Teaching Children with CIs to Speak More than One Language

The United States population experiences a steady immigration growth with more than 40 languages being spoken by over 55 million people. Furthermore, neonatal hearing loss is particularly prevalent among Hispanic-Americans and those from low-income households. As a result, many speech-language pathologists, deaf educators, and audiologists are serving an increasing number of children with cochlear implants who come from families that do not speak English. Since English is the language of the public schools in the United States, bilingualism will become a necessity for many families, including those who have children with cochlear implants.

However, the concern that learning a second language can interfere with the mastery of the majority language and cause language impairment has historically led clinicians and educators to discourage second language learning, especially among pediatric cochlear implant users. In contrast, there is no data to support the impression that there is a higher incidence or more severe presentation of language impairment in children learning two spoken languages versus one. Language impairment found in bilingual children with typical hearing is not because of the simultaneous acquisition of two languages but rather a problem in the child’s innate ability to acquire language. In addition, research with typical hearing children who are learning English as a second language indicates that they should receive skilled intervention in their primary language when a language disorder is diagnosed. Results of therapy outcome studies on bilingual children with typical hearing who have language impairment have indicated that language intervention provided in both languages can yield the same results as monolingual children.

For bilingual and monolingual families who have children with cochlear implants, facilitating their child’s successful integration into the family and the majority society also requires intervention designed to increase performance in both spoken languages. This has been possible with the implementation of mandated hearing screenings, early identification, and special treatment for infants with hearing loss. Such results are being seen across North America for some children with cochlear implants when compared to their monolingual hearing impaired peers’ intervention ages.
Though agencies may not have adequate bilingual staff to accommodate for the variety of language backgrounds on any one caseload, there are ways to compensate for these shortages. Current family-centered, spoken language intervention models offer hope and opportunity for children with hearing impairments to develop multiple spoken languages on par with their auditory-oral, hearing impaired peers even when the home language is not English. The pathway to such success is paved by supporting bilingual development through appropriate assessment and intervention, as well as hiring bilingual support staff and service providers.

Ideally, assessment and intervention should be conducted in the language of the home by a skilled bilingual service provider proficient in that language. In cases where this is not feasible, bilingual support personnel can assist service providers in delivering the appropriate instruction. If trained properly, this arrangement can be effective in implementing instructional activities and help skilled providers accommodate families and children with special needs. Bilingual support personnel are not responsible for designing assessment tools and making educational placement decisions, and are not considered specialists. They perform their well-defined duties under the direct supervision of a monolingual listening and spoken language specialist, speech-language pathologist, certified teacher of the deaf, audiologist, or psychotherapist trained and knowledgeable in multi-lingual learning issues. Bilingual support personnel who are biliterate can also be recruited to develop much needed learning material in other languages.

Professionals who understand the expected course of both monolingual and bilingual language acquisition will be better prepared to analyze pertinent data crucial for facilitating each individual child’s success. Integrating issues related to hearing impairment with matters relevant to the typical and atypical development of children without hearing impairment who speak another language will aid in the development of an appropriate treatment plan. A discussion of assessment procedures that combine these issues is beyond the scope of this article and the reader is referred to Goldstein and Austin for further reading and understanding of bilingual development and related issues.

It is well known that children with cochlear implants benefit from rich linguistic environments. When a child is regularly exposed to a language other than the majority language, and when that minority language is recommended for intervention, careful investigation of center-based programs that can also provide intense immersion in the majority language is necessary. When selecting intervention models, efforts need to ensure that the targeted input will be meaningful or learning will not occur. To facilitate bilingualism, Pearson reports that previous studies found participants should spend a minimum of 20% (15 hours a week) in the minority language. Other researchers specify spending up to 30% or more of the children’s time (25 hours a week) in the minority language.

Current educational models for typical hearing children with language disorders who speak more than one language employ expert professionals who immerse and shape children’s oral communicative behaviors. These models are also consistent with auditory-oral programs implemented by educators of the deaf. In both instances, skilled manipulation of the rate of instruction, cueing hierarchies, and specific strategies are used during fun and meaningful activities with rich, comprehensible linguistic input in quiet environments during individual, small, and large group sessions.

For children with cochlear implants whose home language is not English, parents can work within the framework of an established language/speech/audition plan developed by a listening and spoken language specialist. In individualized sessions, therapists teach parents strategies to facilitate the attainment of weekly goals at home. The idea is to maximize the family’s capacity to help their child learn spoken language through listening. These sessions can be done with a trained interpreter, a trained paraprofessional who speaks the home language, or a bilingual therapist who speaks the home language. Meanwhile, the child is immersed in English-speaking spoken language programs at school on a daily basis. Ideally, these programs are implemented by skilled professionals with expertise in hearing loss, including educators of the deaf, speech-language pathologists, and audiologists.

The same teaching strategies used for any monolingual, English-speaking family who has a child with a hearing impairment...
are effective for coaching parents who do not speak English. When working with these families, interventionists will need to prepare themselves to effectively connect culturally with each family while paying extra attention to their body language and how things are said. Intervention provided in the home language with trained bilingual personnel or trained interpreters begins with education on the hearing loss, treatment options, and the establishment of a good parent-child relationship. For those who choose a spoken language approach, initial counseling is followed by a clear and simple plan for the consistent use of hearing technology and development of listening skills in the home language.

Strategies that facilitate spoken language development can be implemented and shared with family members in any language with appropriate personnel under the guidance of the managing specialist. These may include shared book reading, “observe, wait, listen, and speak” (OWLS), modeling and imitation, recasting, choral speaking, expansions, and extensions.

There are resources available in other languages that are designed to help professionals effectively teach families strategies to develop listening skills. These include the Oral Deaf Education website (http://www.oraldeafed.org), Learn to Talk Around the Clock (Rossi, 2003) and a variety of materials available from MED-EL (see sidebar). Lessons at no cost to parents are also available in 50 languages online and/or through traditional mail from the John Tracy Clinic in Los Angeles, California (http://www.jtc.org). Bilingual children’s songs in English and other languages are available online at http://www.sara-jordan.com.

Bilingual therapists or monolingual therapists with their interpreters can also use resources as a reference tool when translating talking points during therapy such as My Baby and Me: A book about teaching your child to talk. When resources are available in English and other languages such as You Make the Difference, It Takes Two to Talk, and the John Tracy Clinic Distance Education Course for Parents, monolingual English-speaking therapists can use both materials in tandem to convey and practice strategies with families. Bilingual children’s books in English and 40 other languages are available on http://www.languagelizard.com.

During typical intervention with young children who are hearing-impaired and learn one language, parents learn easy strategies to accomplish weekly goals in the context of daily routines. The idea of learning two languages, especially one the parent does not know, can be overwhelming for caregivers. Therefore, additional strategies will need to be considered to simplify this process. As parents immerse their child in an English-speaking program, the choice of strategies will depend on the goals and what language resources are available. It is important to remain flexible in teaching day-to-day language behaviors. With consistency and gentle persistence, parents can learn to facilitate the development of the minority language or English as a second language during daily activities through the use of strategies such as the following:

• Minority Language at Home (ML@H) - the minority language is spoken at home while English is used in the community.
• One Parent One Language (OPOL) - one caregiver speaks English; another caregiver speaks the minority language.
• Time and Place (T&P) - a mixture of OPOL and ML@H.

These are implemented while accommodating for different linguistic environments during different times of the week or in different places. For example, the child may be exposed to Spanish on Wednesday at a grandparent’s house, English with an aunt on Wednesday at the grocery store, Spanish at home with
a caregiver the rest of the week, as well as English with another caregiver in the evening and during school.

In her book, *Raising a Bilingual Child*, Pearson provides parent-friendly explanations of these strategies and their use. She also provides self-evaluation tools to reference when counseling parents, helping them to decide on a strategy that will fit their lifestyle, or discovering solutions for common questions and obstacles.

**CONCLUSION**

In order to maximize the listening and spoken language skills of infants and children with cochlear implants who are or will be constantly exposed to more than one language, a team of professionals will need to focus their attention on designing an intervention program intended to implement positive change in the languages the children will need to be successful in their lives. This situation presents exciting challenges that can be mitigated through the enhancement of current intervention models for children with cochlear implants, the employment of multilingual professionals and the publication of more teaching resources in other languages.

A comparison of strategies for developing bilingualism in bilingual, monolingual, and minority-language speaking families is provided in Table 1. A list of strategies for English immersion programs is provided in Table 2.

**Table 1. Facilitating Bilingualism through Skilled Intervention**

<table>
<thead>
<tr>
<th></th>
<th>Bilingual – Majority and Minority Language Speaking Families</th>
<th>Monolingual Minority Language Speaking Families</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Home</strong></td>
<td>Mutual strategizing for home intervention – ex. Use English in the community, minority language at home.</td>
<td>Minority language is spoken at home and in the neighborhood.</td>
</tr>
<tr>
<td><strong>Therapy</strong></td>
<td>Individual therapy in the majority language with active parent participation – parent uses the strategies in the minority language at home.</td>
<td>Individual therapy is provided in the minority language (with bilingual therapist/assistant or monolingual therapist and an interpreter). Parent uses the strategies at home.</td>
</tr>
<tr>
<td><strong>School</strong></td>
<td>English immersion through an auditory-oral or mainstream preschool.</td>
<td>English immersion through an auditory-oral preschool program.</td>
</tr>
<tr>
<td><strong>Extra-curricular</strong></td>
<td>Parent may enroll the child in additional, individualized minority language training.</td>
<td>Parent may enroll the child in additional, individualized majority language training.</td>
</tr>
</tbody>
</table>

**Table 2.**

**Strategies for Educational Environments**

- Assure a 20-30 dB signal to noise ratio
- Pause often
- Repeat, rephrase, and restate information between pauses; utilize all effective evidenced-based strategies that encourage listening and speaking
- Use shorter sentences and pause between them without ruining the natural rhythm and syntax of connected speech
- Use a multi-modal spoken language approach to learning – incorporate body movements
- Try to teach new information in as quiet an environment as possible
- Use preparatory sets to inform students what is about to happen
- Use gestures and facial expressions to supplement the meaning
- Allow extra processing time by waiting (longer than a pause) for the child to answer questions
- Use student’s name to get their attention
- For learners first exposed to a new language, a silent period may last up to two years
- Emphasize key words through acoustic highlighting
- Initially focus on comprehension while gently encouraging production
- Work in small groups so they can see and hear the teacher easily

(Pearson, 2008; Rhoades, et. al, 2008; Roseberry-McKibbin, 2001)

Bibliography for this article is located on page 8
Music and MED-EL

MED-EL has recently released several new resources for music therapy and music enjoyment for children using cochlear implants.

“Musical Ears” is a comprehensive music therapy program for children with cochlear implants. Numerous therapy activities, musical instruments and a Music Evaluation form are included.

“Music and Young Children with CIs” is a free resource to help parents get started with music activities at home. A Musicality rating scale is included. Available as a download in English and Spanish at www.medel.com

“The Farmer’s Cheese” is a special musical composed for Children with CIs. This original piece was composed by Oliver Searle and based on a children’s story written by Geoff Plant. A colorful hardback story book with both a CD and DVD of the musical concert makes up the Farmer’s Cheese package.
WHAT’S NEW WITH MELLIE!

“Mellie and Her Cochlear Implants” storybook is now available in Spanish.

“Mellie goes to nursery school”, a delightful new story is available as a free download at www.medel.com

“The LittlEARS Diary” has been revised to include additional activities for parents. Additional diaries are available as a free download from www.medel.com

“A How to Guide, Getting Connected” and “Taking Steps to Enjoying Music with your Cochlear Implant” are two new resources to help your students connect to a variety of ALD’s and improve their music enjoyment.

For more information on these new resources contact usamarketing@medel.com
SAVE THE DATE
COMING ATTRACTIONS: Workshops and conferences

13th Symposium on Cochlear Implants in Children - followed by the US debut of “The Farmer’s Cheese” musical
July 14-16
Sheraton Hotel, Chicago Illinois

Children’s Memorial’s 2011 Listening and Spoken Language Summer Programs
Symposium: August 1-4;
Practicum: August 5 and August 8-12
Who should attend: Early interventionists, classroom teachers, audiologists, teachers of the deaf, speech-language pathologists, program and school administrators, therapists working with children who are deaf and hard of hearing

Location: The Children of Peace School, home of the Holy Trinity Deaf Program in Chicago.
For further information & to download an application visit:

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Communication program. BRIDGE is a program developed by MED-EL Corporation especially designed for education and rehabilitation professionals, implant users and parents to help BRIDGE the gap between implantation and the rapid development of improved listening skills and spoken communication. The BRIDGE program consists of a wide variety of products, resources and materials for adult and pediatric habilitation, assessment, and device management.

For more information contact us at usaeducators@medel.com or call 1-888-633-3524.


8. Waltzman et al. (2008), Ibid.


34. John Tracy Distance Education: http://www.jtc.org/parent-child-services/distance-education-courses-parents
