

2008 Voice Conference
in Pictures

Self Advocacy =
Self Esteem

Universal Design
for Hearing

Literacy and AV

Bilateral Cochlear
Implantation for Children

Sound Matters

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Two Ears Are Better Than One

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Nothing quite sums up the needs and challenges for deaf and hard of hearing children as the title of our 2008 conference – **Diverse Challenges and Unique Solutions** and its goal to foster collaborations that support children with hearing loss. Once again this year we were inspired by some tremendous presenters. We are grateful to each and every one of them for their participation and their wisdom and for their contributions to this issue of *Sound Matters*. We are equally grateful to our many volunteers who helped make this year's conference the "best ever" and to the conference delegates, many of whom came great distances to be with us. Save the date for next year's conference – May 2, 2009 and please plan to attend. We would like to take this opportunity also to again thank our many valued sponsors and exhibitors. As a not-for-profit organization, we rely on their generous support. Thank you all.

Recently I had the pleasure of meeting people from our VOICE Associate Chapters in Montreal, Edmonton, and Calgary. VOICE families in Quebec, Alberta and Manitoba are now actively lobbying their provincial governments for a universal infant hearing screening program. It is astonishing that not all provinces in Canada today have adopted a universal infant hearing screening program, knowing what we do about the long-term benefits of early identification. Early identification of hearing loss and access to appropriate communication and audiological supports have enabled the majority of children born with hearing loss, in communities with infant hearing screening programs, to develop spoken language on par with their hearing peers. In an age of sophisticated testing methods and miraculous technological advancements, even the most profoundly deaf child, if tested and aided early, can fully integrate into a hearing and speaking society. Sadly, during my chapter visits, I met families whose children went undiagnosed until the age of 4. Many families shared the frustration of not being told of communication options for their child and now they feel they've missed the chance for optimal early and intensive listening and language development. In 2008 early identification programs and access to auditory-verbal therapy is not universally available to families in Canada. VOICE is committed to seeing this change.

It is through our collaborations, with parents, professionals and policy makers, that we can assure the most beneficial supports and services for our children with hearing loss. Together we CAN make a difference. I encourage each and every one of

our parents and the professionals who help our children, to find ways to work in partnership, and to support each other. With one unified VOICE our ability to influence decision makers is much more powerful.

In 2007/2008 VOICE has participated in a number of collaborations that support children with hearing loss, their families and their professional community. With the support of the Ministry of Education in Ontario, a Mentorship Training Program is currently being piloted in four Ontario school boards. Feedback from the professionals and the parents involved and the ministry has been extremely positive. VOICE also consulted with the A.G. Bell Academy of Listening and Spoken Language in its development of the new designation for a listening and spoken language educator. In addition, VOICE has worked with the Ontario College of Teachers to develop new recommendations and guidelines for the teacher of the deaf qualifications program. Commencing in 2008, the curriculum will include the option to become an "oral specialist." Also in 2008, VOICE will continue its efforts to partner with like-minded organizations by participating at the CHHA/International Federation of Hard of Hearing People Conference to be held in Vancouver, British Columbia in July.

Last, but not least, is the collaboration we have formed with Andrew John Publishing Inc. We are pleased to appoint them as our new official publisher of VOICE's *Sound Matters* and look forward to hearing from you, our readership, with your feedback on the "new" *Sound Matters* format.

Sound Matters

2008

Official publication of VOICE

voice

for hearing impaired children

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VOICE News

In Memorium

VOICE was saddened to learn that past board member, **Mr. Robert “Bob” McGlashan**, passed away February 23, 2008. Bob came to VOICE through his association with the Ontario Elks in the early 90s and during his tenure served as a dedicated board member. Bob believed passionately in our programs and above all, in our children. Following his retirement from the VOICE Board, he and his wife, Carmen, continued their commitment to the VOICE organization through their annual financial support of VOICE Camp. We are extremely grateful for the personal contribution Bob made to VOICE. His positive attitude will be missed by many.

Long-time VOICE member, auditory-verbal therapist, and teacher of the deaf, **Hope Turcotte**, passed away at the age of 51 on Saturday, March 1, 2008. Hope was a loving wife of Rejean and mother to her sons Luke and Spencer. She will be sadly missed by her colleagues from the Halton Catholic District School Board and from those of us at VOICE, who remember her fondly.

An Important Message to our Supporters

VOICE for Hearing Impaired Children places a high value on our relationship with you, our donors. Without your support we would not be able to achieve our mission “To ensure that all hearing impaired children have the right to develop their abilities to listen and speak and have access to services which will enable them to listen and speak.”



We thank you for your commitment to us.

We believe that transparency and accountability are essential to our success. With this in mind, we have recently joined Imagine Canada's Ethical Code Program.

The Ethical Fundraising and Financial Accountability Code lays out a set of standards for charitable organizations to manage and report their financial affairs responsibly. By adhering to these standards, we are complying with generally accepted practices for soliciting and managing donor dollars. This is important because you, our supporters, are entitled to transparency and the greatest impact possible for your investment in us.

If you have any questions about our adherence to the Ethical Code, please feel free to contact Norah-Lynn McIntyre, visit our website or request a copy of our financial statements. You can also download the Ethical Code itself by going to www.imaginecanada.ca.

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2008 VOICE Conference



Lucky draw winner photo features Matthew Wren, VOICE Alumna and conference volunteer, John Pepper, VOICE Chairman of the Board, Gloria Baldwin, VOICE Fund Developer.



Conference Title Sponsor PHONAK Hearing Systems' Peter Stelmacovich, an enthusiastic participant on the "Tech Talk" panel.



VOICE staff, Maribel Martinez and Eileen Boxall – service with a smile!



VOICE Conference volunteer gets early training!



14 exhibitors at this year's conference enjoyed steady traffic!



Moira Sinclair, Ministry of Education, on the IEP Development Process



Lively discussion on break

“Greatly enjoyed presentations”
“Thanks for having CART for all information sessions”
“It was a worthwhile day thank you”
“Excellent content”
“Best conference VOICE has ever had”



Seen here with VOICE Executive Director Norah-Lynn McIntyre is Mrs Liz Sandals, Parliamentary Assistant to the Ontario Minister of Education and MPP for Guelph. Mrs. Sandals provided encouraging remarks as she officially opened the 2008 VOICE Conference



Speaker and VOICE Therapist, Janet Henry, “Ready, Set, Play!”



Parents as Advocates Panel moderated by Norah-Lynn McIntyre, Executive Director, VOICE



Camila and Dannie, conference volunteers

We'd like to express thanks to all conference participants and exhibitors and sponsors and ask that you *“Save the Date – May 2, 2009”* for next year's conference.

Self Advocacy = Self Esteem

John Anderson, VOICE Conference 2008 keynote speaker, shares some thoughts on the process of self-advocacy.

Through his more than 10 years of working with parents and children as the mainstream adjustment counsellor at the Mainstream Center at CLARKE School Center for Oral Education in the United States, he has built on his own personal lifetime experiences as a person with hearing loss.

In John's words ...

I have read the literature, I have had conversations with my colleagues, I have talked with parents, and I have had conversations with students of all ages. I am convinced that acquiring many of the skills that are needed to advocate for yourself with a hearing loss begin with helping parents learn many of the skills that their children will need as they grow up. Yet frequently, I come across statements from parents and professionals that students with hearing loss are expected to automatically learn these skills on their own in a timely manner.

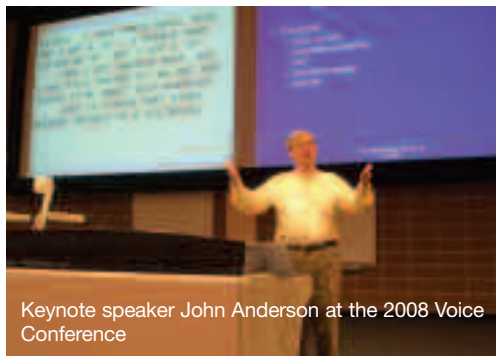
And what are these skills? In my mind, they are a cluster of skills that interact with each other:

1. Problem solving skills
2. Communication skills
3. Social skills
4. Stress management skills

For this article, I don't want to review how each of these skills help a student advocate. Instead I want to focus on the process, because it is a lifelong process that involves finding out who you are with a hearing loss and who you hope to be. This is lifelong self-advocacy for two reasons: Firstly, hearing loss most likely will not be cured during their lifetime, so they will need to learn some skills to help them in a wide variety of situations involving communication. Secondly, these students will probably be mainstreamed with students who have normal or typical hearing, and these students will know little about the challenges of communicating through a hearing loss. So, over time, a student with hearing loss will need to learn a variety of skills to help make their relationships with people with typical hearing work more smoothly despite the presence of hearing loss.

My own view of self-advocacy is that the skills that a student needs cannot be learned and developed unless the student already feels good about who he is as a person. In short, the work of self-advocacy requires a growing sense of self-esteem. I need to get to know myself and learn to like who I am.

It is important to start early with self-advocacy. This means we need to start as early as kindergarten in teaching kids the skills to help make communication work for everyone. This will be difficult to achieve, however, if we do not help the parents to teach the same skills at home. School and home share the opportunity for communication in groups. In these settings, there are many opportunities to teach skills such as: turn taking, raising your hand when you want to speak, allowing for communication repair, and announcing new topics.



As the child grows into middle-school years, the parent's role of advocate needs to begin shifting to allow for the student to become an active participant in choosing the services and technology that will allow him to advocate for communication access in a variety of situations. These typically are the hardest years to self-advocate, since adolescence is challenging enough. But, through self-advocacy exposure experiences, problem solving and negotiating skills will be honed.

By the time a student reaches high school, we should see more evidence of independence, understanding, and responsibility. Personal growth as an individual with hearing loss to date has been about learning to take care of yourself with your hearing loss. Our goal in teaching self-advocacy skills is to encourage the student to think of him or herself as a whole person first; as an individual who also happens to have a hearing loss.

Learning the skills of self-advocacy are the tools that can help a person with hearing loss pursue his or her dreams. In essence, developing the self-confidence needed to self-advocate are the stepping stones to a healthy self-esteem.



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By Karen A. Gordon, PhD, Reg. CASLPO, CCC-A
and Gina Sohn, M.Cl.Sc, AUD(C), Reg. CASLPO.

Bilateral Cochlear Implantation for Children: What Do We Know and What Are We Still Learning About?

Cochlear implants have made it possible for many children with severe to profound hearing loss to access speech sounds that they would not be able to detect with very powerful hearing aids. As a result, many children with significant hearing loss have been able to develop excellent speech and language. Over the past two decades, we have learned much about how cochlear implants work and who might benefit from receiving one. However, there is still much more that we need to know. One of our current focuses is on the use of bilateral cochlear implants in children.

What Are the Goals of Bilateral Cochlear Implants?

The aim of bilateral implantation is to take advantage of the fact that we have two ears to hear with. When both ears can hear, the auditory nerves are able to compare the sounds reaching each of the ears. Of most interest is whether there are any timing differences or any differences in intensity (or loudness) between the ears. For example, a sound coming from the right will sound louder in the right ear than the left ear, and/or the right ear will hear the sound slightly sooner than the left ear. These differences in timing and intensity help us to locate where sounds are coming from and help us to hear better in noisy environments.

What's wrong with Using Only One Cochlear Implant?

Unilateral cochlear implants have allowed many children to develop good speech and language skills. This was something that was only a dream before cochlear implants were available. Yet, despite all the benefits, we must be aware that cochlear

implants do not restore normal hearing. For one thing, the cochlear implant cannot do all the things that the normal cochlea (inner ear) can do. Also, there may be changes in the auditory system due to the hearing loss that we aren't aware of. However, the most obvious limitation is that children using a single cochlear implant hear from one side only.

Hearing from one side (unilateral hearing) is particularly difficult in noise. Of course, noise is everywhere! This means that a child with unilateral hearing probably has more troubles hearing in the classroom, on the playground, and even at home than in an audiologist's sound booth. Unilateral hearing also affects the ability to tell which direction sound is coming from. Because of this, children who have hearing loss in one ear or who use one cochlear implant need to use other cues (like their vision) to find the person who is calling them or to figure out where that car horn was coming from. Clearly, this can be a safety issue and children with unilateral hearing loss as well as children using a single cochlear implant should be encouraged to look around whenever they are close to roads or traffic.

By Laurie Monsebraaten
and Jeff Keay

Do We Know if Bilateral Cochlear Implants Work?

We have provided bilateral cochlear implants to some of the children followed in our program through a research study. We are assessing how the hearing nerves and brain respond to each implant separately and to both implants together. We are also looking at whether the children are able to understand speech better with two cochlear implants versus one.

All families and children who would like to participate in our study are made aware that a second cochlear implant means a second surgery which comes with all the risks of the first one. Many of these risks are understood and include the risks of anesthesia, potential damage to the facial nerve, and loss of residual hearing. Other risks such as possible damage to the balance (vestibular) organs are not yet clear. Thus, the decision to undergo bilateral cochlear implantation can be a difficult one particularly when a child appears to be doing very well with one implant.

To date, over 100 children have received bilateral cochlear implants in our study. Most children were provided with their first implant at young ages. We have divided the children into three groups according to the duration of unilateral implant use prior to receiving the second implant: (1) children with more than 2 years of unilateral implant use; (2) children who use their first implant for 6 to 12 months of unilateral implant use; and (3) children who receive both implants at the same time (simultaneously).

Our initial findings are that, in relatively easy listening environments (e.g., a quiet room), children find it easier to hear speech with two cochlear implants rather than one. We think that this is because having input from both ears makes sounds louder and thus easier to hear and understand. When we examine how well children can understand speech in noise, most children show improvements in their scores when they are wearing both implants as opposed to just one. How much improvement one child receives from a second device depends on many factors including where the speech and noise are located and when the second implant was received. To determine what factors are most important, we are studying how the hearing nerves work and change in children using bilateral cochlear implants.

We have found that most children benefit from auditory verbal therapy for their new

implant just as they benefit from therapy for their first implant. Children often don't realize that it took time to understand sounds with their first implant and sometimes expect to be hearing well from their second implant right away. We must be sure to counsel children and families of the challenges they may face particularly in the beginning stages of bilateral implant use. We have not recommended removing the first implant for an extended period of time after receiving a second cochlear implant but there are some centres which do encourage this.

We are continuing to explore how the hearing system changes when two cochlear implants are used in the children we are following. We are measuring any differences between the ears, as well as tracking auditory abilities when both implants are worn. We are also examining ways which might help the hearing nerves best compare the information provided by both implants.

Conclusions

Cochlear implant technology continues to evolve and we are beginning to learn how the auditory system develops with one or two cochlear implants. Our research examines whether children receiving two implants can develop binaural hearing to help them hear more easily. We are finding that there are some advantages for children when listening through both implants compared to one. As always, our research goals are to provide children with severe-to-profound hearing loss the best opportunities to hear.

For further information please consult Dr. Blake C. Papsin and Karen A. Gordon's "Bilateral Cochlear Implants Should be the Standard for Children with Bilateral Sensorineural Deafness" (*Current Opinion in Otolaryngology & Head and Neck Surgery* 2008;16:69-74).

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Two Ears Are Better Than One

A family's decision to get a second cochlear implant, five years after the first one changed their daughter's life.



When our daughter Annie received a cochlear implant in the fall of 2002, the results were stunning. Our then-3½-year-old daughter, who lost much of her hearing to meningitis as a baby, was suddenly engaged in what we were saying. Blank looks turned to comprehension. New words and phrases began tumbling out of her mouth. It was a miracle.



So when the Hospital for Sick Children offered Annie a second implant last year as part of a study of sequential bilateral implants on children deafened by meningitis, we were definitely interested. Annie, now 8, was particularly keen to get rid of her remaining hearing aid that whistled when she wore a hat or bicycle helmet, especially when tests showed she was no longer getting much usable sound from it anyway.

We had read that children with bilateral implants hear better in background noise. We were excited by the possibility that two implants would make listening less tiring for her. And to have a back-up should her existing implant fail, was an added attraction.

But we were also warned that the second implant wouldn't produce the dramatic changes we saw when Annie got her first implant and that any improvement in her hearing would be nuanced. The time lapse was also a concern. Would Annie's newly implanted ear ever hear as well as the first? Would she even like the new sound?

One of the factors that swayed us in favour of surgery was brain plasticity. We could wait and let Annie decide for herself as an adult when better hearing technology may be available. However I had heard a panel of leading experts speaking at the 2005 AG Bell Convention in Pittsburgh say exciting new stem cell and chemical research is at least 20 years away from clinical practice. Maximizing Annie's hearing now when she is young and her brain is still developing seemed to make more sense than waiting. And since most of the new therapies are being delivered via

cochlear implants anyway, a second implant won't likely cut her off from future advances.

But the dreaded surgery loomed large. In fact when we explained to Annie that she would have to go to the hospital for an operation to get a second implant, she was horrified. We weren't crazy either about another stomach-churning five-hour hospital waiting room vigil while doctors at Sick Kids drilled into our daughter's skull.

There were also practical issues. Annie, whose death-defying battle with meningitis forced her to undergo more medical procedures in her first year than most of us will experience in a lifetime, has an understandable terror of needles. No problem, we were told: All needles would be inserted after she is peacefully sedated by nitrous oxide. What about surgical tape? One of Annie's most enduring (bad) memories from her first implant surgery was when doctors removed the bandages. She didn't want any tape on her forehead this time. Now, that was going to be a bit more difficult to arrange, the hospital social workers said. But after several tearful counselling sessions that included practising on stuffed animals, Annie came around. She would be brave.

But during our pre-op surgical consultation with Dr. Adrian James, Annie could not help bringing it up. To our surprise and delight, Dr. James told her he doesn't use surgical tape to keep the bandages in place. "No tape?" Annie asked, astonished. "No tape," he assured her. Annie was thrilled. We were relieved.

One of the things Sick Kids wanted to explore with Annie and other post-meningitis children was the impact of a second implant on balance which, typically, is lost due to the illness. So Annie participated in a number of balance tests before and after surgery. The theory is that the second implant will give these children more sensory information to help with balance. Annie is also participating in tests on auditory synchronicity along with all children who are part of research into sequential bilateral implants at Sick Kids. Early findings show the more time between first and

second implants, the longer it takes the brain to synchronize hearing between the two ears.

Annie's surgery was a resounding success. Thanks to a new anesthetic, she was less groggy coming out of surgery this time. And since Annie's first implant was switched on when she regained consciousness, we were able to talk to her right away – a benefit that certainly made us feel better about the experience. We knew all was well when she asked to play "I Spy" in the recovery room and requested pizza for supper later that evening. Sick Kids generally performs implant surgeries on Thursdays and most children are discharged on Friday to recover at home over the weekend. In Annie's case, she was back at school on Monday.

Ontario's Infant Hearing Program provides Auditory-Verbal Therapy (AVT) for pre-schoolers with hearing aids or cochlear implants. But for children like Annie who receive implants after age 6, there is no AVT coverage in most of Ontario. We are grateful to VOICE for Hearing Impaired Children for providing AVT services to Annie once a week as she learns how to hear with her second implant. The service has been invaluable and input from our therapist has helped our audiologist at Sick Kids fine-tune Annie's MAP. Most kids receiving second implants receive 6 months of AVT and for us it has really helped Annie navigate her new technology.

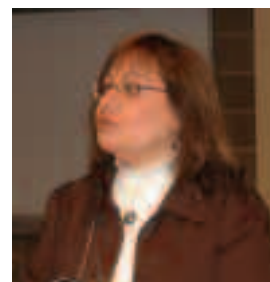
We have been told it can take as much as a year to 18 months for kids to become completely comfortable with their second implant. Although Annie still prefers her old one, she wears both all day and has already successfully used the new one as a back up when her batteries ran out on her old processor.

Did you ask the teacher for new batteries? I asked her at home that evening. "No, I just used my new implant. Pretty good, eh mom?"

Pretty good indeed.

AG Bell Academy for Listening and Spoken Language® Launches a New Certification Program for Educators of the Deaf and Hard of Hearing using an Auditory-Verbal Approach

In November 2007, the AG Bell Academy for Listening and Spoken Language® (The Academy) announced a new professional certification program, Listening and Spoken Language Specialists® (LSLS®), which encompasses Certified Auditory-Verbal Therapists (LSLS Cert. AVT®) and Certified Auditory-Verbal Educators (LSLS Cert. AVEd®).



The AG Bell Academy is the certification body of the AG Bell Association which administers and sets standards for Auditory-Verbal Certification. Its aim in expanding the certification program to include educators is designed to increase the number of qualified and distinguishable spoken language specialists who are available to help bring the option of spoken language to families whose children with hearing loss are learning to listen and speak.

As a consequence of increased accessibility to early intervention and innovations in hearing technologies such as cochlear implants, digital hearing aids, and integrated FM systems, there has been an explosion in the demand for spoken language specialists to provide intervention to children with hearing loss. The Academy projects that the LSLS designation will become the standard parents look for if they choose a listening and spoken language outcome for their child.

Within the LSLS certification there are two separate distinctions – one for Auditory-Verbal Therapists and one for educators – the examination given will be the same for both subcategories, however, the official designation will differ depending on the educational experience and work environment of the individual. The Academy developed the new LSLS designations based on the results of a job analysis conducted by Prometric™, the leading global provider of comprehensive testing and assessment services. The analysis demonstrated that the core tasks, skills, and knowledge used by listening and spoken language professionals have more similarities than differences. All LSL specialists aim to develop spoken language

through maximizing listening skills. A LSLS Cert AVT® focuses on guiding parents to be the primary listening and language stimulators, provides intervention in a one on one setting and promotes the mainstream as the immediate education placement option. A LSLS Cert. AVEd® focuses on teaching various sized instructional groups in classroom settings to prepare children who are deaf or hard of hearing to enter mainstream education and to support them there. A detailed description of the LSLS certification process and the guiding principles for Cert AVTs® and Cert AVEds® can be viewed on the Academy website www.agbellacademy.org/certification.htm. The new certification exam will be administered for the first time at the 2008 AG Bell biennial convention in Milwaukee, Wisconsin, in June 2008.

These new guidelines for Listening and Spoken Language Specialists form the foundation for the VOICE Auditory Verbal Training and Mentorship Program. In the past only those able to provide intervention following the principles of AVT were eligible to participate in the Mentorship Program. The new designation has now made it possible for educators, who work with groups of deaf or hard of hearing children who are learning to listen and speak, to take advantage of the VOICE Pilot AV Training Program being supported by the Ministry of Education. Parents, children with hearing loss and school boards are looking forward to increased availability of highly specialized professionals who support the spoken language communication development of children with hearing loss.

Principles of LSL Auditory-Verbal Therapy

1. Promote early diagnosis of hearing loss in newborns, infants, toddlers, and young children, followed by immediate audiologic management and Auditory-Verbal Therapy.
2. Recommend immediate assessment and use of appropriate, state-of-the-art hearing technology to obtain maximum benefits of auditory stimulation.
3. Guide and coach parents* to help their child use hearing as the primary sensory modality in developing spoken language without the use of sign language or emphasis on lipreading.
4. Guide and coach parents* to become the primary facilitators of their child's listening and spoken language development through active consistent participation in individualized Auditory-Verbal Therapy.
5. Guide and coach parents* to create environments that support listening for the acquisition of spoken language throughout the child's daily activities.
6. Guide and coach parents* to help their child integrate listening and spoken language into all aspects of the child's life.
7. Guide and coach parents* to use natural developmental patterns of audition, speech, language, cognition, and communication.
8. Guide and coach parents* to help their child self-monitor spoken language through listening.
9. Administer ongoing formal and informal diagnostic assessments to develop individualized Auditory-Verbal treatment plans, to monitor progress and to evaluate the effectiveness of the plans for the child and family.
10. Promote education in regular schools with peers who have typical hearing and with appropriate services from early childhood onwards.

An Auditory-Verbal Practice requires all 10 principles*

- * The term "parents" also includes grandparents, relatives, guardians, and any caregivers who interact with the child.

(Adapted from the Principles originally developed by Doreen Pollack, 1970)

Adopted by the AG Bell Academy for Listening and Spoken Language®, July 26, 2007.

Ministry of Education Supports the VOICE Training and Mentoring Program in the Auditory- Verbal Approach

*Anita Bernstein, LSL Cert. AVT®, Director of Therapy Services,
VOICE for Hearing Impaired*

In the past decade increasing numbers of parents and professionals have become aware of the Auditory-Verbal Approach as a viable option for children with hearing losses. The Auditory-Verbal Approach is one of the communication intervention options presented to parents when their infant's hearing loss is identified through the Ontario Provincial Infant Hearing Program. Parents who choose cochlear implants for their child with a profound loss will also become involved in Auditory-Verbal intervention to ensure their child maximizes the hearing now available through this technology.

Educators and clinicians have sought out training in the Auditory-Verbal approach so that they could better support the growing numbers of children with hearing losses in mainstream classroom settings who were developing spoken language through hearing. Canadian professional training programs introduce teachers of the deaf and speech-language pathologists to the Auditory-Verbal approach but do not allow for a thorough understanding of the methodology or practical application of Auditory-Verbal intervention.

VOICE has been well aware of the shortage of AV trained professionals and since 1992 it has provided an AV Training/Mentorship program which has successfully impacted a number of communities through its "train the trainer" model. The VOICE Training Program mentors professionals by pairing teachers of the deaf or speech pathologists with certified Auditory-Verbal Therapists so that they can gain insight and practical experience in this approach. Upon completion of the training and the required experience, these professionals have the foundation to pursue AV certification as Listening and Spoken Language Specialists and then will be able to train others within their institutions.

In 2007, the Ontario Ministry of Education became increasingly cognizant of the growing need for AV trained professionals and recognized the expertise of the long-standing VOICE program. In the fall of 2007 a Pilot AV Training/Mentorship Program supported by the Ministry of Education was launched in four Ontario School Boards. Currently six professionals from the Lambton Kent District School Board, the St Clair Catholic District School Board, the Peel District School Board, and the Toronto Catholic District Board are training under the mentorship of a VOICE Certified Auditory-Verbal Therapist. The primary goal of the mentorship is to achieve a long-term change in services provided to students who are deaf and hard of hearing in their prospective boards by making available the option of on-going provision of AV communication development. The ultimate goal is to train Listening and Spoken Language Specialists who are capable of providing intervention in the Auditory-Verbal approach and facilitate the transition of students from the Infant Hearing Program to the educational environment.

Since the launch of the pilot program in September 2007, information and/or presentations about the program have been provided to at least seven additional school boards. VOICE SEAC representatives have been instrumental in educating school boards about the availability of the Mentorship Program. If you would like more information about the AV Training/Mentorship Program, please contact Anita Bernstein, Director of Therapy Services at the VOICE office 416-487-7719 or abernstein@voicefordeafkids.com.

Literacy and AV

Amazing strides have been made to screen newborns for the presence of hearing loss and to provide early intervention to infants and toddlers who are deaf or hard of hearing in the 21st century. The benefits of early identification and early intervention are well documented. Research suggests that speech, language, and vocabulary outcomes and social-emotional development are significantly better than for children who are identified later (Yoshinaga-Itano 1995, 2004; Yoshinaga-Itano and Sedy 2000; Yoshinaga-Itano et al. 1998).



In this new era of early identification and early intervention many children are developing communication and language skills in close parallel to their hearing peers. However some children require intensive and specialized intervention to close educationally significant language-learning gaps. It is important to understand the impact of delayed language on academic success and to identify and implement effective home and school practices for this population.

Achieving Academic Success: Considerations for Children who are Deaf or Hard of Hearing

Kathryn Wilson, MA, CCC-SLP, LSLS Cert.

There is clear evidence from the literature regarding the robust relationship between oral language and success in reading (Katz et al. 1981; Mann et al. 1984; National Institute of Child Health and Human Development 2005; Shankweiler et al. 1979; Snow et al. 1994; Storch and Whitehurst 2002). It has been said that “spoken language is the engine that pulls the reading-writing-literacy train.” Children with language delays are particularly at risk for problems related to success in reading and subsequent academic failure (Ling 1989; Robertson 2000). Simply stated, in order for children who are deaf or hard of hearing to achieve academic success they must be able to read well and in order to read well, these children must develop the requisite spoken language skills. Unfortunately, far too many children are forced to begin the formal reading process before the language gap is closed. The result is often a student whose language-learning gaps continue to expand and one who finds reading difficult and frustrating.

For children with significant language delays who are at risk of academic failure the development of a long-term, multi-year plan is recommended. This model first introduced by Walker (2004) includes the child’s present level of performance as well as projected rate of progress in language and vocabulary for each year of the plan until the gap is closed. The long-term plan describes school services and the amount of time needed daily or weekly at school to make sufficient progress toward goals. In addition to changes in school programming and professional practices the role of parents in closing the gap is critical. A long-term plan also defines parental roles and responsibilities in terms of participation in weekly parent sessions and amount of recommended carryover time outside of the school environment. Subsequent to development of a long-term plan, parents and professionals must implement evidence-based practices that contribute to success in reading and literacy.

Research has demonstrated that reading aloud to children of all ages is the most important factor in raising a reader (Trelease, 2006). It is hard to imagine any other single practice that yields so many benefits. The following list of benefits from *The Read Aloud Handbook* authored by Jim Trelease clearly demonstrates that reading aloud is an essential practice for all children and especially those with educationally significant language-learning-gaps:

- Reading aloud improves vocabulary
- Reading aloud promotes oral language development
- Reading aloud increases attention span
- Reading aloud increases listening comprehension
- Reading aloud increases reading comprehension
- Reading aloud results in increased performance on standardized tests

The Read Aloud Handout is a highly recommended resource for parents and professionals alike to learn more about the benefits, stages, and strategies for reading aloud on a daily basis.

In summary, the learner must know the spoken version of the language that is to be read and written. Children who are deaf or hard of hearing can and must learn to read well to achieve true academic success. The key is closing the language-learning gap. Two tried-and-true practices for this population include the development of a long-term plan and daily read-aloud. The long-term plan is essential so that all involved in the child's education understand the end goal and the factors necessary for achieving the goal. Secondly, adopting the practice of daily read aloud is an easy and highly effective method for achieving high levels of language, literacy, reading and writing. We can all contribute to the present and future success of children who are deaf or hard of hearing. Pick up a book and read!

References

- R.B. Katz, D. Shankweiler, and I.Y. Liberman. Memory for item order and phonetic recoding in the beginning reader. *Journal of Experimental Child Psychology* 1981;32:474–84.
- D. Ling. *Foundations of spoken language for hearing-impaired children*. Washington, DC: Alexander Graham Bell Association for the Deaf and Hard of Hearing. 1989.
- V.A. Mann, D. Shankweiler, and S. Smith. The association between comprehension of spoken sentences and early reading ability: The role of phonetic representation. *Journal of Child Language* 1984;2:627–43.
- National Institute of Child Health and Human Development Early Child Care Research Network. Pathways to reading: The role of oral language in the transition to reading. *Developmental Psychology* 2005;41(2):428–42.
- L. Robertson. *Literacy learning for children who are deaf or hard of hearing*. Washington, DC: Alexander Graham Bell Association for the Deaf and Hard of Hearing. 2000.
- D. Shankweiler, I.Y. Liberman, L.S. Mark, C.A. Fowler, and F.W. Fischer. The speech code and learning to read. *Journal of Experimental Psychology: Human Learning and Memory* 1979;5:531–45.
- C.E. Snow, P.O. Tabors, P.A. Nicholson, and B.F. Kurland. SHELL: Oral language and early literacy skills in kindergarten and first-grade children. *Journal of Research in Childhood Education*, 1994;10(1):37–48.
- S.A. Storch and G.J. Whitehurst. Oral language and code-related precursors to reading: Evidence from a longitudinal structural model. *Developmental Psychology* 2002;38, 934–47.
- J. Trelease. *The Read Aloud Handbook*. Penguin. 2006.
- B. Walker. Mainstream module. Presented at the University of North Carolina—Chapel Hill, Chapel Hill, NC. 2004.
- C. Yoshinaga-Itano. Efficacy of early identification and intervention. *Seminars in Hearing* 1995;16:115–120.
- C. Yoshinaga-Itano. Levels of evidence: universal newborn hearing screening (UNHS) and early hearing detection and intervention systems (EHDI). *Journal of Communication Disorders*, 2004;37:451–65.
- C. Yoshinaga-Itano and A.L. Sedey. Early speech development in children who are deaf or hard-of-hearing: Interrelationships with language and hearing. In: C. Yoshinaga-Itano and A.L. Sedey (Eds.), *Language, speech, and social-emotional development of children who are deaf and hard-of-hearing: The early years*. *The Volta Review*, 100, 181–211. 2000.
- C. Yoshinaga-Itano, A.L. Sedey, D.K. Coulter, and A.L. Mehl. Language of early and later-identified children with hearing loss. *Pediatrics* 1998;102:1161–71.

Universal Design for Hearing



Universal design is a concept that started in the field of architecture, but is now being talked about enthusiastically in education. Universal design in architecture means designing buildings, products, and spaces that are as usable as possible by as many people as possible, regardless of age, ability or situation (for example, putting volume controls on public telephones in noisy lobbies is helpful for those with hearing loss, but most people without hearing loss appreciate and use those volume controls too). In education, we talk about universal design in creating classrooms and learning spaces that work for all students and include meeting a wide variety of learning needs.

The problem that we encounter in classrooms is that learning in school involves a large part of the day spent in listening, yet we also know that young children have immature listening skills and that many classrooms have poor acoustics. Research shows:

- Up to 75% of the school day is spent in listening
- Because children have less ability to listen in noise, researchers recommend that a teacher's voice needs to be at least 15 decibels louder than the background noise, yet typical classrooms have noise levels equal to or only slightly lower than the levels of the teacher's voice
- Up to 20% of young children will have temporary, mild hearing loss due to middle ear fluid at any given point during the school year
- Children's listening and processing skills take a long time to develop. While we used to believe that children's listening skills

were mature by age 12, more recent research shows that children's brains and auditory systems are continuing to mature and develop well into adolescence.

Dr. Karen Anderson calls this "learning to listen in a sea of noise," and there is ample evidence that many of today's classrooms represent difficult places to listen. A simple search of the literature turned up over 100 research articles documenting the problems with acoustics in classrooms, speech perception difficulties experienced by students, vocal fatigue problems experienced by teachers, and the benefits of addressing poor listening environments (such as installation of sound field amplification systems).

Providing mild amplification of a teacher's voice using a sound field system is one way to improve the listening environments. Some of the benefits of sound field systems found in research studies include the following:

- Improvements in speech perception scores
- Improvements in academic achievement, including reading and math scores
- Improvements in student attention and behaviour
- Decrease in teacher vocal fatigue problems and sick time
- More teaching time available due to better classroom management, less time spent repeating instructions and better student attention

Ideally, of course, classrooms should be designed and built with the goal of ensuring the best possible listening environment so that we don't need to try and find solutions after the fact; in fact, appropriate acoustical treatment of classrooms represents only a small percentage of the total cost of construction. Because good acoustical design does not always happen, improving classroom acoustics for all children has become a commitment by administrators, principals, teachers, and parents by funding and installing as many sound field systems as possible in existing schools. Some school districts in the United States, and a few in Canada, have

implemented plans to equip every new classroom in the district with sound field amplification systems at the design stage. Installing sound field systems when new buildings are being built and wired is certainly far easier and far less expensive than finding money to purchase, install, and maintain systems for existing classrooms. While sound field systems are available for individual students, there are no funds available for schools to purchase these systems to improve the listening environment for everyone.

An excellent resource for more information about classroom acoustics, including recent Canadian research, acoustical standards, and advocacy for better listening environments can be found at the website for the Canadian Association of Speech-Language Pathologists and Audiologists at this link, including a sample petition letter for lobbying government on this issue: www.caslpa.ca/english/resources/noise_in_classroom.asp#materials.

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Communication Outcomes of Pre-school Children with Hearing Loss Enrolled in Auditory-Verbal Therapy Programs in Ontario

This prospective, longitudinal research study examined the question of how children with permanent bilateral hearing loss (PBHL) enrolled in Auditory-Verbal Therapy (AVT) programs in Ontario compared to their hearing peers on standardized measures of speech, language, and global development.

Two groups of children participated in the study; a group of 65 children with hearing loss enrolled in recognized AVT centres in Toronto and Ottawa, and a control group of 48 children with normal hearing. The participating children in both groups ranged in age from 12 to 60 months and had no additional severe handicapping conditions that might have impacted on their speech and language development. In addition to being enrolled in AVT, inclusion criteria for children with hearing loss were the presence of a bilateral sensorineural or conductive hearing loss with congenital or early onset (< 6 months), consistent use of hearing technology, and English as language of intervention. Of the participating children with permanent bilateral hearing loss (PBHL), 68% had severe to profound hearing losses. Thirty two of the children with PBHL wore cochlear implants (CIs) and 33 wore bilateral hearing aids. Mean age of diagnosis was 13.9 months (range 0.8–42.9 months) and mean length of enrollment in AVT was 29.5 months (range 9.3–53.7 months).

Both groups of children were administered the Preschool Language Scale- Fourth Edition (PLS-4) (Zimmerman, Steiner, and Pond 2002), the Peabody Picture Vocabulary Test Third Edition (PPVT-III) (Dunn and Dunn 1997), the Goldman Frisloe Test of Articulation, Second Edition (GFTA-2) (Goldman and Frisloe 2000), and the Child Development Inventory (CDI) (Ireton 1995). The number of children who were tested with each measure varied depending on their age at the time of their last assessment. These standardized measures are commonly used assessment tools that have sound psychometric properties and have been normed on hearing children.

Analyses indicated that over 65% of participants with permanent bilateral hearing loss (PBHL) scored in or above the normal range on the speech and language measures used in the study. More specifically, for the PLS-4, 86.8% with scores for this test fell into the normal range for receptive language and 74.6% for expressive language. For the PPVT-III, 67.9% of chil-

dren with scores for this test performed at or above the normal range. For the GFTA-2, 66.0% of children with scores for this test performed at or above the normal range. Results from the CDI, a parent report instrument, showed no significant differences in performance between the children with hearing loss with scores for this measure and their hearing peers on the scales of gross motor, fine motor, self-help, and social development. Significant differences in expressive and receptive language were found between the two groups of children; however, the findings are highly variable for the group of children with hearing loss. Findings from the CDI indicate that parents appear to be reliable reporters of their children's development across all domains.

Degree of hearing loss was found to be correlated with several of the standardized outcome measures, however no single variable consistently discriminated between the higher and lower performing groups of children with permanent bilateral hearing loss (PBHL). No consistent correlations with any of the outcome measures and hearing age or age of diagnosis were found, nor were the differences between the higher and lower performing children consistently attributable to age at assessment or type of hearing technology.

The results of the study suggest that a large percentage of the children enrolled in AVT fell within normal limits in their performance on the individual measures used in the study. Results also suggested differences in development between the two groups of children are apparent in the areas of speech and language, but not consistently in other areas.

The study addressed some of the criticisms of previous research examining outcomes of AVT through the inclusion of a control group and the adoption of a prospective, longitudinal research design. Additional analyses examining the potential influences of age of diagnosis, hearing age, degree of hearing loss, global development, SES, parental involvement and other variables of interest are ongoing.

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