

Central Auditory Processing Disorder (CAPD): Tips for the Teacher

The student with a central auditory processing disorder (CAPD) will respond in a variety of ways to changes within their environment and instructional program. Management suggestions identified for a student with a CAPD should be based on the student's individual profile of auditory processing strengths and weaknesses. Suggestions in this listing are in the areas of attention, preferential seating, instructions, preview and review, time, classroom adaptations, self-advocacy, and organizational strategies. The audiologist will select those strategies most appropriate for the student's CAP profile.

Attention

- **Gain bi-sensory attention.** Auditory processing is maximized when the same information is received simultaneously through different modalities. Therefore, it is important to gain the student's visual as well as auditory attention before speaking with him or her.
- **Speak at eye level.** Whenever possible, speak at the student's eye level, get close to the student, and face the student to provide clear visual and auditory information.
- **Use cueing.** It may be beneficial to work out a cueing system to help students become aware of times when they are not paying attention. These "pretuning" techniques help to focus the student's attention on the subject coming up. Use words such as "listen," "ready," and "remember this one."
- **Assign peer partners.** Assign a peer partner to the student with a CAPD. The peer partner can assist the student with a CAPD in activities such as paying attention, getting assignments listed, participating in small group projects, and tuning in for key information. Peer tutoring may also be a part of the buddy system if appropriate.
- **Mark transitions between activities.** Students with auditory processing difficulties often need more time to make transitions. Therefore, it is helpful and important to mark transitions between activities by clearly identifying the new activity by naming and explaining the sequence of steps needed to accomplish the task.
- **Review and transition.** Clearly closing an activity may be accomplished by briefly summarizing what the student should have learned and/or completed before transitioning to the next activity.
- **Provide notetaking assistance.** Because it is difficult to watch the teacher and take notes simultaneously, it may be helpful for the student to be able to get a copy of another student's notes, to get a copy of the teacher's notes, to have a study guide, and/or be able to tape record the lesson for future reference and study.

Flexible Preferential Seating

- **Provide preferential seating distance.** Seat the student near the primary sound source (e.g., teacher, television, computer, center activity area). A distance of three-four feet is the best, but a distance up to six-eight feet should be adequate. This allows the student to derive maximum benefit from both auditory and visual information cues.
- **Avoid seating near noise sources.** Seat the student away from competing or distracting noise sources (e.g., external noise sources, bathroom area, telecommunications equipment, aquarium). Seating away from windows and doorways also will reduce possible sources of distraction.
- **Provide better ear option.** Seat the student so that the better ear, if indicated, is directed toward the primary sound source. (The audiologist will provide this recommendation if appropriate.)
- **Allow flexible preferential seating option.** Allow flexibility in seating to continuously achieve the preferential seating advantage. This enables the student to attend and actively participate as the classroom activities and the teacher or other primary sound source change location.
- **Provide quiet study/work area.** Provide the student with a "private" or isolated area, such as a study carrel, for individual seatwork, testing, or tutoring. This helps to minimize the student's problems in foreground/background discrimination.
- **Use daily routines.** Use daily routines or schedules to help keep the student focused and organized.
- **Use earplugs.** If their use is recommended, allow the student to use earplugs or earmuffs during individual seatwork time to help tune out distractions.
- **Use FM amplification.** Use a personal or sound field FM system to improve access to auditory information, if this is indicated by the student's CAP profile. Students with difficulty hearing in noise, integrating information, or organizing information may benefit from FM amplification. An audiologist should make the recommendation for an FM system. The teacher(s) will receive an inservice on the use of the FM system.

Instructions

- **Speak in a clear, well modulated voice.** Speak distinctly, at comfortably loud level, and at a rate the student can follow easily. Vary loudness to increase the student's attention. Remember not to overexaggerate your speech. Emphasize important information using intonation and stress. Repeat important words when necessary.
- **Use natural gestures.** Use natural gestures that enhance the message. Avoid extraneous gestures and excessive movement while delivering the message if this appears to distract the student.
- **Reduce distractions.** Avoid extraneous noises and visual distractions, especially when giving instructions and teaching new concepts.
- **Alert student.** Before giving instructions, stand close to the student, call the student's name, and gently tap the student's shoulder, or use another cue to make sure you have the student's attention. Using the student's name during teaching time also will help to maintain attention.
- **Reduce motor activities during instruction time.** Reducing motor activities during verbal presentations is helpful for some students with a CAPD, especially if the student has an integration deficit.
- **Define purpose.** State the purpose of each activity clearly and directly before introducing the specific instructions for task completion.
- **Give age and ability-appropriate directions.** Give direct and uncomplicated directions. Use age-appropriate vocabulary that clarifies the logical, time-ordered sequence (e.g., first, second, last).
- **Repeat direction and allow ample response time.** It may be necessary to repeat each step of the instruction and allow time between each step for the student to process the information.
- **Provide examples.** Work on an example together and leave the example on display.
- **Use modeling.** Use modeling to provide the a clear demonstration of student performance expectations.
- **Identify key words.** Emphasize key words when speaking or writing, especially when presenting new information.
- **Give written and verbal instructions.** Provide both written and verbal instructions to aid the student in following directions and completing tasks.
- **List the steps.** To help the student learn multi-step sequences, list the steps on a reference card. As the student becomes more familiar with the sequence, steps in the written directions may be omitted gradually and system-atically until the student is able to complete the sequence automatically without referring to the written cues.
- **Encourage the student to ask for clarification.** Encourage the student to ask questions for clarification of information. It may be necessary to rephrase the information to ensure that the student with a CAPD is able to comprehend. Also, some students with a CAPD have a language deficit and may not be familiar with key words. By substituting words and simplifying the grammar, the intended meaning may be conveyed and understood more easily.
- **Repeat or paraphrase.** Have the student repeat the content of the instructions to provide the comprehension feedback. This technique allows the teacher to see which parts of the instruction need to be corrected or repeated. Ask for verbal accounts rather than a "yes" or "no" response. Reinforce listening for *meaning* rather than *exact repetition*.
- **Give positive feedback.** It is important that students receive positive feedback to ensure understanding of the message or instruction correctly. Feedback is important even if the student understood only a portion of the message.
- **Boost self-confidence.** Many students with a CAPD lack of self-confidence due to comparisons made by themselves or others about their performance. Reinforcing all work performed successfully will help to alleviate this problem.
- **Check instruction comprehension.** Check the student's work after the first few items to ensure that the student understood and retained the instructions. The teacher should watch for signs of inattention, decreased concentration, or understanding. Periodic comprehension checks (e.g., paraphrasing instructions, main idea, key points) are helpful to keep the student on task.
- **Allow subvocalization.** To help with reading comprehension, the student could be allowed to subvocalize while reading until such time as this is unnecessary.
- **Allow reauditorization.** Some students have a need to reauditorize information as they formulate their response. This strategy also strengthens the memory trace.

Preview and Review

- **Review, preview, and summarize class lessons.** For all class lessons, review previous material, preview material to be presented, and help students summarize the material presented. Discuss new and previously introduced vocabulary words and concepts. Whenever possible, relate new information to the student's previous experiences and environment.
- **Provide pre-teaching materials and assignments.** Provide preassigned readings and home assignments to help introduce new concepts and topics.
- **Avoid divided attention.** Avoid asking students with a CAPD to divide their attention between listening and taking notes at the same time. Allow students to tape record lessons or provide students with a detailed outline of the information presented in the class lesson.
- **Review and orient.** Provide a short review statement about the topic(s) to be discussed to orient the student. Write a brief outline and list key vocabulary on the board or an overhead projector. Provide the student with a copy of the outline and key vocabulary to use in following the discussion and for review.
- **Frequently summarize key points.** Repeat and summarize key points frequently. Emphasize key vocabulary words during the discussion.
- **Give salient clues.** Give salient clues to identify and emphasize important information (e.g., "This is important," "The main points are...", "This could be a test question.").
- **Use verbal review strategies.** Use verbal review strategies to ask questions periodically about the material being presented. This is a helpful topic maintenance strategy. Verbal review questions should include language required for description, explanation, exemplification, comparison, and relating real events to abstract principles.
- **Give individual attention.** Students with a CAPD often need individual attention. Inform resource personnel and parents of planned vocabulary and curriculum topics to be covered in the classroom to allow opportunity for pre-teaching as a supplement to classroom activities.
- **Reference important pages.** Refer students to important textbook pages for less review and preview.
- **Encourage class participation.** Encourage participation in expressive language activities related to each lesson. Reading is especially important, since information and knowledge gained through reading help compensate for what may be missed because of auditory difficulties.

Time

- **Avoid fatigue.** Students with a CAPD often become fatigued more easily than their peers. It is often difficult for the student to attend because of the effort required to keep up and compete in classroom activities. To minimize fatigue, consider the following suggestions.
 - Give several short classroom activities instead of one long activity.
 - Provide short periods of instruction with breaks so the student can move around if needed.
 - Alternate activities requiring greater auditory processing requirements with those that are less demanding.
 - Avoid higher level auditory tasks when the student is already fatigued. (Consider presenting high-auditory content information during the morning.)
- **Allow extended time.** Students with a CAPD should be given adequate time to comprehend and complete tasks. Avoid giving penalties for not completing assignments in the prescribed classroom time. Whenever possible, give students fewer items to complete in the amount of classroom time available or give them additional time in the resource room to complete the assignment.
- **Give adequate response time.** It may be necessary to allow students with a CAPD more time to formulate responses to verbal questions, especially questions that include comparisons, generalizations, and explanations requiring lengthier and more complex language organization.

Classroom Adaptations

- **Record instructions.** Class lessons or instructions can be recorded so that the student can listen to and review the material later.
- **Sound tune the classroom.** Acoustical modifications may be implemented to create a positive acoustical listening and learning environment (e.g., carpeting, drapes, sound absorbing materials).
- **Arrange classroom.** Structure the classroom to reduce background noise, reverberation, and distractions. Noise interferes with reception of auditory information and distracts the listener from the complex task of processing (e.g., organizing and interpreting) information. Special areas for small group instruction that are relatively quiet and distraction free are helpful for many students.

- **Avoid open classrooms.** Avoid open classroom settings for students with a CAPD. In these settings, reduce distractions by using sound barriers (e.g., bookshelves, flannel boards) and other modifications to improve the listening environment.
- **Close windows and doors.** Keep doors and windows closed to reduce external noise entering the classroom.

Self Advocacy

- **Encourage self-monitoring.** Encourage the student to self-monitor the listening environment and identify any problems that may be interfering with the learning process.
- **Encourage self-advocacy.** Encourage the student to self-regulate by using strategies to modify conditions and situations that may compromise effective learning. This will assist the student in learning self-regulation strategies and becoming an effective manager of his listening and learning environment.
- **Suggest counseling.** If necessary, the student should be referred for counseling for social/emotional concerns as part of the management plan. The student (and parents) needs to understand the nature of the CAPD and why it is essential to develop compensatory strategies.

Organizational Strategies

- **Encourage the use of agenda book or other organizer.** Encourage the student to consistently use an agenda book (or other organizer or calendar) to ensure that assignments, upcoming events, and other important class information are recorded.
- **Clearly present organizational expectations.** Ensure that the student understands specific organizational expectations for the classroom (e.g., where to place homework, use of folders, required classroom tools). Use cue cards as reminders.

References

Bellis (1996, 1999); Chermak & Musiek (1997); Boswell (1988); Chermak & Musiek (1997); Colorado Department of Education (1997); Educational Audiology Association (1996); Ferre (1999); Florida Department of Education (1995); Hall & Mueller (1997); Johnson, Benson & Seaton (1997); Keith (1996); Matkin (1985); Mayer (1996); Schneider (1992); Strand & West (1994).