach others activates numerous areas of the brain. • Use errorless learning to teach concepts- see projectlearnet.org and brainline.org. Errorless learning does not encourage guessing so the student never has the chance to learn or remember the information incorrectly. • Provide multimodal learning opportunities (visual, verbal, modeling, hands on).

Social/Emotional Competency	For younger students:
	   • Give clear and simple direction.
	   • Avoid time outs (the student is not likely to independently regroup or calm down).
	   • Label the emotion and direct the student to show the acceptable behavior.
	
	For older students:
	• Teach strategies and how to use them rather than offering assistance.
	• Discuss and practice age-appropriate behaviors in real life situations.
	• Create structured social activities (a school/community friendship group focused

Social/Emotional Competency	on the student, for example). • Assume limited ability to generalize from one setting to another
Executive Function - Initiation	• Provide assistance with getting started on school tasks - have the child then identify the first thing they are going to do. • Provide more frequent check-ins to ensure student is completing work and to provide "jumpstarts" as the task demands change. • Seat next to a positive peer to help them get started or if they get stuck as the task changes. • Provide a written routine with an outline of tasks and time frame. • Break large projects or tasks into smaller steps. • Help student develop planning skills. • Teach organization strategies: checklists, graphic organizer or a series of pictures indicating steps needed in task.
Executive Function - Planning	• Teach the student how to develop a step-by-step guide for problem solving by identifying the problem, considering relevant information, listing and evaluating possible solutions, creating a plan of action, and evaluating the plan of action. • Teach time management and prioritizing. • Teach how to develop short term and long term goals. • Support student in connecting new information with what they already know. • Develop and practice schedules and routines when possible. • Plan ahead and prepare student for changes in these routines. • May need written or picture schedule. Prepare the student ahead of time if schedule is changed and make the changes on their written or picture schedule. • If they are not planning social times with friends, they may need help with planning

	their social and free time. (See also Organization and Reasoning strategies)

Executive Function – Mental Flexibility	• Develop and practice schedules and routines when possible.
	   o Plan ahead and prepare student for changes in these routines.
	   o May need written or picture schedule- prepare student head of time if schedule is changed and make the changes on their written or picture schedule.
	   o Rehearse or do a dry run of unfamiliar situations or schedules.
	 • Prepare and give reminders of upcoming transitions.
	 • Plan for situations that require mental flexibility.
	 • Plan ahead and do not introduce too much novelty at once.
	 • Teach student how to analyze directions, break down problems, self-check and self-correct.
	 • Allow for previewing of class notes or materials.
	 • Break tasks down into smaller steps. Make sure directions are clear and concrete.

Executive Function - Reasoning	• Teach the student how to develop a step-by-step guide for problem solving by identifying the problem, considering relevant information, listing and evaluating possible solutions, creating a plan of action, and evaluating the plan of action. • When considering solutions, review at least two different alternatives then let the student select one of the solutions. The goal is to eventually move them to developing their own possible alternative solutions. • Teach use of self-monitoring questions- "What else could I do?"

	• Present information in concrete and concise manner - avoid language using puns, sarcasm, and double meanings. • Check for understanding and the need for assistance. • Give consistent, neutral feedback. • Break tasks into smaller and shorter segments. • Use graphic organizers to show relationships.
Executive Function – Organizational Skills *For additional information see CDE Traumatic Brain Injury website: http://www.cde.state.co.us/cdesped/SD-TBI.asp Brain Injury in Children and Youth: A Manual for Educators	To help a student who does not have normal ability to organize information independently, parents and teachers must provide more structure for the student than is ordinarily necessary for a student their age. Increasing structure can include any of the following: • Establish a daily routine as much as possible. Particularly for young students, the ability to predict what is going to be happening will help them to organize their behavior better. • Teach the student how to develop a step-by-step guide for problem solving by identifying the problem, considering relevant information, listing and evaluating possible solutions, creating a plan of action, and evaluating the plan of action. • Use picture schedules, planners, checklists, or electronic organizers to help them organize their day and prepare themselves for transitions. • Use a "check-in/check-out" system to ensure that student has assignments and materials. • Help the student break down long-term and larger projects. Start with the due date and then work backwards to determine when the smaller steps need to be completed. Have them mark those dates in their planner or on a calendar.