

CLASSROOM GUIDELINES

SUPPORTING A STUDENT WHO HAS HAD A STROKE

Students with SCD who have a history of stroke have an increased need for additional academic support. There are seven common school-related issues for students with SCD who have a history of stroke:

1. Decreased attention
2. Learning and memory difficulties
3. Fine motor difficulties
4. Executive functioning difficulties
5. Reduced mental processing speed
6. Sensory impairments
7. Specific learning challenges

Here are strategies to address them:


1. Decreased attention

You may see that the student ...

- Makes careless errors
- Has difficulty remaining in seat
- Seems to forget things
- Loses assignments
- Has difficulty listening to instructions
- Is distractible
- Cannot complete tasks without taking breaks
- Performs inconsistently on tests and quizzes
- Has difficulty following multi-step commands
- Needs help from an adult to stay on task

What can you do?

- A. Arrange for priority seating
 - Seat the student in the center-front of the classroom, if teacher stays in front of the class.
 - For teachers who tend to move around the classroom, efforts should be made to establish eye contact to keep student on task.
 - Seat the student away from a window.
 - Also, seat the student next to peers who have adequate attention skills


- B. Gain the child's attention
- Have the student's attention before giving instructions
 - Use verbal and nonverbal cues to direct attention to tasks
 - Say the student's name
 - Touch student on their shoulder
 - Point to the activity or task
 - Use a phrase (e.g., "Listen") or turn off the lights when the student is expected to attend to instructions
- C. Schedule breaks. Provide frequent, regularly scheduled breaks that are routine.
- D. Give directions. Directions should be given in one- or two-step commands — the shorter, the better. Check to make sure the student has heard and understood the instructions by having the child repeat them back to you.
- E. Help the child to focus. Help the student maintain attention in conversation and remain on topic by requesting structured verbal output. "Tell me three things about the Incas." "What are the two main points of the story?"
- F. Avoid unneeded material. Keep worksheets free from extraneous material. Students with attention problems can become easily overwhelmed with too many problems on a single page. For math computations, have the child circle the final answer.
- G. Break information into smaller parts. Break multiple-step directions into short, manageable bits. Give the student one direction at a time and wait for completion before proceeding to the next step.
- H. Break assignments into smaller parts. Break down large assignments into small and manageable segments. Students with attention problems can become easily overwhelmed by large tasks. Provide an incentive for completing each segment.
- I. Draw attention to what is most important. Find ways to emphasize the important aspects of assignments or changes in directions (e.g., underline or bold text, highlight with different colors). On math computation sheets, have the student circle the operation sign before beginning the problem.
- J. Remove visually distracting material. Block out material by covering or removing from the visual field the material that you don't want students to focus on. Remove distracting clutter from the board or screen.
- K. Possibly use a timer. Consider using a timer for students who work well with a "beat the clock" system for work completion.
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2. Learning and memory difficulties

You may see that the student ...

- Forgets things
- Gets lost easily
- Can't follow more than one- or two-step directions
- Has trouble telling details from a story
- Has difficulty grasping new concepts
- Has inconsistent school performance

What can you do?

- A. Teach strategies to assist memory skills.
 - **Chunking information:** Reduce the information to be learned into smaller segments. For example, learning a Social Security number can be “chunked” into three segments and then rehearsed.
 - **Associative learning:** Teach mnemonic strategies to recall information based on association. For example, using the phrase “Roy G. Biv” (red, orange, yellow, green, blue, indigo and violet) to recall colors of the rainbow.
 - **Rehearsal:** Improve recall by rehearsing new information by reciting it out loud or paraphrasing. Writing the material to be remembered may also be helpful.
 - B. Emphasize essential details. Reduce the amount of information presented.
 - C. Present in small blocks. For rote learned facts (spelling words, math facts, vocabulary), items should be presented in small blocks (4-6 units), with rehearsal of the block to mastery prior to the introduction of another block.
 - D. Use recognition cues. Rather than relying on the student's rote memory, use recognition clues such as providing true/false or multiple choice options rather than fill-in-the-blank or essay tests.
 - E. Use repetition. REPEAT, REPEAT, REPEAT! This is essential.
 - F. Use external aids.
 - **Multicomponent organizational devices:** These include devices such as PDAs, memory notebooks or computers, which would allow the student a space to organize, store and retrieve a relatively significant amount of information. A student should receive training on how to use these devices and be encouraged to use them on a regular basis.
 - **Simple prospective memory devices:** These include simpler tools, such as a calendar or alarm watches, that remind a child to perform a particular activity at a specific time.
 - G. Enhance meaningfulness. Find ways to relate the content being discussed to the student's prior knowledge.
 - **Parallels:** Draw parallels to student's own life.
 - **Examples:** Bring in concrete, meaningful examples for students to explore to provide an experiential experience.
 - **Alerts to caregiver(s):** Inform caregiver(s) about upcoming topics so that they can talk about topics and provide related background activities at home or make a trip to the library.
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- H. Provide a focus point. Before presenting new material, provide the student with a topic for them to focus their attention on (for example, the main characters of a story or the story's setting).
- I. Check for attention. Make sure that the student is attending to the source of information (for example, eye contact is being made, hands are free of materials, and the student is looking at the assignment).
- J. Use visualization strategies, experiential learning and multisensory presentation. For example, if the student is learning about George Washington crossing the Delaware, the student could hear a story about it, draw a picture about it, and imagine what it would feel like to be George Washington. When later asked to retrieve that information, the student has multiple pathways (e.g., verbal, visual, sensory) by which this information could be retrieved.
- K. Provide a schedule. List daily activities, locations and materials needed for each class. Use pictorial cues to enhance memory.
- L. Communicate with caregiver(s). Daily or weekly communication between teacher and caregiver(s) is important to ensure that necessary information (which the student may have forgotten) is conveyed. Journals or weekly progress notes are examples of written communication techniques.

3. Fine motor difficulties

You may see that the student ...

- Does not anchor a piece of paper while writing on it
- Takes a long time to produce written work
- Has difficulty copying or writing information that is seen
- Misspells many handwritten words
- Has sloppy handwriting or drawings

What can you do?

- A. Check for appropriate seating. Make sure the student's seating is supportive with the desk or table at elbow height.
- B. Promote hand-strengthening exercises. Provide opportunities for hand strengthening prior to handwriting tasks.
- C. Compensate for poor fine motor control.
 - Allow larger-scale writing.
 - Provide the student with paper that has boxes on it (i.e., graph paper) that would allow them to write one letter per box.
 - Allow wide-ruled paper.
 - Allow the student to write on every other line.
 - Allow students to print rather than write in cursive.
 - Allow the use of a clipboard or tape paper to the desk if a student has difficulty anchoring paper.

- D. Establish realistic expectations of neatness. Realistic and mutually agreed upon expectations for neatness should be established and care should be taken to avoid pressuring the student to consistently meet standards at the limit of capacity of motor control.
- E. Take breaks from handwritten paper-and-pencil tasks.
- F. Use verbal rather than written responses. When possible, allow the student to respond verbally when writing is not the focus of instruction.
- G. Provide copies of class notes. Assignments or other information written on the board should be provided to the student in written form, rather than having them copy it down.
- H. Assign a note-taking buddy. A buddy checks their notes against that of another student to ensure there is a full record of information presented in class. This can help make sure a student is not penalized for the inability to rapidly record information.
- I. Allow for audio recording. Recording class lectures or dictating class assignments can be very helpful to the student.
- J. Allow the student to type information on a computer instead of writing by hand.
- K. Give alternatives to handwritten assignments. Along with typing and dictation, theatrical presentations, video presentations or oral reports can be used.
- L. Shorten assignments. Assign truncated assignments for writing (i.e., having the student copy down only half or the spelling words, then having the others provided for the student to study).

4. Executive functioning difficulties

You may see that the student ...

- Has difficulty completing long-term projects
- Has good ideas but cannot get them on paper
- Underestimates time needed to finish tasks
- Starts assignments at the last minute
- Turns in written work that is poorly organized
- Has difficulty thinking of alternative ways to complete a task
- Has difficulty getting started with directions or assignments
- Has difficulty getting started on a task despite being able to tell you the instructions
- Routine tasks are not finished without assistance or reminders

What can you do?

- A. Assist with planning. Help the student to plan out an approach for tasks, assignments and projects.
 - Outline: Develop a calendar with a plan for when and how each step will be completed. Help the student to develop outlines for reports and essays.
 - Review: Have someone frequently review the plan, assess the steps required and identify materials needed.
- B. Provide incentives. Incentives for timely completion of work may help the student transition from one task to another.
- C. Chunk information. Breaking assignments down into smaller parts will help the student gain a sense of accomplishment and likely decrease feelings of being overwhelmed. Approaching assignments in more manageable “chunks” will likely reduce the tendency to put off projects until the last minute.

5. Reduced mental processing speed

You may see that the student ...

- Asks for directions to be repeated
- Spends more time on tasks or homework than other students
- Fatigues easily
- Performs poorly on timed tests
- Appears confused when instructions are given
- Appears inattentive
- Does not complete work

What can you do?

- A. Emphasize essential details. Keep instructions short and simple. Instructions should be simplified by breaking them down into steps requiring one or two actions at a time.
- B. Be specific. Specify a time commitment for homework (for example, one hour per night) or indicate a reduction in the number of problems per assignment that the student is required to complete (for example, half of the math problems).
- C. Add in extra time. Allow extra time for test-taking and assignments. Some students may benefit from taking tests in a quiet resource room rather than among peers.
- D. Give breaks. Allow frequent breaks. Mix up higher-interest with lower-interest tasks, less active with more active tasks, and individual with group activities.
- E. Create focus. Ensure that you have the student's attention (e.g., eye contact) before giving instructions.
- F. Break down assignments. Classroom assignments should be broken into a sequence of subtasks involving shorter work periods. The number of concepts introduced during a class period or lesson may need to be reduced.
- G. Supplement oral directions. Provide the student with annotated outline of lectures. Students with processing deficits often have difficulty with auditory information, such as a teacher's lecture, while trying to keep up with note taking. Written instructions are also helpful so that the student has something tangible to refer to if they become confused.

Please remember: It is very important not to penalize a student who has slowed processing speed for not completing assignments as quickly as their peers. If a student requires extra time, allow them extra time during study halls or shorten the requirements rather than have them miss out on a fun activity, such as recess.




6. Sensory impairments (vision or hearing difficulties)

You may see that the student ...

- Complains of headaches
- Complains of double vision
- Appears to be squinting while reading from the board
- Holds reading materials close to his face or puts face close to desktop while writing
- Forms letters poorly or overlapping with each other
- Reads quickly to self but has difficulty answering comprehension questions
- Looks confused when given oral instructions
- Appears to “zone out” during lectures
- Asks for repetition of instructions
- Speaks loudly
- Ends up with notes taken during lectures that are “spotty” and missing essential details

What can you do?

- A. First, review concerns with the student’s family and/or school nurse to determine if a sensory deficit has already been identified. If these are new concerns, the student may need to have an evaluation.
 - B. For vision impairments: Use visualization strategies, experiential learning, and multisensory presentation.
 - Place a ruler under sentences being read for better tracking.
 - Adapt worksheets by using LARGER type (or enlarge on a photocopier) and good contrast between print and background.
 - Provide worksheets with fewer items per page.
 - Allow student to use all capital letters when spelling to reduce confusion among similar appearing lower-case letters (e.g., “d,” “b” and “p”).
 - Encourage the student to wear their eye patch if it is a part of their treatment plan to address double vision or blurriness.
 - Position the student in the room according to his visual field cut (left side if student has right visual field cut).
 - Place a magnifier over computer monitors.
 - C. For hearing impairments: Use visualization strategies, experiential learning, and multisensory presentation.
 - Seat student in front of the classroom.
 - Use an FM system (microphone attached to the teacher).
 - Voice record class.
 - Provide student with a copy (either of teacher’s or classmate’s) of class notes to check for missed information.
 - Encourage student to ask for clarification.
 - Check understanding of task instruction by asking the student to repeat them back before beginning a task.
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7. Specific learning challenges

You may see that the student ...

- Has assessments that reveal weaknesses in specific academic areas
- Shows poor performance on quizzes and homework
- Seems unable to keep up with peers during class

What can you do?

- A. First, review concerns with caregiver(s) and/or school nurse to determine if a sensory deficit has already been identified. If these are new concerns, the student may need to have an evaluation.
 - B. In math:
 - Allow the student to use a calculator without penalty.
 - Group similar problems together (e.g., all addition problems in one section).
 - Provide fewer problems on a worksheet (e.g., 4 to 6 problems on a page, rather than 20 to 30).
 - Require fewer problems to attain passing grades.
 - Use graph paper to write problems to help the student keep numbers in columns.
 - Tape a number line to the student's desk.
 - Provide a table of math facts for reference.
 - Use pictures and graphics.
 - Teach the student to break down lengthy word problems into smaller parts.
 - Use visual aids such as an abacus, blocks, number lines, graphs, and fraction wheels.
 - C. In reading:
 - Highlight key words with a colored marker.
 - Use a lone marker (a strip of paper or ruler) to keep place while reading.
 - Ask the student to summarize what they have read in short intervals.
 - Use a lower-level test as alternative reading material in subject areas.
 - For classes not specifically teaching reading (e.g., science or social studies), allow books on audiotape to accompany written textbooks. Such audiotapes can be obtained free of charge through services such as Reading for the Blind and Dyslexic (rfbid.org). The student can utilize the tape during the class by using headphones.
 - Encourage the student to read aloud or subvocalize, rather than silently, to help increase comprehension.
 - Provide the student with a set of textbooks to be kept at home to make notes in and highlight.
 - To aid comprehension and retention, provide outlines and periodic review questions during lengthy reading assignments.
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