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A Cochlear Implant Rehabilitation Newsletter Volume 1 Issue 3

Making the CONNECTION: The School, Implant Center and Family

By Linda Strojny, M.S., Judy Harrison, M.A. and Sue Zimmerman-Phillips, M.S.

As an increasing number of cochlear implant children enter mainstream classrooms, it is clear that their changing academic, social, and audiologic needs can be best addressed by an ongoing relationship between the implant center, family and school.

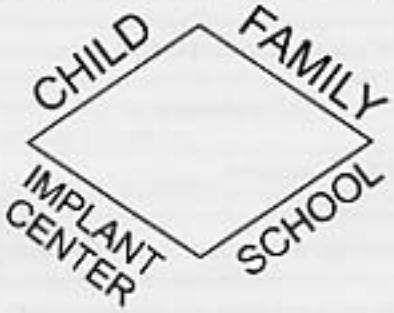
The child reaps great benefits from open and frequent communication - a strong *connection* between all the professionals serving the child and the family. The cochlear implant team members specialize in the child's auditory development, and they are in a good position to provide guidelines regarding the child's auditory capabilities and potential. They also are the primary source for technical information on how to care for and troubleshoot the cochlear implant device.

On the other hand, classroom teachers and therapists possess a wealth of knowledge about the child's academic performance, learning style, and social interactions. Their input to the cochlear implant team is invaluable regarding management issues in the clinic, adjustments that should be made to the programs on the child's speech processor, and identifying appropriate auditory goals.

Recognizing the importance of this *connection* between school, implant center and family is the first step in addressing the multifaceted nature of optimizing the child's performance with a cochlear implant. We shall address a number of commonly asked questions related to this topic. The first question that needs to be addressed is:

1. How is a good team relationship or *connection* established?

The foundation for the *connection* is established when the child is first being evaluated for a cochlear implant. Generally, it is the cochlear implant team that sets the tone for the level of communication between the different people involved with the child. If the cochlear implant team approaches the school during the initial stages of evaluation, welcoming



opinions and input, they are sending a strong message of unity and partnership. By making it clear that the contributions of the school personnel are desirable and valuable, a spirit of collaboration is established.

Each person working with the child has input and opinions that should be valued and considered by all. The cochlear implant team members, school personnel and family members will have expertise in a variety of areas (medical, educational, habilitative, audiologic and family/child needs). Working together as a cohesive team, facilitates an easy flow of ideas and information among all of the individuals.

An important part of building this team relationship is communication of relevant information between the implant center, school and family. Any evaluations or reports completed at the implant center should be shared with the educational facility and vice versa. A child's audiological and educational performance are very closely related, and both need to be considered during the pre- and post-implant phases. Typically, the child's family needs to provide written permission for this exchange of information, a process that also keeps them involved in the communication loop. Gathering and sharing information during the pre-implant phase can become a bit confusing unless someone takes responsibility to oversee the process. It will likely be the educational consultant or audiologist from the implant center who will assume this role.

2. Who is in the best position to facilitate the *connection* between home, school, and the implant center?

It is often best to identify two key contact people, one at the implant center and one at the school, who will assume responsibility for facilitating communication and passing on relevant information about the child. By doing this, information is shared that is key in managing the child at the implant center, school and home. This helps in establishing the *connection*. These two people should have good skills in communication and mediation, and should have a global view of the child's development.

3. What are some ways for implementing the *connection*?

- *Connecting* through the implant center audiologist. The approach used most often involves close communication between the audiologist at the implant center, who is responsible for the post-implant management, and the personnel at the child's school. This can take on many forms. Some audiolo-

gists make visits to the children's schools on a regular basis or during the first stages of implant use. If staffing and financial constraints preclude visits, the audiologist can establish effective lines of communication through regularly scheduled telephone conferences.

- *Connecting* through the Implant Center Educational Consultant. Usually this person is employed by the implant center. In this case, a teacher of the deaf may be a part of the team at the implant center and consult with the child's educational staff. The educator can assume the responsibility of *connecting* with the personnel at the child's school and also ensure effective communication with the family about important audiological/educational issues.
- *Connecting* through a Deaf and Hard of Hearing Liaison. In some regions, there are positions funded by the state and/or school districts for students with hearing impairments. These individuals already have a close *connection* to the school and family. Their services can be accessed by the cochlear implant team for classroom observations and they can provide in-service training to the liaison and other school professionals who work with the child.

4. How can the *connection* be strengthened?

Ideally, a school visit by someone from the implant team to meet the teachers and observe the child in the classroom is recommended. Children often behave differently in surroundings that are more familiar to them than at the cochlear implant center. For example, one little girl stared blankly at all the cochlear implant team members when they interacted with her at the hospital, giving the impression that she had very little to communicate. This occurred in spite of the clinician's best efforts to be entertaining. There was concern that this child had very limited use of language and perhaps was not a good candidate for a cochlear implant. One visit to her classroom full of kindergartners made it clear that she was indeed an animated and enthusiastic communicator. Apparently, the problem was that none of the implant clinicians could elicit the same level of enthusiasm as did her five-year-old peers!

A school visit also gives the implant team an opportunity to identify the needs of the teachers and therapists in working with the child. The cochlear implant team should provide staff inservices and information regarding cochlear implants, checking and troubleshooting of equipment, classroom needs and rehabilitation suggestions.

By the same token, teachers and therapists also find it beneficial to visit the implant center. The family may want to invite them to observe the initial stimulation of the child's speech processor. It is also helpful for them to come to any or all of the evaluations. As stated earlier, the teacher or therapist can provide in-

SCHOOL VISIT CHECK LIST

Date of Visit:_____ Name of School:_____
Child's Name:_____ Contact Person:_____
Primary Communication Mode Used by Child:_____
Primary Communication Mode Used by Teacher:_____
Classroom Setting:
___Mainstream ___Self Contained __Pre-primary
___Partial Mainstream ___Other:_____
Uses FM Trainer: ___No ___Yes Make & Model # _____
Other Classroom Amplification System:_____
Number of Children in the Classroom:_____
Classroom-Physical Description:_____
Classroom Acoustics:_____
Auditory Skill Development Curriculum:_____
Speech Curriculum:_____
Language/Reading Curriculum:_____
Frequency of Individual Training:_____
Duration of Individual Training:_____
Trainer:_____
Current Focus of Training:_____
Classes Mainstreamed: Number:___ Names:_____
How does child function in the mainstream setting?_____
Is Interpreter Available? ___No ___Yes _____Percent of the Time
Sign System Used:_____
Sign Language Type:_____
In Classroom:_____
In Other Classrooms (i.e. school wide system):_____
What type of assessments does the child receive on a regular basis?
Speech & Language:_____
Academic:_____
Auditory:_____
Cognitive:_____
Comments:_____
Recommendations:_____
Names, Addresses, Title of Individuals to Receive a Copy of Report:
_____
_____
Prepared by Susan Zimmerman Phillips M.S. CCC-A

sight regarding the child's learning style, communications abilities, and when appropriate, suggestions for effective behavior management. School personnel can often help an audiologist "read" a child's response more accurately, resulting in a more effective device programming session. Also, by attending the programming sessions, the teacher can share in the discussion about the child's predicted responses to sound during the following weeks of implant use.

It is not always possible for the school, consultant and implant staff members to visit one another. With or without a site visit, the following are some creative ways for the school, the family and the implant center to stay *connected*:

- Share videotapes of the child's behavior while in school, at the implant center and at home or play. The family may be in the best position to exchange the videos among the parties when they visit the implant center or school, and there is always the post office if no visits are planned.
- Use electronic mail as a method of communication. Most schools have at least one computer that can send and receive e-mail. This can be a wonderful and immediate way for a teacher to inform the audiologist about the child's performance with the implant and vice versa.
- Make appointments for telephone conferences ahead of time. Because of the busy schedules of the teachers and cochlear implant team members, finding a mutually convenient time in advance for a telephone conference will facilitate the communication process and make the most efficient use of everyone's time.
- Encourage school personnel and family members to attend workshops or meetings in their region that focus on cochlear implants. Joining local and national organizations such as Cochlear Implant Club International (CICI) and the Alexander Graham Bell Society (AGBell), will ensure advance notification of these meetings.

Once the *connection* is made between the family, the implant center and the school, each member of this larger team can feel committed and enthusiastic

CLASSROOM ASSESSMENT
Helping the Child with a Cochlear Implant in the Classroom
(Example)

1. Classroom Accommodations

Communication

__Is the cochlear implant and/or the auditory trainer (FM unit) in good working order?
__Face the class when you speak.
__When talking directly to a cochlear implant student, look at the student in order to enhance lip reading and the reading of facial expressions.
__Speak to the student with normal volume.
__Use natural speech. Exaggerated lip movement is not needed.
__Repeat students' responses during question and answer times.
__During class discussion, have one student speak at a time.
__Identify the speaker in a class discussion.
__Check in with the student to insure that he/she is getting the content of the discussion.
__Make frequent use of visual materials, written or graphic.
__Allow the student time to look at your visual materials before continuing to speak.
__Provide an outline of a lecture on paper, chalkboard, or overhead.
__Write homework and other assignments on the board.
__Repeat and rephrase difficult concepts. Make use of repetition.
__Slow down the pace of the lecture or discussion. Pause appropriately.
__Be aware that the student with a cochlear implant may have difficulty hearing public address systems, directions in the gym, in assemblies or in any situation where there is competing noise.
__Peer awareness of hearing loss and some of its implications.
__Remember that this child is hearing at the expense of a greater effort than the child who has normal hearing. It is to be expected that it will be more difficult to hold the attention of the hard of hearing child. Never forget that this child gets fatigued sooner than other children because he/she not only has to use their eyes on all written and printed work, but also watches the lip movements of speakers.

The Classroom

__The number of students per classroom size makes a difference in the student's ability to perform.
__Preferential seating. Discuss with the student the best seating arrangement for viewing the teacher and the other students.
__If possible, arrange the desks in a circle so that the student with the cochlear implant has a clear view of classmates.
__Make sure the room has good lighting and that the student can see visual materials presented to the class.
__Does the room have sound absorption materials - carpet, acoustic tiled ceiling, curtains?
__Make sure the student is not sitting near competing noise (fan, fish tank, traffic noise, etc.)
may have regarding the student's previous knowledge.

2. Cochlear Implant Information

A. Date of last programming session_____
B. Configuration of programs in speech processor
_____
_____
_____
C. Type of therapy approach
__Auditory/verbal
__Auditory/oral
__Total communication
__ Bilingual ASL/auditory
D. Date of implant procedure_____

3. Recommendations

_____

Prepared by Linda Strojny M.S. CCC-A

about maintaining the relationship. Frequent communication allows for the sharing of concerns, solutions and success stories. Ongoing communication is also needed to accommodate the changing needs of the child as he or she moves through school.

5. What happens after the *connection* is established - assessing the learning environment of the child with a cochlear implant?

The use of a checklist in the classroom can be helpful in obtaining concrete information for the comparison of classroom environments, teaching styles, and in-service needs. A checklist enables the evaluator to be consistent in recording observations in a variety of settings. Reference can then be made to the checklist when consulting with the people involved in the the educational process, ensuring that the key points will be communicated to everyone involved with the child. The checklist can be used by the representative of the implant center or by one of the professionals at the school who has been trained in its use (Strojny and Zimmerman-Phillips 1998).

There are several checklists available, which can be modified or adapted to the specific needs of a child and their classroom. Checklists have also been developed by Nevins and Chute (1995) and DeConde Johnson (1997). Areas that are evaluated include the acoustical environment, learning style of the child, communication mode of the child, teaching style and social interactions of the child with peers.

6. How can the classroom be modified to enhance learning - making accommodations in the implanted child's school environment?

As information is shared through discussions and reports, recommendations can be made for appropriate accommodations to facilitate the classroom performance of a child with a cochlear implant. Listed below are some suggestions that may be made at the time of a classroom visit:

- Use of a soundfield or personal FM system - The level of noise in the classroom is surprisingly high, and the child with a cochlear implant is much more sensitive to its interfering effects on communication than are children with normal hearing. FM systems increase the signal-to-noise ratio in the classroom, providing the child with a clearer and louder signal in the presence of competing background noise.
- Change the classroom seating arrangement - The child's seating placement in the classroom can have a positive or negative effect on their ability to follow what is being said by the teacher and fellow classmates. It is recommended that the child be seated where there is the best view of the teacher, a situation that might require changing the configuration of the desks.
- Use of a Home-School Journal - The need to keep communication open and ongoing between the school and parents is of the utmost importance for effective management of a child with an implant. Topics of communication should include all aspects of a child's home and school life, not just auditory and speech-language development. A journal that is passed between the home and school will facilitate effective communication between teachers and parents.
- Use of a Homework Assignment Book - This is another tool that may be used to increase communication between the home and school. The homework assignment book is designed to help the student organize homework assignments and give the family information about what is expected at home.

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Advanced Bionics Corporation
12740 San Fernando Road
Sylmar, California 91342
Tel: (+1) 818-362-7588
Tel: (+1) 800-678-2575 (in U.S.)
TDD: (+1) 800-678-3575 (in U.S.)
Fax: (+1) 818-362-5069
Web: www.cochlearimplant.com
Email: info@advancedbionics.com

Homework Planner

Week _____

	English	Science	Foreign Language	Social Studies	Math	Other	Other
Monday							
Tuesday							
Wednesday							
Thursday							
Friday							