
In this issue:

- **Building Peer Partnerships through Information Provision**
- by Julie Maier, CDBS Educational Specialist
- **The Art of Persuasion and What We Can Learn from the World of Sales**
- by Maurice Belote, CDBS Project Coordinator
- **Confidently Engaging Yourself into Your Community**
Lessons from “*The Feeling Through Experience*” - by Kayla Coburn, CDBS Educational Specialist
- **Central Auditory Processing Disorder: The Hearing Equivalent of CVI**
Risk Factors, Features, and Strategies - by Maurice Belote, CDBS Project Coordinator

Building Peer Partnerships through Information Provision

Julie Maier, Educational Specialist

“Walking with a friend in the dark is better than walking alone in the light.” ~Helen Keller

In the Fall 2019 issue of *reSources*, I shared ideas about building peer partnerships between children and youth with deafblindness and their same-age peers through participation in shared activities, providing information to peers, and facilitating and supporting peer-to-peer interactions. In this issue of *reSources* I'd like to share some *strategies and tips for providing information to peers* that can help to build a foundation for positive reciprocal relationships

Purpose or need for informing peers

Positive, reciprocal relationships are important to our emotional, mental, and physical well-being. However, developing this type of relationship between learners who are deafblind and typically developing peers can sometimes be difficult to achieve without initial intervention and some ongoing support. Reciprocal interactions occur when two or more people are able to communicate messages and share ideas and emotions easily with each other. If the partners don't communicate or express themselves in the same ways, it helps to provide information to bridge that barrier.

It's important to acknowledge that if a classmate, teammate, club member, or neighbor hasn't met a person who is deafblind, they may not be quick to approach or engage with their peer who is deafblind because they just don't know how to do it. They're simply unsure how to initiate or extend an interaction or interpret the individual's initiations or behaviors. Offering information to peers can help them feel more confident and comfortable in approaching, interacting and getting to know the learner you are supporting. As more and more children and youth spend time in integrated school and community settings, it's critical that information about the impact of their deafblindness and other sensory or learning issues is directly discussed in order to build awareness, understanding, and empathy that can lead to positive peer relationships.

On occasion, a peer who lacks information about a student and their sensory differences and needs may respond in negative ways, such as teasing or bullying. While such behavior should never be condoned or excused, the reasons for the bullying or teasing should be carefully examined and information to address it should be provided to that person and other peers. Sometimes this peer will change or stop their behaviors once they know more about their peer with deafblindness and understand why they communicate, move, learn or behave differently. Another method to address negative interactions is to provide information to groups of peers who can serve as allies and will stand up and support their classmate with deafblindness by sharing information and showing others how to engage, interact, play, or work in partnership with a peer who communicates or behaves differently or uses special equipment or materials.

Information that can be helpful to share

In my opinion, information about learner's strengths, interests, motivators, unique talents and skills, and supports they use is the most valuable information to emphasize. I call this type of information provision "ability awareness", as it emphasizes the person's abilities, rather than disability. I like to emphasize similarities between the individual and their peers rather than pointing out differences. I find that only sharing information about the etiology of their deafblindness or a syndrome is not necessarily as helpful as learning more about the individual student, especially because there is such a range of skills and needs across most etiologies and syndromes. Differences are not ignored, but they are explained in contexts peers can understand such as communicating using sign language or tactile objects, completing classwork using enlarged text or text-to-speech readers, or activating a switch to complete steps in an activity. It helps to focus on the unique ways a student communicates and participates and the assistive technology or equipment they use.

Because learners who are deafblind do require different adaptations and supports and use specialized equipment and assistive technology, it's important to discuss why these modifications, supports and technology are needed as well as their purpose. It's also very helpful to provide peers with information that aids their peers in understanding the impact of vision and hearing loss on learning and connecting with others. Adults should support peers to get to know the student by sharing information and pointing out similarities between their interests, skills, and learning goals. They should include information about if and how much the learner can see and hear, the ways they compensate for diminished distance senses, the modes the learner uses to communicate, and ways to interpret and respond to the individual's initiations or behaviors.

Finally, consider discussing and teaching peers some strategies they can use to initiate and engage in positive interactions with the student such as inviting them to join activities, making social comments, offering information or assistance, and also asking for information or help in return. Focusing on building these type of positive interactions allows all learners to hold valued roles and ensures reciprocity in the social partnerships versus the more typical "tutor" or "helper" roles peers sometimes fill.

Ways to provide this information

This information can be provided informally or within a more planned and formal presentation. Informal methods include sharing information with peers during class activities or in social settings about how the student is participating, the ways their equipment or technology helps them, and tips for how the peer could reach out to interact or support the student, as well as answering questions from peers.

More formal methods include:

- A presentation or lesson to the student's whole class, team, or club or to small groups of peers who are interested in getting to know the student better.
- Social groups, such as a 'lunch bunch' or sign language club or group, are another great venue to continually provide information on a variety of topics related that particular student's participation and goals, and understanding deafblindness.
- Preparing and presenting a [Personal Passport](#) or [All About Me Book](#) that includes specific information about a learner and the adaptations, supports, technology and equipment they use is another good method for presenting information.
- Reading [children's literature that include portrayals of people with disabilities](#) or watching videos or short films that address topics related to a particular learner's sensory issues and learning needs or disability topics in general is a great way to impact their peers' knowledge and understanding.
- Carefully planned simulation activities that include facilitated discussion about the experience are helpful in some instances.

Using print and digital media to share information helps to engage many peers. Children's books that includes characters who are deafblind, visually impaired, Deaf or hard of hearing, or have other physical or intellectual disabilities can be very effective ways to provide information to peers. Some guidelines for selecting books include the following:

- Carefully review books for factual content and illustrations, and age-appropriateness.
- Choose books that provide strong, positive portrayals of individuals with disabilities and use people-first language.
- Consider books in which characters with disabilities might be faced with challenges not necessarily due to their disabilities, demonstrating their important character traits.
- Choose books that do NOT promote stereotypes or generalizations, engender pity, or portray hopelessness for individuals with disabilities. Instead, choose books that illustrate capacity, potential, and commonalities.
- Consider the author's experience or connection to disability in order to better understand the themes and values included in book.

You might also thoughtfully select and show a class or a small group video clips or short films that include examples of individual who are deafblind participating in school, community, and home to provide examples or to teach students about vision and hearing loss or specialized equipment and assistive technology.

Sometimes teachers or service providers provide information through simulation activities where peers engage in an activity that is meant to simulate a particular experience, such as wearing a blindfold and earplugs and trying to complete a common school routine or navigate from one room to another. These types of activities can be helpful in providing additional perspective and understanding, but must be planned and implemented with great care. Many individuals with disabilities do not agree that these activities are useful and fear they may promote stereotypes or generalizations or cause participants to feel pity or hopelessness for individuals with disabilities. The goal of this activity should be to provide information that teaches peers about another person's perspective, and techniques and tools they use to participate and contribute to their community.

My advice for the use of simulation activities includes the following:

- Determine your goal(s) for the activity. Why have you decided a simulation experience would be more effective or helpful than providing information through another format? What do you want peers to learn about how an individual with deafblindness or other disabilities experiences the world and participates in daily life?
- Prepare peers in advance by explaining the simulation is an opportunity for them to experience—for a short time—what it might be like to have a sensory loss or physical or intellectual disability. It is NOT, however, the same as living with that disability.
- Emphasize the function of supports, adaptations, assistive technology, and equipment used during the simulation activity (e.g., a white cane allows a person with low vision to travel safely and independently; visual or tactile sign language provides more information to someone who cannot hear well; modifying rules allows a person using a wheelchair to participate in a recess game; having time to rock in a chair before story time on the rug helps some students to relax and focus).
- Include plenty of facilitated discussion time that allows peers to share thoughts about what they thought and felt during the experience so that you can ensure the activity didn't engender feelings of pity or relief. The goal of this experience is to increase understanding and empathy. This is also a time to listen to peers' questions and encourage them to seek out more information about disability, and supports and equipment used by people with disabilities.

Who can provide this information?

This information can be provided by anyone who knows the student well—a teacher, an intervener or instructional aide, a related service provider, parent, sibling or friend. As a student gets older, they can assist in providing information, especially in terms of sharing their interests and goals and different accommodations or assistive technology that are helpful for them.

How will you know if your efforts are effective/working?

The goal of providing information is to see changes in peers' attitudes, behaviors and interactions with their peer with deafblindness or other disabilities. Ideally, you'll know by observing changes in the behavior and interactions of the individual and their peers across settings. You may notice more reciprocal, positive interactions and see the students spending more time together. Another indicator would be peers seeking out information or offering their ideas and suggestions for enhancing the student's participation in the class or activities. Your conversations with other teachers, support staff, and family members about observable changes they have seen in their classes and at home will also demonstrate effectiveness of providing this type of ability awareness information. Finally, observing changes in a student's advocacy and awareness of their skills, goals and support needs would also indicate the student and peers have increased awareness and knowledge of deafblindness and other disabilities.

If you have questions, ideas or resources related to this topic, I'd love to brainstorm more with you. Please reach out and contact me at jmaier@sfsu.edu.

The contents of this newsletter were developed under a grant from the U.S. Department of Education, #H326T180015. However, these contents do not necessarily represent the policy of the U.S. Department of Education, and you should not assume endorsement by the Federal Government. Project Officer: Susan Weigert.



The Art of Persuasion and What We Can Learn from the World of Sales

by Maurice Belote, CDBS Project Coordinator

For years, I have joked that one of the reasons why I went into public education was because I would have failed so badly at a career in sales. From door-to-door sales of ‘Scout-o-Rama’ tickets as a child to unfortunate attempts at retail jobs in my teens, my usual sales line went something like, “You probably don’t want this, do you.” It’s one of the reasons I decided that joining a state deafblind project would be such a good fit—everything we do is provided at no cost.

But over the years, as I’ve watched master salespeople at work, I’ve started to wonder if—in my personal dismissiveness—I have ignored valuable sources of insight. Perhaps there are things that I can learn from the world of sales that will help me be a more effective technical assistance provider. We of course have wonderful resources and strategies from colleagues like Karen Blase and Dean Fixsen who study implementation science, that is the science of bridging theory and research with actual educational practices in the field. But what if the proven strategies of sales hold secrets for those of us in special education?

And I am not thinking only about technical assistance providers like those of us with state deafblind projects. In many ways, we are all in the business of asking people to change what they are doing. If you’re a teacher, you are—and the core—asking students to change the way they are doing something for a better way of doing the same thing. If you are an itinerant teacher, you come in and out of programs, asking staff to implement your recommendations during all the times you are not there to personally implement these strategies yourself. And if you’re a family member, you are likely asking school and program staff to implement strategies that work for you and other family members so that there is continuity between home and school.

To begin this article, I started by talking to my brother-in-law, Bob. He has worked in sales most of his adult life and has sold for numerous companies and industries—it seems to me he can sell most anything. I asked him to tell me a few tricks of the trade. He started by telling me that people don’t make the decision to change unless there is pain involved; pain is the motivation to change. He said people change because it is



more painful to stay the same than the pain of something new. Bob also said that there are two reasons why people listen to you: you have experience that they can use, and you point out something to them that is glaringly wrong. Finally, he told me about a concept called ‘feel-felt-found’ (described below) that apparently is a universal practice in sales but unfamiliar to me. It is a technique used when a salesperson needs a little extra boost to close a sale.

After my talk with Bob, I began exploring a few of the literally hundreds of sales and marketing websites that offer tips and techniques. Most of these articles and posts consist of numbered lists: ‘5 Proven Strategies To...’, or ‘10 Things to Try Right Now to Change...’ So, I have compiled a few of these strategies I found that have the most relevance to our work. I will call this list:

8 Proven Sales Techniques that Just Might Help Us Convince People to Change Their Practice

Sales tricks of the trade

Build on the foundation of trust.

Trust is the foundation of sales success. A buyer will not open up and share their needs if they don't trust you. A buyer will not believe in your solution and that you can do what you say you can do if they don't trust you. A buyer will never see the full value of what you propose if they don't trust you. You will not win the sale if they don't trust you.

[From Erica Stritch at rainsalestraining.com]

Start with a positive comment.

A particular study wanted to figure out a technique that increase the room service tips for waiters in hotels. They figured out that all the waiter had to do was to start with a positive comment...all the waiters had to do was say good morning following by a positive forecast for the day which resulted in a 27% increase in their tips.

[From Gundeep Singh at aeroleads.com]

What does this have to do with the rest of us?

In the field of deafblindness, we know that relationships built on trust form the core of parent-child and teacher-child bonds. But trust is critical to all relationships. When providing technical assistance, the TA recipients have to believe that I am a trustworthy source of information, that I will do what I say I would do, and that I will empathize with the daily challenges and obstacles they face in their jobs.

I first learned how to provide technical assistance from my our former CDBS Project Coordinator, Susan Sternberg-White. Susan would remind me that there is always something nice to say about a place, person, and/or situation, even if it is complimenting something as mundane as a bulletin board or a nicely organized bookshelf. When I hold team meetings as part of the TA process, I ask people to begin with descriptions of the student's strengths and gifts and not with a litany of what the student can't do. I have to learn to do the same thing with all of my own interactions with service providers.

Sales tricks of the trade

What does this have to do with the rest of us?

Paint a picture of the new reality.

You must paint a picture of what their new world will look like. How will it be better? In your sales conversations, help them visualize the other side and build excitement around it.

[From Erica Stritch at rainsalestraining.com]



In the field of deafblindness, we use stories in many ways. We use social stories to teach important concepts and we utilize experience books to allow children to tell their own stories. Perhaps we should be using stories to help technical assistance recipients better understand the positive outcomes of changing their practices to better meet the needs of learners who are deafblind. For example, I might share with a teacher: “Imagine you are greeting your students at your classroom door. The students enter the classroom and carefully place their backpacks and coats in their respective cubbies. The students then go to the schedule board to determine what’s in store for the morning. With clear information about their schedules, the students confidently go to their first activity and begin completing their first task...” Something like this could be a very attractive alternative to classroom chaos and one that might spark additional interest and motivation.

Sell solutions to challenges.

Mediocre sellers sell features...Average sellers sell benefits...Rainmakers...the best of the best...sell solutions to challenges.

[From Erica Stritch at rainsalestraining.com]



When providing technical assistance, I rarely ask teachers and interveners about challenges they face beyond those of serving the child for whom I am providing TA. We spend most of our time focused on the target student, of course with good reason. But perhaps it would be helpful for me to more clearly emphasize the benefit of deafblind strategies to all children, and explain how these strategies can address many of classroom challenges, and home challenges for families.

Sales tricks of the trade

What does this have to do with the rest of us?

Practice empathy.

Before you meet a prospect, put yourself in their shoes. Try to emulate their thinking process.

[From Gundeep Singh at aeroleads.com]



Empathy is the ability to more acutely imagine another person's situation. When I was a classroom teacher and on the receiving end of technical assistance, I remember thinking that my TA providers had no idea of the minute-to-minute challenges and stresses of managing a class of deafblind teenagers with widely varied interests, strengths, and IEP goals. Now, as a TA provider myself, I am always trying to find ways to better appreciate the circumstances of recipients of my own TA. And, of course, this also applies to empathizing with the children and students I serve.

Use the power of customer reviews.

Everyone knows...the power of customer reviews. If you know people who have already enjoyed your services or product, you can kindly ask to get reviews from them.

[From marketinginsidergroup.com]



Of course, I don't want to be reviewed like a business on Yelp, but for the strategies I recommend most often, I could include written or video testimonials from people who have had success with these strategies. And I could offer to link current technical assistance recipients with past recipients who benefitted from employing similar strategies.

Sales tricks of the trade

What does this have to do with the rest of us?

Feel-felt-found. Tell them “I understand how you feel”. This is intended to tell the customer that you have heard them, and can empathize.

Tell them about someone else who felt the same way initially. You’re telling the customer that they are not alone, and that things can change.

Then tell them how that person found that when they did what you wanted/bought the product, they got what they wanted.

[From Andy Smith at nippod.com]

Close with two choices.

Rather than ask, ‘How does this sound?’, give your prospect a choice. For example, if you’re selling educational books to preschool owners, ask if they want to purchase the book series or the book and tape series together.

[From Carla Goodman at entrepreneur.com]



It seems that the ‘feel-felt-found’ strategy could have applicability to our work.

Consider the following:

“I understand you feel like it would be a burden to carry around an object communication system when you are off campus. I worked with a teacher last year who felt the same way. But what she discovered was that by providing consistent access to the child’s communication system while off campus, these outings were more successful and enjoyable for everyone—the student and the school staff—and much less stressful overall for the teacher.”



Perhaps instead of giving someone a list of strategies to start right way, I could frame my recommendations with a choice. For example, I could ask the following: “There are two strategies that would help this child be less fearful of interactions: touch cues and tactile name cues. Which of these would you prefer to try first?”

Do you own a business or have experience in sales? Do you have tools for persuasion that might have special relevance to education? I welcome your comments, questions, opinions, observations, and reflections. And let me know if we have permission to add them to my list of techniques. I can be reached at mbelote@sfsu.edu.

References

Five bulletproof tips and tricks for sales and marketing. (2017, March 30). Retrieved from: <https://marketinginsidergroup.com/strategy/5-bulletproof-tips-tricks-sales-marketing/>

Fixsen, D. L., Blase, K. A., Naoom, S. F., Van Dyke, M., and Wallace, F. (2009). *Implementation: The Missing Link between Research and Practice. NIRN implementation brief, 1.* Chapel Hill, NC: University of North Carolina at Chapel Hill.

Goodman, C. (2002, April 24). *25 super sales secrets.* Retrieved from: <https://www.entrepreneur.com/article/51268>

Singh, G. (2020, February 21). *17 best sales tips and techniques for success.* Retrieved from: <https://aeroleads.com/blog/sales-tips/>

Smith, A. (2014, February 21). *Feel, felt, found: How it works and how to use it better.* Retrieved from: <https://nlppod.com/feel-felt-found-works-better/>

Stritch, E. *7 keys to leading highly effective sales conversations.* Retrieved from: <https://www.rainsalestraining.com/blog/7-keys-to-leading-highly-effective-sales-conversations>

Stritch, E. *10 ways to boost your sales success.* Retrieved from: <https://www.rainsalestraining.com/blog/how-to-increase-your-sales-success-with-these-sales-tips>

Confidently Engaging Yourself into Your Community Lessons from “The Feeling Through Experience”

by Kayla Coburn, CDBS Educational Specialist

Face-to-face communication has become a more challenging task. With the rise of social media, texting, and e-mails, face-to-face communications are no longer necessary. Someone may have thousands of followers on social media and message friends all over the world but cannot seem to make eye contact with the barista while ordering their coffee or say anything more than basic greetings or pleasantries. People who are deafblind may already have limited access to social media and instant communication. How are they supposed to learn to communicate with people in their community? How do we engage with people who may communicate differently if we already have a challenging time communicating with people we see daily? In February, I attended a screening of “The Feeling Through Experience,” which not only is a beautiful short film starring the first deafblind lead actor, but it also was an event that was fully accessible.



As I arrived to “The Feeling Through Experience” screening at UCLA, I was quickly surrounded by many people who are deafblind. People were greeting each other in American Sign Language, tactile sign language, and with the assistance of multiple interpreters. The best part about this scene was how everyone greeted each other. As soon as someone new walked through the door, people would wait in line to greet them. There were many hugs, smiles, and laughs surrounding the deafblind community. As the night continued, we made our way to the theater where seats were labeled for specific vision and hearing abilities to accommodate what everyone needed. At the front of the theater was an illuminated interpreter incased in a blacked-out box, so the interpreter could be easily seen without the lighting affecting the movie. You could also see people with headphones scattered throughout the theater, and people with tunnel vision were able to reserve seats closer to the back with chairs for their multiple interpreters. This event was accessible for every person, no matter their unique ability, which gave everyone the opportunity to be fully engaged in the film and their community.

The film was spectacular. It was a 20-minute film that was based on the director’s experience communicating with someone who is deafblind. The film showed very real reactions for someone who has never communicated with a person who is deafblind before. The first interaction between the two characters was attempted verbally by the person who can see and hear. He then realizes that this person cannot hear him, and is stuck in his first challenge. The actors perfectly demonstrate a realistic, awkward-at-times situation. The story had me smiling and wiping away tears. I left the film feeling encouraged to communicate to more people in my community, to engage with the people around me now, and to not be afraid to step out of my comfort zone. This film encourages communication and gives the audience an example of how beneficial it can be to engage with people who are out of your comfort zone.



Next time you are ordering coffee, or decide to not do self-check-out, communicate with the person in front of you and communicate something more unique than basic greetings. When you see someone who needs help, offer it. Genuinely reach out to your community, no matter the person’s background, ability, age, gender, etc. Our own communities are struggling to engage with each other and often choose to do so on social media platforms instead. Put your phone down and engage with the people who live around you. Don’t be afraid to communicate with someone who may communicate differently than you. My biggest lesson learned from this experience was that we all just want to be a part of our community.

If you want more information about the film check you the link below.

<https://www.feelingthrough.com/>

They are currently working on setting up more screenings, as they want the community engagement, but you can follow them on social media to get more information.

@feelingthrough on Facebook, Instagram, and Twitter

The contents of this newsletter were developed under a grant from the U.S. Department of Education, #H326T180015. However, these contents do not necessarily represent the policy of the U.S. Department of Education, and you should not assume endorsement by the Federal Government. Project Officer: Susan Weigert.



Central Auditory Processing Disorder: The Hearing Equivalent of CVI

Risk Factors, Features, and Strategies

by Maurice Belote, CDBS Project Coordinator

What is Central Auditory Processing Disorder and Why Is It Important?

It is said that central auditory processing disorder is to hearing what cerebral visual impairment or CVI is to vision. Central auditory processing disorder (CAPD) is defined as deficits in the neural processing of auditory information in the central auditory nervous system (ASHA, 2019). Central auditory processing disorder is also called auditory processing disorder (APD), cortical deafness, and central deafness. In these definitions, ‘central’ refers to the site of the problem with hearing and comprehension. While the peripheral hearing system includes the outer, middle, and inner ear to the auditory nerve, the central hearing system refers to the area from the brainstem to the brain. With CAPD, the ears may be functioning normally but sound is not reaching the brain in a way that is meaningful.

Students who are blind or visually impaired—and who have typically developed hearing—depend in part on their hearing to compensate for what they miss visually. For students who also experience varying degrees of CAPD, compensating with auditory information, whether speech or environmental cues, may not be possible. Unfortunately, CAPD cannot be diagnosed in very young children and CAPD assessments in older children require language acquisition, which many of these children haven’t yet acquired. What do we do with children who are at significant risk for CAPD but who cannot be accurately tested for a definitive diagnosis? There are evidence-based auditory strategies that can be used with children who are suspected of having CAPD that are similar to the visual strategies used with children with CVI.

It is also important to distinguish between CAPD and auditory neuropathy spectrum disorder because these two conditions are often confused but are very different. In CAPD, the hearing problem is brain-based, with the peripheral hearing system intact. With auditory neuropathy, there is damage to the inner hair cells of the cochlea and also possible damage to the auditory nerve. Unlike CAPD, auditory neuropathy can be diagnosed in young children who may not yet be efficient communicators. Tests that measure auditory brainstem responses (called ABRs) and reflexes of the muscles of the middle ear (often called acoustic reflex testing) will be normal in CAPD but abnormal or absent in auditory neuropathy (Morelt, 2010). These tests allow audiologists to make a reliable differential diagnosis between auditory neuropathy and possible CAPD in children who may seem to have features of both CAPD and auditory neuropathy.

Risk Factors Associated with Both Central Auditory Processing Disorder and CVI

Many of the risk factors for CVI and CAPD are the same (American Speech-Language-Hearing Association, 2019; Boston Children’s Hospital, 2019; Jin et al., 2019; Khetpal & Donahue, 2007) and therefore children with significant multiple disabilities who are diagnosed with CVI may also be at risk for CAPD.

The following risk factors are associated with both CVI and CAPD:

- Hypoxia (i.e., not enough oxygen reaching the tissues of the body)
- Anoxia (i.e., an absence of oxygen, an extreme form of hypoxia)
- Prematurity
- Seizure disorders
- Prenatal drug exposure
- Cytomegalovirus (CMV)
- Meningitis (i.e., inflammation of the membranes surrounding the brain and spinal cord)
- Low birth weight
- Traumatic brain injury
- Hydrocephalus (i.e., fluid accumulation in the brain)
- Hypoxic ischemic encephalopathy (i.e., brain damage caused by oxygen deprivation)
- Hyperbilirubinemia (i.e., the cause of jaundice)

Signs that a Child or Student Might have Central Auditory Processing Disorder

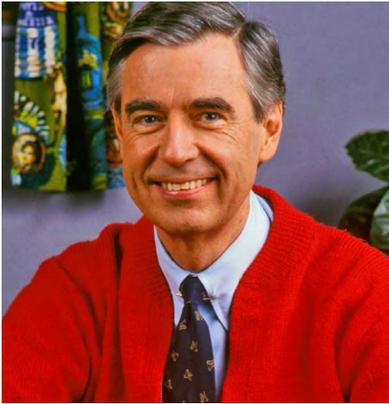
The National Institute on Deafness and Other Communication Disorders (2010) states that children with central auditory processing disorder often:

- have trouble paying attention to and remembering information presented orally, and may cope better with visually acquired information.
- have problems carrying out multi-step directions given orally; need to hear only one direction at a time.
- have poor listening skills.
- need more time to process information.
- have low academic performance.
- have behavior problems.
- have language difficulties (e.g., they confuse syllable sequences and have problems developing vocabulary and understanding language).
- have difficulty with reading, comprehension, spelling, and vocabulary.
- Other features of CAPD include distractibility, difficulty localizing sounds, difficulty hearing in noisy environments with a lot of competing sounds, and difficulty understanding speech that is too fast (ASHA, 2019).

Strategies to Support Students with Suspected Central Auditory Processing Disorder

Teachers of the visually impaired routinely provide VI services for children with CVI, which is one of the leading causes of visual impairment in children in the U.S. Teachers of the Deaf/hard of hearing, however, are much less likely to serve children who are diagnosed with CAPD as the sole cause of their hearing loss. While speech and language therapists may be available to support these students if speech and language services are included in the related services of these students' IEPs, there are strategies that can be implemented by all team members.

While the following strategies are designed to support students with CAPD, they will likely benefit most blind and visually impaired students in educational programs. These strategies help ensure that all students have—to the maximum extent possible—access to auditory information.

- **Decrease auditory clutter.** Auditory clutter can impact a student's ability to process spoken language and environmental sounds in the same way that visual clutter can make it difficult for a child with CVI to use their vision to the maximum extent possible. Amplification technologies, such as soundfield systems, can raise (i.e., improve) the signal-to-noise ratio so that the student can hear what's most important over less important competing noise. There are also a number of strategies for reducing classroom noise, such as rubber tips or tennis balls on the legs of chairs, establishing set times for noisy activities like pencil sharpening, and covering shelves with homemade drapes to improve acoustics.
- 
- **Allow sufficient time for auditory processing.** Give students adequate time to process information and respond. Consider each student's auditory processing and their need for 'wait time.' Fifteen to 30 seconds of wait time, which is not at all unusual among this population of students, can seem much longer when waiting for a student to respond to a request or command.
 - **Consider your rate of speech.** The central nervous system of a young child cannot process the acoustic and language elements of spoken language at a rate faster than about 124 words-per-minute (Hull, 2009; Hull, 2012). To imagine what 124 words-per-minute sound like, think of Mr. Rogers, who was a master at speaking at precisely this rate. Of course, we all talk faster than this most of the time. But consider slowing down your words-per-minute rate when presenting new or particularly important information to help support comprehension. Even older students of high school age only process language at a rate maximum rate of about 145 words-per-minute. And remember that we're only talking about slowing down the rate of speech, not slowing down the pronunciation of individual words. We still speak clearly without artificially over-enunciating words and syllables.
- 

- **Consider the limits of simultaneous multi-sensory input.** There may be times when it is not advisable to require multi-sensory participation. If a student with CAPD is listening very carefully, at that moment they may not be as available for visual and tactile input as they might otherwise be. This is similar to the way that children with CVI can sometimes seem more visually impaired when they are listening carefully or exploring tactile objects, especially objects that are new to them.
- **Use a multisensory approach.** Even though a student may not be able to access auditory, visual, and tactile information simultaneously, a multisensory approach is still important. In some cases, you may want to provide sensory input through one sense at a time. For example, when presenting a novel item, you may want to wait for the student to tactually explore the object before providing auditory information about what the object is called, its purpose or use, etc.

For More Information

If you have a student who is diagnosed with CVI and who you think might also experience auditory processing issues, I am happy to offer guidance. I can be reached at mbelote@sfsu.edu or 415-405-7558. And the American Speech-Language-Hearing Association (ASHA) has a very informative website specific to CAPD: <https://www.asha.org/PRPSpecificTopic.aspx?folderid=8589943561§ion=Treatment>

References

- American Speech-Language-Hearing Association. (2019). *Central auditory processing disorder*. Retrieved from: <https://www.asha.org/Practice-Portal/Clinical-Topics/Central-Auditory-Processing-Disorder/>
- Boston Children’s Hospital. (2019). *Cortical visual impairment symptoms and causes*. Retrieved from: <http://www.childrenshospital.org/conditions-and-treatments/conditions/c/cortical-visual-impairment/symptoms-and-causes>
- Dennison, E., & Hall Lueck, A. (2006). *Proceedings of the summit on cerebral/cortical visual impairment: Educational, family, and medical perspectives*. New York: American Foundation for the Blind Press.
- Ferre, J.M. (2007). *Understanding intervention for (C)APD: Easy as A-B-C*. The ASHA Leader, 12(10), 20-22.
- Hull, R. (2009). *A child’s CNS auditory system: Do we expect too much?* Paper presented at the U.S. Office of Special Education Programs, Project Directors’ Conference, Washington, DC.

Hull, R. (2012). *Misdiagnosed developmental delays in young children*. Paper presented at the U.S. Office of Special Education Programs, Project Directors' Conference, Washington, DC.

Jin, H.D., Demmler-Harrison, G.J., Miller, J., Edmond, J.C., Coats, D.K., Paysse, E.A., Bhatt, A.R., Yen, K.G., Klingens, J.T., Steinkuller, P., & Congenital CMV Longitudinal Group. (2019). *Cortical visual impairment in congenital cytomegalovirus infection*. *Journal of Pediatric Ophthalmology and Strabismus*, 56(3), 194-202. Retrieved from: <https://www.ncbi.nlm.nih.gov/pubmed/31116869>

Khetpal, V., & Donahue, S.P. (2007). *Cortical visual impairment: etiology, associated findings, and prognosis in a tertiary care setting*. *Journal of the American Association for Pediatric Ophthalmology and Strabismus*, 11(3), 235-239. Retrieved from: <https://www.ncbi.nlm.nih.gov/pubmed/17459745>

Lueck, A.H., & Dutton, G.N. (Eds.). (2015). *Vision and the brain: Understanding cerebral visual impairment in children*. New York: American Foundation for the Blind Press.

Morelt, T. (2010). *Auditory Neuropathy Spectrum Disorder and (Central) Auditory Processing Disorder*. *Deaf-Blind Perspectives*, 17(2), 1-5.

National Institute on Deafness and Other Communication Disorders. (2004). *Auditory processing disorder in children*. Retrieved from: <https://web.archive.org/web/20101204022554/http://www.nidcd.nih.gov/health/voice/auditory.html>

Roman-Lantzy, C. (2007). *Cortical visual impairment: An approach to assessment and intervention*. New York: American Foundation for the Blind Press.

The contents of this newsletter were developed under a grant from the U.S. Department of Education, #H326T180015. However, these contents do not necessarily represent the policy of the U.S. Department of Education, and you should not assume endorsement by the Federal Government. Project Officer: Susan Weigert.

