



CAEDHH
www.caedhh.ca

THE CANADIAN JOURNAL OF
EDUCATORS
OF THE DEAF AND HARD OF HEARING

Volume 3, Issue 1, 2012

Teachers Supporting Students



Publications Agreement Number 40025049 • ISSN 1923-533X



Published by
ANDREW JOHN
PUBLISHING INC.
www.andrewjohnpublishing.com

Living Life's Everyday Adventures



child
friendly
hearing
care



Oticon Streamer ConnectLine Microphone Oticon Safari

Your child can connect more closely to the world with the Oticon ConnectLine Microphone *–the ideal complement to your Safari hearing instruments*

Children and teens of all ages want to connect to electronic devices. This can be challenging for children wearing hearing aids. With advances in Bluetooth™ and wireless technology they are now able to get connected. Chatting with friends, listening to music, watching movies and playing computer games can be done with far more ease than before! And with the ConnectLine Mic, listening

performance is dramatically improved – even in places where one-to-one conversations might before have been very difficult or even impossible. The small, discreet wireless microphone is worn by the person speaking and their voice is wirelessly transmitted to the hearing instruments through the Streamer. Whatever they're doing and wherever they go, ConnectLine and Safari keep you in control.



CAEDHH
www.caedhh.ca

Volume 3, Issue 1 • 2012

Publications Agreement Number 40025049

EDITORS-IN-CHIEF

Maureen Clarke, CTD
mclarke@nvsd44.bc.ca

Nancy Schenkeveld
nancy.schenkeveld@gov.mb.ca

MANAGING EDITOR

Scott Bryant
scottbryant@andrewjohnpublishing.com

CONTRIBUTORS

Cassie Bell, Marion Bremner, Maureen Clarke,
Jim Coleman, Paul Dixon, Charlotte Enns,
Verena Hunzinger, Nancy Schenkeveld,
Tom Tylka, Erica Weselowski

ART DIRECTOR/DESIGN

Andrea Brierley
abrierley@allegrahamilton.com

SALES AND CIRCULATION COORDINATOR

Brenda Robinson
brobinson@andrewjohnpublishing.com

ACCOUNTING

Susan McClung

GROUP PUBLISHER

John D. Birkby
jbirkby@andrewjohnpublishing.com

•••••

Canadian Journal of Educators of the Deaf and Hard of Hearing, is published twice annually by Andrew John Publishing Inc., with offices located at 115 King Street West, Suite 220, Dundas, ON L9H 1V1.

•••••

We welcome editorial submissions but cannot assume responsibility or commitment for unsolicited material. Any editorial material, including photographs that are accepted from an unsolicited contributor, will become the property of Andrew John Publishing Inc.

The publisher and the Canadian Educators of the Deaf and Hard of Hearing shall not be liable for any of the views expressed by the authors published in *Canadian Journal of Educators of the Deaf and Hard of Hearing*, nor shall these opinions necessarily reflect those of the publisher.

Return undeliverable Canadian Addresses to:



115 King St W., Suite 220, Dundas, ON L9H 1V1



Contents

COLUMNS

- 5 Message from the CAEDHH National Director

FEATURES

- 7 Apps for Student Learning
By Maureen Clarke
- 8 Ask the Expert
By Cassie Bell & Marion Bremner
- 10 Do You Know a CAEDHH Member Who Deserves National Recognition?
- 11 CAEDHH Membership Information
- 12 Good Vibrations from the Manitoba School for the Deaf
By Jim Coleman MSc, CTD and Erica Weselowski BMus, BA
- 14 Acoustics in the Classroom: A Historical Perspective
By Maureen Clarke and Tom Tylka
- 17 Ann's Story: Early Literacy Intervention with a Child Who is Deaf
By Verena Hunzinger and Charlotte Enns University of Manitoba
- 23 The Deafblind Club Experiences the UBC Museum of Anthropology
By Paul Dixon



COMFORT DIGISYSTEM

Crystal clear digital FM



For participation in all situations

The Comfort Digisystem range of microphones and receivers is wireless and fully digital. It uses the advantages of digital technology perfectly in school, at work and at home

– wherever crystal clear sound perception is needed.



Distributed by:

Supportive Hearing Systems Inc. | 283 MacPherson Avenue | Toronto, Ontario | M4V 1A4
CANADA | Phone 1-800-732-8804 | info@SimeonCanada.com | www.SimeonCanada.com



Comfort Audio
HEAR THE FUTURE

Message from the CAEDHH National Director

It is hard to believe but another school year has come and gone. I hope yours has been a rewarding and enjoyable one.

The National Executive has been focusing on your feedback from the CAEDHH Membership Survey and how we can continue to provide the services and supports you value as well as to implement some of your suggestions. An executive meeting was held in April via SKYPE focusing on the following main areas: the treasurer and financial reports; goals for the executive; and the biennial conference.

Our treasurer, Kathy Solmundson, found it challenging to meet the time commitment of her role and has recently resigned. We thank Kathy for her hard work on our behalf. We would like to welcome Sharon Forzley as our new treasurer. Sharon has many years of experience in accounting and we value the expertise she brings to the position. Our financial reports were also reviewed during the meeting and we are pleased to be “on target” with our budget.

In discussing the goals for this executive, consideration was given to both the things you value about CAEDHH as well as to your actual survey suggestions for specific goals. Your highest priority was for CAEDHH to continue to promote our certification standards and to advocate for the hiring of trained personnel to work with students who are deaf/hard of hearing. CAEDHH is dedicated to upholding the standards of our profession and maintaining our standards.

Another area of focus will be the national professional development provided to the membership. This is an area which requires serious review, in light of the low attendance at the last few biennial national conferences and the cancellation of our conference last year due to a lack of registrants. Many members have expressed difficulties with the cost to attend conferences, the location/ease of travel, and the programme offered (as we are such a diverse group). Several provinces offer their own PD opportunities through the school year (some for free), which makes it more difficult to entice members to travel to a distant CAEDHH conference. On the membership survey, only 41% of respondents expressed an interest in live national conferences while 45% preferred online conferences. CAEDHH National is exploring a number of options to address these concerns and how we can best meet your professional development needs. These include: partnering with regional CAEDHH conferences during the school year (which raises the issue of release time from your employers); continuing to offer a summer conference; and offering PD via webinars (linked to regional conferences). Your regional director will be bringing this discussion to your affiliate for your input.

The CAEDHH National Executive will be exploring different webinar programs/tools and the costs and logistics involved in hosting a webinar. The provision of PD via webinars is certainly a growing trend among conference providers as they offer access to a larger pool of participants at a reduced cost for those participants compared to attending a live conference. We will certainly keep you informed as we learn more and move forward with more concrete plans. Due to a

number of factors, including the uncertainty of numbers of attendees for live national conferences at this time, it is difficult for affiliates to commit to preparing and hosting a national summer conference. As a result, CAEDHH will not be hosting a regular live biennial conference in 2013. (We do, however, hope to offer professional development via a webinar.) This means we will not be able to conduct our usual live Biennial General Meeting, so we will be discussing ways to share information and obtain your feedback through other avenues. In addition, networking has always been an important component of our biennial conferences and the CAEDHH National Executive is thus also exploring avenues to expand our networking with the membership. This was also a goal mentioned by members on the survey. Stay tuned!

The third goal for CAEDHH National this term is to continue to address issues in the field through CAEDHH Connects (the listserv), the journal, and other means as appropriate. If you have an issue or concern to share, please contact us and we will do our best to support you or to provide the appropriate information. We will also continue to address your queries, whatever they may be. Recently we have addressed questions regarding membership, certification, and potential conference speakers.

In response to your survey feedback regarding our website, CAEDHH will be exploring potential improvements to the look, functionality and content of www.caedhh.ca. We know the listserv is also a very important tool for you, so please continue to take advantage of this valuable resource to share and gain information from one another.

Is there a local member who is retiring/retired and whom you feel has made a significant contribution to CAEDHH National? If so, you can recognize them by nominating them for a Honorary Lifetime Membership with CAEDHH. Please refer to the criteria for this honour on our website (click on “Membership,” then “Awards”). A letter of nomination, outlining the nominee’s contributions and membership history, should be submitted thorough your affiliate to CAEDHH National in September.

Members who are still working and who have made a significant contribution to CAEDHH National may be nominated for an Award for Outstanding Personal Contribution to CAEDHH. Please contact your regional director for more information.

Applications for the RJD Williams Scholarship will also be accepted in the fall. If you are conducting research, creating materials or continuing your studies, please consider applying for this scholarship. It is one of our benefits to you, our members.

This edition of the *CJEDHH* is focused on “of-the-moment” issues in the field as we seek to keep current and to keep you informed. Articles reflect how teachers are supporting students and encompass the topics of literacy development, acoustics, bullying, more great apps, and examples of positive and successful group activities for students. I wish

Message from the CAEDHH National Director



to thank the contributors for sharing their articles which will hopefully inform and inspire you.

All the best for a relaxing, rejuvenating and recreational summer to you all!

Nancy Schenkeveld
CAEDHH National Director

CAEDHH National Executive - November 2011



Back Row: Cindy Neil (MB Director), June Hamer (AB Director), Pam Guilbault (Pacific Director), Nancy Schenkeveld (National Director), Tracey Brown (ex-ON Director).

Front Row: Maureen Clarke (Past National Director), Tina Royle (NL/Labrador Director), Phyllis Anne Blanche (Maritime Director).



CAEDHH
www.caedhh.ca

CAEDHH National Executive 2011 - 2012

Nancy Schenkeveld, CTD

National Director
nancy.schenkeveld@gov.mb.ca

Maureen Clarke, CTD

Past National Director
mclarke@nvsd44.bc.ca

Pam Guilbault, CTD

Pacific Regional Director
pguilbault@sd61.bc.ca

June Hamer

Alberta Regional Director
jhamer@providencechildren.com

Cindy Neil, CTD

Manitoba Regional Director
cneil@sjsd.net

Phyllis Anne Blanche, CTD

Maritimes Regional Director
pa.blanche@ns.sympatico.ca

Tina Royle

Newfoundland and
Labrador Regional Director
tina@ncsd.ca

Sharon Forzley

National Treasurer
Sharonforzley@hotmail.com

Apps for Student Learning

By Maureen Clarke

We are all eager to discover new apps that will entice our students into learning a variety of skills. Many of you have shared your ideas through our listserv, CAEDHH Connects. Here are a few more ideas for you to try out.

Hearing resource teachers, Jo Szabo and Stepha Locke (BC) keep an update on their website, www.dhhapps.notlong.com. They have organized the apps into different categories: Grammar, Speech, Vocabulary, Math, Itinerant, as well as a general list. Check it out because it has some introductory uses of the apps. Kudos to both of these teachers!

Recently the North Vancouver School District teachers met with Dave Gordey, an audiologist from Oticon Canada. He shared the following apps for teaching about hearing loss or working with children who have a hearing loss:

1. **Apps for Hearing Conservation:** Too Loud (free) a sound level meter; Awareness (free); dB Meter Pro (\$2.99); Decibel Ultra (free)
2. **Apps for Hearing Screening:** Hearing-Check (free); Siemens Hearing Test (free); Hearing Kit (\$.99)
3. **Apps for Students with Hearing Loss:** Hearing Aid TicTacToe (\$8.99); Rule the School Self-Advocacy Board Game (\$14.99)
4. **The Hearing Loss Simulator** (\$1.99) contains pre-recorded common sounds and has the option to let you record your own voice for playback through the different hearing loss configurations. The Hearing Loss Simulator includes graphics to show where the common sounds, speech, and individual speech sounds are located for loudness and frequency.
5. **LUMA Audiology** (free) is one in a series of LUMA apps from Eyemaginations and includes 15 videos explaining the vestibular system, binaural hearing loss, tinnitus, hearing aids, and more. Download the other LUMA apps for a complete collection of educational content. The LUMA apps are free to all Eyemaginations LUMA clients and are a free demo for all others.
6. **Teaching Ear Anatomy:** Ear ID (\$2.99); Gray's Anatomy (free); Anatomy (free)
7. **Auditory Discrimination App** – Secret Sound Lite (free)
8. **Speech and Language App** = Smarty Ears – for professionals wanting tools to assist with speech and language evaluation and therapy

We hope to update this resource as we hear from you so please continue to share your experiences and your lists!



One Student's Experience of Bullying

By Cassie Bell

In my head, I was just like everyone else. A 12-year-old girl in grade 7. I started a new school for junior high because it was grade 7 which meant some new people, new teachers, and new classes. The only thing that was still the same, was the fact that I was deaf. My hearing has been gradually decreasing since kindergarten when I was first diagnosed with a hearing loss. My parents chose to put me in a hearing school and let me try different things to help me hear. In grade 7, I had an interpreter. Since I noticed a lot of people changed between grade 6 to grade 7, I decided to find some new friends. This was harder for me than it seemed. No one wanted to be friends with “the deaf girl.” I was a smart girl, probably because since I wasn't friends with a lot of people, I tried hard in school.

It happened one lunch hour. Probably in April or May of grade 7. I sat in my homeroom just like everyone else and ate my lunch. Two boys started making fun of me, calling me names and laughing. I couldn't hear what they called me but I decided it was probably better that way. Next thing I knew, I had a group of grade 7 kids crowded around my desk. There was this one boy, one I had always been nice to, and he said “Cassie, you have no friends. No one in this entire room is your friend.” I looked

around and everyone agreed with him. Even the girls I thought were my friends. I got up and ran to the guidance counsellor's office with tears streaming down my face. I sat down on the bright orange couch and continued to cry.

After I talked with my guidance counsellor, I felt a little bit better. The boy that told me I had no friends, moved at the end of that year, but the bullying didn't stop. In grade eight, I had kids that would come up to me, start talking and cover their mouths so I couldn't read their lips. They thought it was a joke. It hurt. When I got a cell phone in grade 9 my number was given out and people called and left voicemails saying how I probably couldn't hear them. The bullying continued until the day I graduated from junior high in June of 2010. I was finally out of that school.

I'm going to be going into grade 12 in the fall and the bullying still happens sometimes. It's definitely gotten easier though. I've learned how to deal with bullies. It isn't easy and it takes a lot of guts to stand up to them but because of how much I was bullied when I was younger, I am stronger. I can stand up and say “my name is Cassie Bell, and I am deaf,” without feeling ashamed. I am proud of who I've become.

In this issue we feature a question about bullying that is answered by Marion Bremner.

Marion Bremner is a social worker with over 30 years of experience working with families and children who are deaf/hard of hearing. She is presently employed with Manitoba Education as a social work consultant with the Deaf and Hard of Hearing Services Unit. Marion recently became an accredited Positive Parenting Program Group Facilitator and is presently supporting the initiation of a Manitoba Chapter of Hands and Voices.

Question: A student I support is being bullied. How can I support the child, school and parents in this situation?

Words are powerful things.
They can ruin anybody.
Break somebody down to their core.
They can make someone want to die.

But they're powerful things.
They can help heal.
They can persuade for the better.
They can be used for so much more than bullying.

Words can be used anyway you choose.
Make a good choice.

~ Author Unknown

Almost daily, there is a news clip referring to bullying, whether it is about a hurtful story, tips for parents or a newly developed curriculum for teachers to follow!

Bullying has been identified as a problem that creates a climate of fear, affecting the whole school. Bullying is intentional aggressive behaviour which can take the form of physical or verbal harassment. Bullying has been described as involving an imbalance of power. As educators, you are very aware of the types of bullying behaviours (e.g., teasing, insults, gossiping, etc.) which cause victims to feel upset, afraid, ashamed, embarrassed, and anxious about going to school.

The presence of a hearing loss can impact self-esteem, social skills, opportunities to socialize, mental health, language development, attention and concentration, incidental learning, listening skills, processing time, learning style, and literacy skills. Language and communication barriers faced by the Deaf or hard of hearing student can manifest themselves in increased risk to being bullied.

It only takes one bullying incident to change a positive educational experience into a negative one. A child who is Deaf or hard of hearing is faced with many unique challenges as they try to keep pace with their hearing peers in a mainstream classroom or in a classroom with other Deaf or hard of hearing children. Add bullying to these challenges and life can become overwhelming for the student, parent and the school staff. Providing appropriate support and strategies can be as varied as the classmates, schools and communities where the bullying occurs.

As counsellors, teachers and parents it is hard to believe that a

student with special needs would be the victim of bullying, but students who are perceived as different are disproportionately the targets of bullies. Those Deaf or hard of hearing children who have difficulties in social situations and perhaps those that lack a support system are often the students that a bully may recognize. Those students, who are already struggling with self esteem issues, are the students who will not report bullying. These students in particular will need extra support/teaching about what bullying is and that it is something that should never be accepted by them. There are many bullying training courses and materials available to support schools in developing bullying policies and protocols. Most bullying campaigns emphasize to the student that they have the right to be treated with respect and feel safe! We need to make sure that the student who experiences and/or witnesses a bullying incident reports it.

Deaf or hard of hearing students will require understanding by the listener. These students may take longer to tell the teacher what they want to say. Communication can become more difficult when students are upset, particularly if they do not have the language level needed or if they have difficulty expressing themselves.

Let us continue our work to develop "Zero Tolerance for Bullying" and support the Minnesota Hands and Voices Slogan regarding this issue: "THE END OF BULLYING BEGINS WITH ME."

There are hundreds of websites that offer information and suggestions for parents and educators on the "how to's" of bullying programming. Some specific sites that have been most helpful with supporting students with special needs include:

National Bullying Prevention center: A web-site created by PACER, a parent training and information center for families of children with disabilities
www.pacer.org/bullying/

StopBullying.gov: A government website that discusses bullying
www.StopBullying.gov

Bullying and the Child with Special Needs
www.abilitypath.org/areas-of-development/learning-schools/bullying/G

Guidance document by Maurice Elias titled: "Addressing bullying of students with disabilities" (this article will direct you to a link for a guidance document)

Recently in Manitoba we provided two separate opportunities for our Deaf and hard of hearing students to understand what bullying is. The Canadian Red Cross RespectedED Violence and Abuse Prevention program provided the framework and instructor to support our students in learning and practicing new skills "To Stop the Hurt." This an educational program to promote safe and healthy environments for children and youth, free from bullying and harassment.

<http://www.redcross.ca/article.asp?id=000294&tid=030>

Do You Know a CAEDHH Member Who Deserves National Recognition?

Honorary Lifetime Membership

Do you know a CAEDHH member who is retired/retiring and who has made a significant contribution to CAEDHH on a national level? If you wish to honour this member, you can nominate them for an Honorary Lifetime Membership.

Candidates for consideration must be/have been a CAEDHH executive member at the local and/or national level

AND

must have been a member in good standing for a minimum of 10 years

AND

must have made a significant contribution to CAEDHH on a national level.

Your nomination should include the member's name, province and a brief description of their contributions to CAEDHH National.

Any candidate nominated by a provincial CAEDHH membership must be accepted by a 2/3 vote of the CAEDHH National Executive to receive an honorary lifetime membership. Honorary lifetime memberships are usually granted to those who are retiring/retired.

For further information and to nominate a candidate, please contact your CAEDHH Regional Director. Nominations are due in the fall.

Award for Outstanding Personal Contribution to CAEDHH

CAEDHH members who are still working and who have made a significant contribution to CAEDHH on a national level can also be recognized. You may nominate them for an Award for Outstanding Personal Contribution to CAEDHH.

Candidates for consideration must be a CAEDHH member AND must have made a significant contribution to CAEDHH on a national level.

Again, please contact your CAEDHH Regional Director for further information and to nominate a candidate. Nominations are due in the fall.

R.J.D. Williams Scholarship

In 1991 a scholarship was established from monies presented to CAEDHH as a parting gift from the alumni and staff of the RJD Williams School for the Deaf in Saskatchewan. The scholarship is awarded at each CAEDHH Biennial Convention (the first award was granted in 1993 in Montreal). The scholarship value is \$500.00.

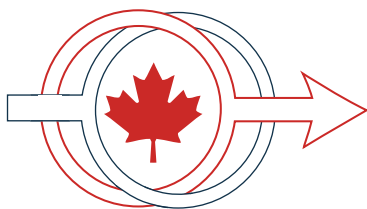
The scholarship is intended to support the following:

- a. Research into deaf/hard of hearing issues (education, language, sign systems, aural habilitation, Deaf culture, counselling, cochlear implants, etc.).
- b. Continued studies in the field of deafness.
- c. Development of materials to promote awareness or extend knowledge of deafness/hearing loss; or, in the area of fiction, to depict deaf/hard of hearing characters or Deaf culture.

The applicants must:

1. be a member of CAEDHH,
2. be a trained teacher of the deaf/hard of hearing, and
3. have a minimum of three (3) years experience in deaf education.

The application form is available on our website www.caedhh.ca. Click on 'Membership' then 'Awards'. Please forward your application to your Regional Director.



CAEDHH
www.caedhh.ca

CAEDHH Membership Information

Membership Year: September to August

Fees:

\$70.00 Full Membership
+ provincially determined fees (contact your Regional Director for local fee)
(Teachers of the Deaf/Hard of Hearing)

\$50.00 Associate Membership
(regular ed teachers, Resource/Special Ed. teachers, Guidance counsellors,
interpreters, etc.)

\$40.00 Retired Membership and Student Membership
(for retired Teachers of the Deaf/Hard of Hearing and those enrolled in a uni-
versity training program to become a Teacher of the Deaf/Hard of Hearing)

\$5.00 Honorary Lifetime Membership (granted by CAEDHH and paid by
provincial affiliate)

Each affiliate has its own membership application form. Please check our
website or contact your Regional Director to obtain a form.

Each fall, Regional Directors send their provincial affiliate membership lists
to the National Treasurer, the CJEDHH editors and our listserv coordinator to
ensure you receive CAEDHH's annual publications and access to CAEDHH
Connects.

“MSD Vibrations” - Manitoba Legislative Building
– Music Month Performance – May 2011.



Good Vibrations from the Manitoba School for the Deaf

By Jim Coleman MSc, CTD and Erica Weselowski BMus, BA

“The BEAT is something you feel inside you. It is a steady pulse, like the beating of your heart or the ticking of a clock or the steps of your walk. The beat is what makes you feel like dancing. The beat turns your drum sounds into rhythms and music.” – *Ben James*

“MSD Vibrations” (the latest of several names) is a percussion group run out of the Manitoba School for the Deaf (MSD). It was started in 2002 by Jim Coleman, a teacher of the deaf at MSD. It is composed of Deaf and hard of hearing students, as well as staff members. They have performed several times over the last few years, including such events as the Deaf Children’s Festival Opening Ceremony (2008), World Deaf Ice Hockey and Curling Championships Opening Ceremonies (2008), the annual Student Services Forum Closing Ceremonies (2009), MSD Networking Day (2010), the Fountain of Peace Opening Ceremonies, and for Manitoba Music Month at the Manitoba Legislative Building (2011). They have also had done performances at MSD for events such as holiday concerts and other school functions.

After a couple of years of having a drum club, Jim decided it was

time that students learn about percussion and music in a structured format. He wrote a curriculum for a class called “Percussion Music Ensemble for the Deaf and Hard of Hearing” and offered it in the second semester of 2009. Most performances are done on Djembe drums, which are played with the hands. However, sometimes the group will use Taiko drums, which are played with drum sticks (called Bachi) and tend to be easier to follow visually. Jim and his students learned Taiko drumming while visiting their sister school in Japan during a school exchange trip. The group has recently started practicing with other instruments such as the balafone and xylophone. There has also been some interested in learning to play the steel drums.

It seems that many people do not understand that music, or sound in general, can be an important part of a Deaf or hard of

hearing individual's life. Sound exists everywhere. Whether you hear it or not, it is all around you. There have been several Deaf people who have been quite successful in the music industry. Currently there is a Deaf percussionist, named Evelyn Glennie, who is one of the top percussionists in the world.

Creating music has many benefits for any child. Increased competency in problem solving, critical thinking, and decision making are a few academic areas that can be improved, not to mention all the social awareness that is gained such as cooperation, team work, respect, acceptance of others and much more.

Being involved in a music group allows the child to develop independence, self-motivation, and a positive self-image. It gives the child the opportunity to explore, create and interpret self- and world-awareness through the study of musical traditions and of different world cultures.

Deaf culture embodies elements of rhythm through movement. Percussion music provides an opportunity for Deaf people to experience music physically and creatively by seeing and feeling the rhythms. Percussion music enables Deaf students to interact with the beats, simultaneously engaging the mind, body and spirit. Through creating, performing, and listening/feeling the beats, students experience the ways in which percussion evokes and conveys thoughts, images and feelings.

Being a Deaf or hard of hearing percussionist does present some unique challenges. Since most of the performers have some degree of hearing loss, feeling the vibrations of the music helps the group play together. This means, for most performances, the group prefers to sit in chairs on a wooden platform. The

combination of the seated position and the wood helps the vibrations transfer more easily. However, this is not always possible. Last year at the legislative building the group had to perform standing on a marble staircase. Since the feeling of the vibrations were almost nil, the group had to depend a lot more on visual cues to make sure they stayed in sync.

Jim, being a Deaf individual himself, has also found the support of different staff very helpful. He has sought help from various hearing staff, especially during final rehearsals to give a quick check to make sure everything was sounding good. Last year, he had the help of Erica Weselowski, who is not only an ASL-English interpreter, but also has a music degree in percussion from the University of Manitoba.

Percussion music makes a valuable and unique contribution to Deaf students' intellectual growth, and integrates academic and emotional development. Students are also able to use their expressive skills gained in percussion music to convey meaning in other aspects of their lives. Shared experiences in music significantly contribute to the development of a healthier society through activities that respect and reflect the diversity of human experiences.

As you have seen, there are numerous reasons why music should be a part of every child's life, regardless if they have a hearing loss. It would be great to see more Deaf and hard of hearing students become involved in percussion music throughout Canada. If there are any more groups like this one we would like to encourage them to contact Jim at jcoleman@msd.ca. Drumming has historically brought communities together and it would be fantastic if this could bring together Deaf communities from around the world together as well.

Jim Coleman and Frank Nausigimana performing "Kadan" - Manitoba Legislative Building - Music Month Performance - May 2011.



Acoustics in the Classroom: A Historical Perspective

By Maureen Clarke and Tom Tylka

Teachers of the deaf and hard of hearing along with classroom teachers have experienced years of inadequate classroom listening learning conditions due to background noise. We know that even moderate levels of noise and poor room acoustics can impair children's ability to clearly understand spoken words. Research into the acoustic standards for classrooms has been conducted worldwide and in the U.S.A. resulted in the passing of the ANSI Standards S12.60-2002, Acoustical Performance Criteria, Design Requirements, and Guidelines for Schools. (American National Standards Institute, Inc). The new Classroom Acoustics Standard recommends that ambient noise levels should not exceed 35 dBA. In order to attain this standard the design consultants of a building must comply with ANSI S.12.60 and consider the professional input of an acoustical engineer. While the US has adopted this standard in most states, and several other countries also have set acoustic standards, Canada lacks a national guideline for classroom acoustics. At the provincial/territorial level only Alberta has acoustic guidelines.

With the advancement of assistive listening technology we have many options for improving the signal-to-noise ratio (SNR) so that the teacher's voice is heard above most background noise in the classroom. However, this works most ideally with students who have hearing aids coupled to FM technology, not for students who experience oral instruction with just hearing aids alone. Classroom FM, or infrared systems work in rooms that do not have high reverberation rates. If the design of the classroom is such that a large "echo" is produced, the classroom amplification will exacerbate the poor acoustical conditions. The consequence is significant for all students, not just those who have a hearing loss. Ultimately, good classroom acoustics reduce background noise and allow FM technology to work optimally.

What do we know about acoustics and student learning?

1. The average grade 1 student will not understand about 1 in 6 simple, clearly spoken words. About one-quarter of grade 1 students will be less successful and will not understand 1 in 5 words spoken by the teacher. (Bradley JS and Sato H 2004)
2. Classroom acoustics are poor when there is: a larger room volume (over 250 m³); a lack of acoustic tiles in the ceiling; few sound absorbing materials in the room; too many hard surfaces that produce reverberation; excessive noise from

student activity; lighting ballasts; heating and air conditioning systems; computer and electrical appliances; and outdoor noise such as traffic and playgrounds.

3. Children spend at least 45% of the day in listening activities (Berg 1987). They listen to the teacher, to each other during group activities, and to multimedia materials. They must be able to hear the speech signal!
4. The child's auditory system is not fully developed until well into the teen years. The knowledge base of language is not fully developed and so the child cannot fill in the missing pieces.
5. The younger the child, the more detrimental the effect of noise on the child's understanding of speech.
6. The teacher's response to classroom noise is to raise his/her voice. The result is a distortion in the speech signal and vocal fatigue for the teacher.
7. There is a significant drop in performance in learning to read when background noise interferes with speech (Hetu et al. 1990).
8. Excessive background noise has a greater detrimental effect on non-native-language learners and children who have a hearing loss, a learning disability, a behavioural difficulty or an emotional difficulty.
9. Less than 10% of Canadian classrooms tested had an ideal speech-to-noise ratio. This means that 90% of our grade 1 students are not hearing all of the teacher's words (Bradley 2005).
10. Research into the building process shows that it can cost as little as 0.5% of building costs to implement acoustic treatments during construction, while the cost of implementing acoustic treatment after construction can rise up to 20% of building costs (BCASLPA Letter to the Honourable Shirley Bond, June, 2007).

What do we know about the effects of acoustically treated classrooms?

1. For pre-school children: There is improved letter, number, and word recognition (MacKenzie 2000).



2. For elementary school children: There is better word intelligibility in treated classrooms (Maxwell and Evans 2000).

How can we make a classroom acoustically sound?

1. Implement classroom management strategies to help keep the classroom quiet.
2. Identify and, where possible, eliminate or minimize noise sources. (One example is to add tennis balls or chair felts to the bottom of chairs and desks.)
3. Modify the classroom acoustical characteristics to increase absorption and reduce the reverberation time.
4. Install soundfield amplification systems in order to help the audibility of the teacher's voice. This is effective only when there is not excessive reverberation.

For more information go to the CAEDHH website (www.caedhh.ca), click on "About Us" and under Resources, you will find a booklet called "Classroom Noise: Tips for a Quieter Environment".

What has CAEDHH done to address the issue of acoustics in Canadian classrooms?

Individual CAEDHH members have worked at their place of employment to support a good listening environment for their students. Many school districts have purchased soundfield

amplification systems to help deliver a better speech signal in the classroom. In some situations this has not worked because of the poor acoustical environment. The issues are greater and more costly to remedy.

In BC a group was formed in 2001 after Tom Tylka, a Vancouver teacher of the deaf and hard of hearing, shared his concerns about acoustics at a CAEDHH-BC AGM. This volunteer group was eventually called the School Noise Action Group and consisted of a researcher from the field of acoustics, teachers of the deaf, administrators in school districts, an audiologist, an architect, the director of the Provincial Voice Clinic, and representation from the UBC Program for Education of the Deaf and Hard of Hearing. Together we organized workshops, gave presentations, wrote letters to lobby both the provincial and federal government, and educated our membership about how they could influence their local school districts. CAEDHH National joined in with the letter writing campaign to lobby for Canadian standards.

In the fall of 2008, CAEDHH National joined a group called the Concerned About Classrooms Coalition, including 19 organizations from across the country. It was led by CASLPA and set its goal to protect the learning environment of students and children, and the vocal health of teachers across Canada. In January 2009, CAEDHH National and CASLPA joined together to hold a press conference in Ottawa. We wanted the Canadian media to convey the message that adopting acoustical standards at the national level would be in the best interest of all learners and educators. You may go to the CASLPA website for the press release and resource material.



In March 2009, Tom Tylka submitted a formal proposal to adopt ANSI S12.60-2002 in our Canadian National Building Code. At the same time CASLPA submitted a separate proposal with the same background information.

In May 2009, Dr. Janet Jamieson with the support of Maureen Clarke presented in Vancouver on behalf of CAEDHH to the NRC, National Building Codes Committee, so that we could educate the committee to accept our proposal to adopt the standards: ANSI S12.60. The committee agreed to take it to the next level in the process of building code change in Ottawa.

Later that year, Tom Tylka participated in a teleconference with the National Research Council Executive to discuss the proposal to the National Building Codes Center, with a detailed rationale for adopting new Canadian acoustical standards. We all waited in anticipation for a favourable response. It took over a year before the committee chairperson contacted Tom to say that they had turned down the proposal and it could not be considered again before 2015. This huge disappointment was felt by all of the CAEDHH members of the coalition, but particularly by Tom who worked so hard to influence the political powers and the National Building Code/National Research Council staff.

Although we were unsuccessful in our efforts to have ANSI standards adopted in the Canadian building code, there have been some positive outcomes at a local level. Through many years of lobbying by the District Hearing Resource Teachers, with the support of SNAG members and a school board trustee, North Vancouver School Board has implemented approximately 85% of ANSI S12.60 in new school construction. Four newly built schools are satisfactorily acoustically treated, which shows that our efforts can make a difference.

Continued lobbying by all teachers of the deaf and hard of hearing is needed at the local school district, provincial/territorial and federal levels, as well as to the Canadian Building Code office of the National Research Council. The goal is for all jurisdictions in Canada to accept and comply with the ANSI standards. When acoustically treated classrooms become a reality for all students, reaching personal academic potential can be realized.

Ann's Story: Early Literacy Intervention with a Child Who is Deaf

By Verena Hunzinger and Charlotte Enns
University of Manitoba

Learning to read is a critical developmental task that has implications for educational, vocational, and social development. To become readers children must learn the mapping between the language they already know and the printed words on the page. Children who are deaf are often challenged on both counts; familiarity with a language, whether spoken or signed, and understanding the mapping between that language and the printed word.¹ (In this article, the first letter of the word deaf appears as both uppercase and lowercase. Deaf, when capitalized, is used to describe members of the Deaf community; deaf is used to describe the physical condition of hearing loss.)

Yet, some deaf children do become fluent readers. The purpose of this case story is to describe the benefits and challenges of using an intensive intervention program to teach early reading and writing skills with a child who is deaf. Ann is a deaf student who uses American Sign Language (ASL) to communicate. The program used was adapted from a Reading Recovery model² and implemented over a 20 week period. Developing appropriate teaching practices and strategies involved bringing together knowledge about literacy learning in deaf students as well as experiences with intensive reading programs.

Is Reading Different For Deaf Children?

In a review of the literature on reading development and reading instruction in deaf children aged preschool to college level, Schirmer and McGough compared results with those of the National Reading Panel (NRP).³ They concluded that instructional strategies that are effective with hearing readers (such as word identification, fluency, vocabulary, comprehension, and text selection) should also be effective with deaf readers; however, many of the practices outlined by the NRP have not received attention in research with deaf and hard of hearing students which makes this conclusion less convincing.

Is reading different for deaf children? The answer is both “yes” and “no.” The evidence described by Schirmer and McGough indicates that skilled deaf readers use their knowledge of word identification strategies, the meaning of vocabulary and English syntax, and their ability to “chunk” information meaningfully, in the same way as hearing readers.³ The answer is also “yes” in the sense that deaf readers bring very different sets of language experiences to the task particularly regarding visual or signed language experiences. Teaching approaches that acknowledge the unique features deaf children bring to the task of learning

to read are often categorized within bilingual deaf education models.

Bilingual Deaf Education

In the bilingual model there is a paradigm shift from viewing literacy instruction from a deficit perspective to a cultural perspective.⁴ Viewing signing deaf children from a cultural perspective has always been controversial, but is a promising strategy for mapping out the nature of reading development in this population.⁵ Application of the bilingual model to teaching reading to deaf students initially evolved from the observation that deaf children of deaf parents

consistently scored higher in English reading than deaf children from hearing parents.⁶ Recent research indicates that competence in ASL plays a significant role in English literacy performance even among deaf students with hearing parents.^{1,7-11} Deaf children who are fully immersed in their first language, ASL, and acquire English as a second language are able to apply their internalized linguistic knowledge of ASL to reading and comprehending English print.

Fingerspelling

One of the specific structures of ASL that is beneficially related to reading and writing development in English is fingerspelling. Fingerspelling is the use of handshapes to denote specific letters of the alphabet. Fingerspelling is an active means of borrowing from English words and incorporating them into ASL. The acquisition of fingerspelling involves two different kinds of skills. The first is understanding how fingerspelling is used in ASL (there are grammatical rules to follow), and the second skill

The **bilingual approach** does not assume that skills acquired in ASL can be automatically transferred to English text. Clearly, the surface features of the two languages (phonology, vocabulary, and grammar) are totally distinct and explicit exposure is required in the acquisition of each language. ASL provides a linguistic foundation from which the development of another language skill such as reading can take place.⁵

Teaching Technique:

“Chaining” encourages children to see the relationship between print and known signs. The teacher fingerspells the word, points to the word in print and then signs the word. The teacher is explicitly calling attention to the fact that these symbols stand for the same object or concept.⁵

involves linking fingerspelling to English words. This develops when the child begins to acquire English literacy. The child develops a sense of the interaction of fingerspelling, signing, reading and writing, but that relationship takes time to develop. A strong correlation was noted between Ann's ability to write words that were fingerspelled and her reading comprehension.

Reading Recovery

Research on the use of Reading Recovery with deaf students is limited. In all three studies Reading Recovery had a positive effect on the literacy development of deaf students, although they progressed through the book levels at a slower rate than hearing children.¹²⁻¹⁴ Also, the teachers working with students who were deaf, focused less on phrased and fluent reading and spent more time supporting the children in accessing meaning, through structures and visual information, to make sense of text.

Ann's Background

Ann became deaf as a result of developing meningitis at two years of age. At that time Ann lived in a remote community and her family had to travel a great distance to get to the city and receive audiology services and medical care. As Ann did not develop any speech, her family received services to learn ASL; however, due to their remote location, this instruction was very limited. When Ann was 5 years old, her family moved to the city. They received biweekly home visits from a Deaf early childhood educator to develop her ASL skills, while she attended kindergarten at a regular elementary school with a resource program for deaf and hard of hearing students. Ann was fully included in a kindergarten classroom with a half day program, and was supported with an educational assistant (EA), fluent in ASL. At the end of kindergarten (age 6 years), Ann was evaluated using the MacArthur Communicative Development Inventory Scale.¹⁵ She was then able to label over 100 pictures from a variety of categories such as animals, vehicles, toys, food, clothing, colours, action words, and furniture. She was able to demonstrate comprehension of approximately 300 signs. With prompts, she was using some one- and two-sign phrases to communicate, but was not observed to engage in meaningful interaction in the classroom.

Ann's placement during the intervention was in a grade one classroom consisting of 27 students. Ann continued to be supported full time by the same EA. To provide additional support in ASL development, a Deaf adult worked individually with Ann and her EA for approximately 45 minutes per week. Her spontaneous communication continued to be limited. With prompts Ann was able to sign two and three-word phrases. She was able to recall experiences from home with picture prompts. With much re-reading and prompting she was able to retell a simple story using pictures. She initiated communication with peers by taking their hand and by turn-taking in a game. Her

peers learned basic signs to interact with Ann during play; however, Ann was never observed to sign to her peers. With simplified instructions and demonstration, Ann was able to participate in classroom activities such as art and math, areas of relative strength. Ann was not able to participate in large group discussions as the language concepts were too abstract. Through the use of pictures and Boardmaker symbols she was able to answer questions with prompts from her EA. She enjoyed looking at the pictures in books. She was exposed to English print throughout the day in the context of chart stories, songs, poems, calendar, journal, science, and social studies activity books.

Ann's Intervention Program

Ann attended a total of 69 lessons over a 20 week period, or an average of 3.5 sessions per week. The sessions were conducted outside of Ann's classroom by the researcher, but Ann's EA participated in the sessions as an interpreter. Her EA conducted follow-up activities in the classroom. The lesson components consisted of the following activities (for a more detailed description see Fullerton et al.¹⁶):

- a) Rereading of one to three Familiar Books (at independent reading level) with a focus on phrased and fluent reading and comprehension through retell or comments (5 min.).
- b) Running Record – completed on the previous day's new book based on reading without support with a focus on reinforcing and strengthening existing reading strategies (5 min.).
- c) Letter Sort – using magnetic letters to practice rapid naming/recognition (2 min.).
- d) Word Solving – making and breaking apart familiar words using magnetic letters, noticing letter clusters and sequencing of letters (3 min.).
- e) Constructing Written Message – highly scaffolded conversational interaction to write a meaningful message (sentence) in English on a sentence strip that was re-read, cut apart into words, and reconstructed, initially with a model and then independently (15 min.).
- f) New Book Selection and Reading – based on interests (familiar themes, vocabulary, and characters) and previous reading experience (instructional level). Support provided by pre-teaching vocabulary, and sentence structure, activating prior knowledge and discussing key concepts (15 min.).

The Reading Recovery program was adapted because Ann was learning ASL as well as how to read and write English. For this reason it was necessary to reinforce concepts in both languages

and to develop her translation skills. Specific adaptations are outlined in Table 1. In order to accommodate these adaptations lessons were extended to 45 minutes, and some activities were completed in the classroom with the EA, and with parents at home. Ann took a familiar book home after each session, as well as her cut up sentence which she reassembled for her parents. Daily home reading was recorded by Ann's parents in a home reading log.

Ann's Progress and Learning

Ann was formally assessed before and after the intervention program with the *Observation Survey of Early Literacy Achievement (OSEL)*,²⁰ instructional book level and the *Burt Word Reading Test*.²¹ The results of these measures are summarized in Appendix B. Essentially, these results show improvements in Ann's word recognition, sight word vocabulary, reading level, ability to write words, and increased use of visual and meaning strategies to decode text.

More specifically, pre-intervention Ann was able to recognize a total of 3 words from the Word Test Score Sheet (*OSEL*, List A) and 5 words from the *Burt Word Reading Test*. Post intervention Ann was able to identify 13 out of 15 words from the Word Test Score Sheet (*OSEL*, List B). Initial measures showed that Ann's instructional reading level was 0 or dictated text (able to remember words of a message that she dictated in response to a picture). When reassessed post intervention Ann's instructional level was 9, or a grade equivalent of 1.5. The average instructional reading level of hearing peers in her class was level 15, so although she did not achieve grade-level performance, she showed considerable gains in being able to read more complex text. Prior to the intervention, Ann was able to write 4 words, which increased to 29 words post intervention. Although most of these words had only two to three letters, she was able to write some longer words such as "play," "book," her brother's name, and her last name.

Although Ann's ability to communicate continued to be limited, after the intervention she was able to demonstrate comprehension of familiar stories by answering simple questions involving the characters, setting, and dialogue. She was unable to answer any questions without prompts at the beginning of the intervention. Ann demonstrated gradual growth in her ability to recall events, and by the end was able to retell three to four events in the correct sequence using two- and three-sign sentences. She also made more comments about stories during and after reading.

Although not measured it was noted through anecdotal observations that her interest and engagement in reading improved. Halfway through the intervention a reinforcement schedule to complete literacy activities was no longer required. She remained focused and attentive for the entire lesson. Due

Table 1. Adapted Reading Recovery Activities

| Activity | Adaptation |
|-----------------|---|
| Reading Aloud | Initial reading/signing preserved English word order to develop a general one-to-one correspondence between printed words and signs |
| | Words that did not have an ASL sign were fingerspelled (e.g., helping verbs "is," "are," "am"; articles "a," "the") ¹⁷ |
| | Character's names were either fingerspelled or given a name sign |
| Running Records | As Ann's ability to use ASL increased her skill in translating entire phrases or sentences into ASL also developed, but she still required prompts to translate English to ASL |
| | The initial use of English-based signing was similar to hearing children requiring the use of phonological analysis instruction but not relying on this in the long term ¹⁸ |
| | Running record transcriptions were needed to reflect how Ann was decoding text into sign (see Appendix A for an example of running record transcription) |
| | Several additional transcription abbreviations were required: fs for fingerspell, wc for wrong concept, and ch for appropriately using one sign to represent several words (e.g., "wake up," "sun came up" and "looked at" can be signed with one sign) |
| | The guidelines developed by Gennaoui and Chaleff ¹⁹ for miscue analysis with deaf readers to accommodate transcription into ASL were followed |
| | If signs did not reflect the meaning, errors were recorded as wrong concept (wc) as follows: "Mother Hippo is (wc) /too big" In this example the sign "also" was used for "too" indicating that Ann did not understand the underlying meaning |
| | <i>Po</i> was used for pronouns and was scored as correct when Ann pointed to the correct picture representation of the pronoun in the book |
| | ASL sophistication was noted in the margins when Ann used ASL grammar features such as body shift |

Table 1. Adapted Reading Recovery Activities

| Activity | Adaptation |
|---------------------------|---|
| | for dialogue, facial expression for adjectives, directionality for verbs, and pointing to pictures for pronouns and classifiers |
| | The absence of morphological markers such as the “ed” ending in “looked,” was not counted as an error if the structure had not been taught as part of the new book introduction the previous day. |
| Reading and Writing Words | Ann’s recognition of sight words: Sight vocabulary was recorded and tracked over the course of the intervention |
| | Fingerspelling was incorporated into lessons emphasizing sight words and making and breaking apart words |
| | Sight words were signed, fingerspelled, practiced on a white board with magnetic letters and then written |
| | “Chaining” was used to form a bridge from fingerspelling, to the signed concept, and to the printed version of the word |
| | Sight words and phrases were written on flashcards and taught within the context of the story prior to reading the new book |
| | For English words with multiple signs depending on their meaning (such as, “back” meaning either to go back or a body part), Ann was required to sign both meanings when shown the flashcard |
| Composing a Message | Ann drew a picture to elicit the language and provide a framework for composing a message – this adaptation was needed to accommodate Ann’s language delay |
| New Book Reading | Since the purpose of reading the new book was to get the message behind the text, it was often necessary to stop after each sentence or page and interpret what was read into ASL |
| | Drawings were used to explain concepts and create mental images |
| | Speech bubbles were used to illustrate conversation and dialogue in the story |
| | Thought bubbles were used to create a mental image of what a character may have been thinking. |

to her progress, she was now able to be an active participant in classroom literacy activities such as journal writing and group story writing. She was able to recognize familiar print around the classroom. Her increased familiarity with fingerspelling helped her recognize children’s names. Her improved reading level at the end of the intervention allowed her to participate in guided reading groups with hearing peers.

Effective Teaching Strategies

Ideally all students should have a strong foundation in a first language before acquiring literacy. Ann’s story is not unlike many deaf and hard of hearing students that enter school with an extremely low level of competency in a primary language whether it is spoken or signed. The strategies that follow may be helpful in these circumstances.

1. Pre-teach Vocabulary and Background Information

Ann’s lack of foundational early language skills had a significant impact on her ability to learn to read. Although she was able to decode text as far as recognizing familiar sight words, she continued to struggle with comprehending the underlying meaning of what she was reading. She required extensive frontloading of vocabulary and world knowledge prior to reading unfamiliar text.

2. Encourage Students to Seek Meaning through Text

Over the course of the intervention Ann was beginning to recognize short phrases such as “the sun came up,” when given a model, and chunked their meaning into one ASL sign in next day reading; however, she did not generalize when reading a new book. Her lack of fluency in both ASL and English impacted her ability to recognize and code-switch from English to ASL. This skill is illustrated by observing reading behaviours in deaf children whose attention during reading is limited to mapping individual signs onto words as compared to children whose attention is focused more broadly on sentences, or even larger text structures, and seeking coherent meaning in them. The latter strategies represent what fluent Deaf readers do. Unfortunately many deaf children continue to be slowed down by mapping individual English words and never make a full transition to reading meaningful units of information. Strategies, such as teaching multiple meanings of words and attending to the sentence context, should be emphasized.

3. Allow Additional Time

When compared with her hearing peers, Ann’s progress was significantly slower. It took her longer to read the books as they increased in text difficulty. Charlesworth et al. in their study implementing Reading Recovery with children who had a hearing loss, also reported that the progress for these children was slower than hearing children, and that more time was needed for teaching background information and general knowledge.¹²

4. Use Fingerspelling as a Tool

Ann was able to read fingerspelling and use fingerspelling as a tool in reading and writing words. Fingerspelling was seen as a key to bottom-up processing of print. Techniques such as “chaining,” to link print to signs through fingerspelling have been used by deaf adults to teach their children print awareness.^{23–25}

5. Build a Repertoire of Sight Words

Learning to read English print is different in some significant ways for children who are deaf and do not have access to the speech sounds of English. Ann was beginning “to form an association between elements of a signed language and elements of written English as she was acquiring the ability to read.”⁵ She was also beginning to use tools that are important in helping children who are Deaf to establish an inner system that supports their efforts to successfully read words that are familiar to them. One of these tools was an increased focus on Ann’s automatic sight word recognition. Sight words were introduced in a meaningful way within text reading and message writing activities. An adapted Dolch word list similar to the one developed by Schimmel et al. in which sight words are linked to ASL signs and fingerspelling, was used.¹⁷

6. Facilitate Translation between ASL and English Text

Ann was more consistently fingerspelling, pointing to text and pictures, and chunking English words into meaningful ASL signs when reading. These behaviours showed that Ann was beginning to use tools effectively in translating English text into ASL.⁹ Strategies such as interacting with text to construct meaning, recalling by drawing events and illustrating dialogue, modelling fluent reading, making predictions and rehearsing texts to develop fluency have all been shown to be beneficial for students who are deaf.²⁶ Using these strategies as part of the intervention was beneficial in developing Ann’s overall language and general knowledge foundation which is fundamental to competence in reading.

7. Incorporate Daily and Direct Intervention

Over the course of the intervention, Ann was successful in reading a large number of texts about a variety of topics. Daily repetition and practice allowed her to experience success. She enjoyed the stories and became more engaged and focused on reading as the intervention progressed. The books became a source for meaningful conversations, which reinforced her general expressive vocabulary and language development. Direct intensive intervention with Ann was necessary so that consistent signing, reinforcement of literacy strategies and language and vocabulary intervention could occur throughout Ann’s school day. The presence of Ann’s EA in individual sessions allowed carryover into the classroom setting. For students like Ann, the ability to provide direct individual intervention was an asset in ensuring the development of early literacy skills. Intensive

intervention allowed Ann to receive the benefit of specific teaching strategies that are known to be helpful in the early reading development of deaf children.

A Happy Ending

An intensive individual intervention program has the benefit of providing deaf students such as Ann with access to guided dialogue about language, reading, and writing. Without consistent observation, individual teaching and monitoring by trained personnel, deaf and hard of hearing students are at risk for failure in achieving basic literacy skills. Although this is just one child’s story, it does show that with appropriate adaptations the Reading Recovery approach may be beneficial for facilitating literacy development in deaf children. Ann’s individual circumstances may make her instructional needs different from the needs of other deaf students, or most other students selected for Reading Recovery intervention. However, it seems safe to say that if an adapted Reading Recovery intervention approach can produce gains even with a student with such significant language delays, it is likely that deaf students with more developed language skills would also benefit. For deaf children literacy is a vital means of learning about the larger hearing world. For this reason, more opportunities for deaf children to receive early intensive literacy intervention should be available in order to give them this access to the world.

References

1. Chamberlain C, Mayberry RI. Theorizing about the Relation between American Sign Language and Reading. In: Chamberlain C, Morford JP and Mayberry RI (Eds.) *Language Acquisition By Eye*. Mahwah, NJ: Erlbaum; 2000.
2. Clay M. *Becoming Literate: The Construction of Inner Control*. Portsmouth, NH: Heinemann Education; 1991.
3. Schirmer BR and McGough S. Teaching Reading To Children Who Are Deaf: Do the Conclusions of the National Reading Panel Apply? *Review of Educational Research* 2005;75(1):83–117.
4. Evans CJ. (2004). Literacy Development in Deaf Students: Case Studies in Bilingual Teaching and Learning. *American Annals of the Deaf* 2004;149(1):17–27.
5. Padden C and Ramsey C. American Sign Language and the Reading Ability of Deaf Children. In: Chamberlain C, Morford JP and Mayberry RI (Eds.) *Language Acquisition By Eye*. Mahwah, NJ: Erlbaum; 2000.
6. Trybus R and Jensema C. *Communication Patterns and Education Achievement of Hearing Impaired Students (Series T, No.2)*. Washington, DC: Office of Demographic Studies, Gallaudet College; 1978.
7. Grushkin DA. Why Shouldn’t Sam Read? Toward a New Paradigm for Literacy and the Deaf. *Journal of Deaf Studies and Deaf Education* 1998;3(3):179–204.
8. Hoffmeister RJ. A Piece of the Puzzle: ASL and Reading Comprehension in Deaf Children. In: Chamberlain C, Morford JP, and Mayberry RI (Eds.) *Language Acquisition By Eye*. Mahwah, NJ: Erlbaum; 2000.
9. Livingston S. Rethinking the Education of Deaf Students: Theory and Practice from a Teacher’s Perspective. Portsmouth, NH: Heinemann; 1997.
10. Prinz PM and Strong M. ASL Proficiency and English Literacy within a Bilingual Deaf Education Model of Instruction. *Topics in Language Disorders* 1998;18(4):47–60.
11. Singleton JL, Supalla S, Litchfield S, and Schley S From Sign To Word: Considering Modality Constraints in ASL/English Bilingual Education. *Topics in Language Disorders* 1998;18(4):16–29.
12. Charlesworth A, Charlesworth R, Raban B, and Rickards F. Reading

Ann's Story: Early Literacy Intervention with a Child Who is Deaf

Recovery for Children with Hearing Loss. *Volta Review* 2006;106(1):29-51.

- Charlesworth A, Charlesworth R, Raban B, and Rickards F. (2008). Teaching Children with Hearing Loss in Reading Recovery. *Literacy Teaching and Learning* 2008;11(1):21-50.
- Nielson DC and Luetke-Stahlman B. The Benefit of Assessment-Based Language and Reading Instruction: Perspectives from a Case Study. *Journal of Deaf Studies and Deaf Education* 2002;7(2):149-86.
- Fenson L, Dale PS, Reznick JS, et al. *The MacArthur Communicative Development Inventories: User's Guide and Technical Manual*. San Diego, CA: Singular Publishing Group; 1993.
- Fullerton S, Brill N, and Carter C. Keys to English Print: Reading Recovery with Deaf Children. *Odyssey* 2003;(fall),76-79.
- Schimmel CS, Edwards SG, and Prickett HT Reading?... Pah! (I got it!): Innovative Reading Techniques for Successful Deaf Readers. *American Annals of the Deaf* 1999;144:298-308.
- Gioia B, Johnston P, and Giovannelli Cooper P Documenting and Developing Literacy in Deaf Children. *Literacy Teaching and Learning* 2001;6(1):1-22.
- Gennaoui M and Chaleff C Miscue Analysis for Deaf Readers. *Odyssey* 2000;(fall):29-33.
- Clay M. *An Observation Survey of Early Literacy Achievement*. 2nd ed. Portsmouth, NH: Heinemann Education; 2005.
- Gilmore A, Croft C, and Reid N. *Burt Word Reading Test*. New Zealand Council for Educational Research; 1981.
- Padden C and Ramsey C. Reading Ability in Signing Deaf Children. *Topics in Language Disorders* 1998;18(4):30-46.
- Hirsch-Pasek K. The Metalinguistics of Fingerspelling: An Alternate Way to Increase Reading Vocabulary in Congenitally Deaf Readers. *Reading Research Quarterly* 1987;22:455-74.
- Kelly AB Keys to English Print: A Deaf Child Teaches A Community about Fingerspelling. *Odyssey* 2003;(fall).
- Padden C. Learning to Fingerspell Twice: Young Signing Children's Acquisition of Fingerspelling. In: Schick B, Marschark M, and Spencer PE (Eds.). *Advances in the Sign Language Development of Deaf Children*. NY: Oxford University Press; 2006.
- Luckner JL. Reading Comprehension Research Survey. *American Annals of the Deaf* 2008;153(1):6-36.

Appendix A

| Page | Text | Count | | Analysis of Errors and Self-corrections | |
|------|--|-------|----|---|--------|
| | | E | SC | E MSV | SC MSV |
| 2 | January 26 A Birthday Cake for Ben B. Randall Nelson ③ Ben is up on the bed. Ben is looking | 1 | | | |
| | at a birthday card. | 1 | | | |
| 4 | Ben is looking at a dinosaur. | | | | |
| 6 | Ben is asleep. Mom comes in. Mom looks at the dinosaur, too. | | | | |
| 8 | Mom is looking at a book. | | | | |
| 10 | Here is Ben's birthday cake. | 1 | | | |
| 12 | Here is the tail. | 1 | | | |

Running Record Sheet 2 © Marie M. Clay An Observation Survey Second Edition 2002

Appendix B: Before and After Intervention Assessment Results

| Assessment | Before Intervention | After Intervention |
|--------------------------|------------------------|-----------------------------|
| Observation Survey Task: | | |
| Letter identification | 51 ^a | 53 ^a |
| Concepts about print | 8 ^b | 15 ^b |
| Word reading | 3 ^c | 13 ^c |
| Writing vocabulary | 4 | 29 |
| Book level | 0 | 9 |
| Burt word reading test | 5 (<5.10) ^d | 20 (5.10-6.04) ^d |

^a Out of a total of 54 items
^b Out of a total of 24 items
^c Out of a total of 15 items
^d Age equivalent range

The Deafblind Club Experiences the UBC Museum of Anthropology

Story and photos by Paul Dixon

This is a tale of today; of introducing a rich and vibrant culture based on oral traditions to an audience of deafblind people. The Museum of Anthropology (MOA) at the University of British Columbia is world-renowned for its collections, research, teaching and public programs. Known principally for its collections of North West Coast poles, masks and other artifacts, they comprise only about 30% of the collection, with the rest of collections drawn from the four corners of the world. On the “must-see” list of every tourist guidebook for Vancouver and British Columbia, MOA even rates an entry in Patricia Stewart’s bestselling *1,000 Places To See Before You Die*. As part of the university’s faculty of arts, MOA is also Canada’s largest teaching museum, supporting a variety of courses at the undergraduate, graduate, and professional level.

The museum offers a range of unique school programs introducing the history and culture of BC’s Northwest Coast Peoples to elementary and secondary students. The programs are designed to compliment and expand upon the current provincial curriculum. The programs are led by trained volunteers. In the 2010-2011 school year more than 12,000 students participated in programs.

The school programs are designed with a great deal of flexibility in the material and presentation to accommodate the diversity of students in any given group. Over the course of any year, there will be requests for presentations that fall outside of the normal classroom group. In the past these have included student groups visiting from outside British Columbia or even from foreign countries. Within the team of education volunteers are a handful that will take on these “one-off” groups, which may entail combining elements of two or more programs depending on the age and level of awareness of the groups.

In the summer of 2011, Shirley Salmon and I undertook to present a program to a group from the Deafblind Services of BC. While many of the 40 or so MOA education volunteers are retired educators, Shirley and I came from other points of the compass; she after a career as an occupational therapist and I had spent much of my life in police communications. While not formally educated as teachers, we had both spent much of our adult lives in professions that saw us working with people and more importantly – for people. We both bring a positive attitude to this kind of challenge.

Shirley acted as the point of contact with Deafblind Services,



Haida canoe created by Bill Reid, in the Great Hall of the Museum of Anthropology. Fully functional, this canoe was the functional test for a much larger canoe Reid created for EXPO 86.

The Deafblind Club Experiences the UBC Museum of Anthropology



Great Raven Mask – more than 2 metres in length, it would be danced by one person during a potlatch.



Haida Bear created by Bill Reid. One of the touchable articles in the museum, allowing one to feel the impressions left by the simple hand tools used to create it.

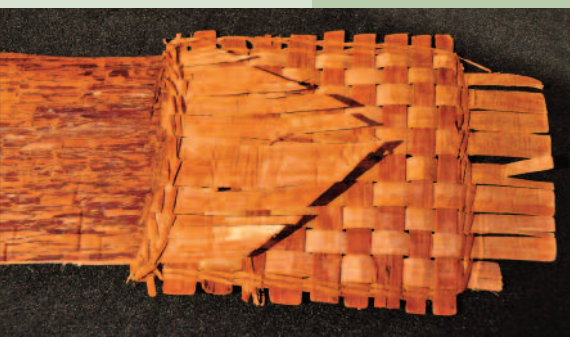
with Eddy Morton, the coordinator of the Deafblind Club. Eddy has been deafblind since birth, through the club he organizes monthly outings that have taken the members far and wide through metro Vancouver. Some may see them as disabled, but they certainly do not allow themselves to be handicapped. They go places, they do things and they work very hard at living their lives to the fullest. Shirley and I realized that unlike our mainstream programs we would have to devise a program that would fit the group with the material that was available. Initially this was a daunting task. School groups can be diverse, but the class group is the same age and at the same point in their class studies. With our group, we would have a range of ages, from teenagers to adults and as we discovered, a wide range in the level of disability. All members of the group were deaf, two were totally blind as well – one congenitally blind and the other acquired – while the others had a range of sight deficit.

In retrospect we seem to have found a common seam with the visions and values of the two organizations – the museum and Deafblind Services – without deliberately looking for it. Among its stated values, Deafblind Services seeks dignity, respect and a safe and welcoming environment for their clients, while a keystone of MOA's values is "serving the individuals and communities in ways that benefit them directly". Dignity and respect are two key elements that are impressed upon students in all the school programs presented at MOA as keystones of

First Nations culture.

Historically, the potlatch was the fabric of the first nations of the north-west coast. The term "potlatch" is actually taken from Chinook, the trading jargon used by the indigenous first nations across a region stretching from the Columbia River north to what is now Alaska. Within this region there were a number of distinct language families, speaking dozens of different languages. Chinook drew elements from many of these languages and after contact with Europeans, English and French words were incorporated. Many place names in British Columbia are derived from Chinook.

While the potlatch was an integral part of the life of all the people of the coast, just as all nations spoke different languages they were as individual in the potlatch. Potlatches were witnessing ceremonies. With no written language, witnesses were required to participate as human recorders of history as it was being made. Potlatches were held for a wide variety of reasons and often included a number of ceremonies within the event; to celebrate initiation, to celebrate marriages, passage to adulthood, name children, mourn the dead, mark the investiture of chiefs, to enact treaties between bands or nations; virtually everything that defined the structure of families and entire first nations. It was a great sign of respect to be invited to participate as a witness at a potlatch and it was done with the understanding that at some point in the future it would be the duty of the



Interpretive piece showing the different layers of cedar bark, from coarse to fine, with each layer being used for a different purpose.



Kwakwaka'wakw wolf mask. Even though this mask was created specifically for the student potlatch program, the mask would never be worn without the proper permission as this would be an act of disrespect.



inside the Haida big house. The eagle sits atop the killer whale pole, signifying the lineage of the family that would have lived in this house.



Paul Dixon and Shirley Salomon in front of Bill Reid's iconic "The Raven and The First Men".

witness to pass this information on to future generations.

A major potlatch could take years of preparation and could last for many days or even weeks. It would involve feasting, spirit dances, theatrical demonstrations and distribution of gifts. The government outlawed the potlatch in 1884 as part of the program to assimilate the natives. It made no sense to the missionaries or government agents that families would work for years to amass the wealth to host a potlatch and in a matter of days would give all their worldly possessions away as part of the ceremony. Potlatches were held in a clandestine fashion, but those who were found were sentenced to prison terms. It was not until 1951 that the ban on the potlatch was lifted, but in the intervening years much of the culture had been lost as the oral traditions did not live on in many tribes.

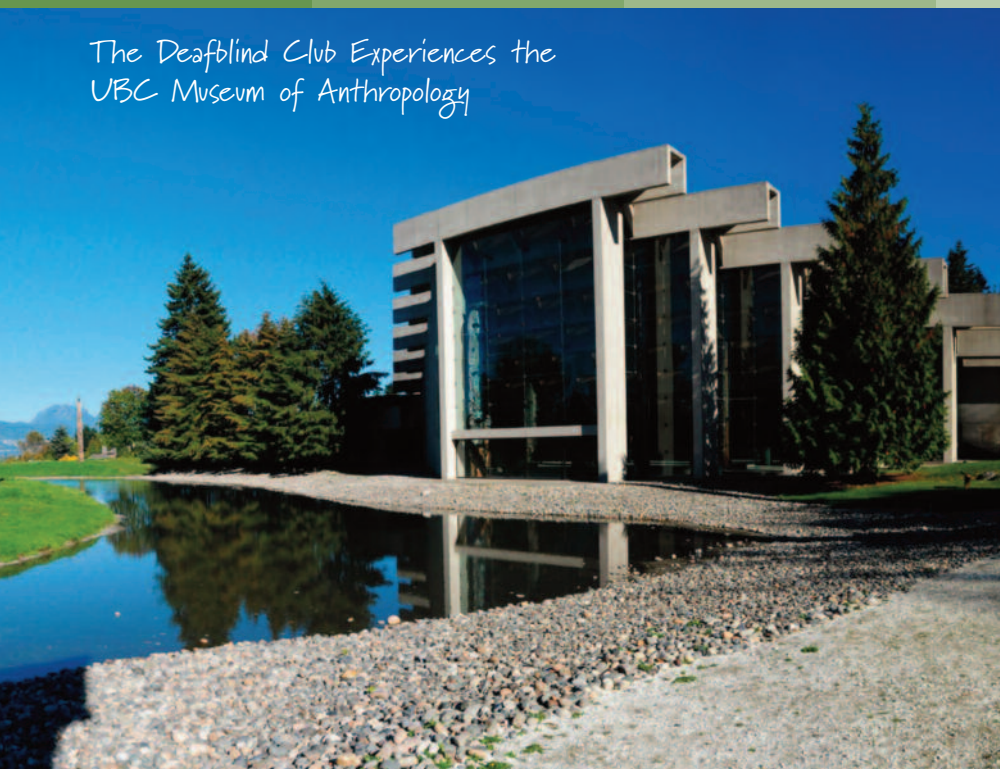
It was a good introduction point with our group of deafblind visitors, working through the concept of a sophisticated society that did not have a written language and relied on the traditional oral recording of history. Shirley and I were very much aware that most of what we learn is through our eyes and ears. We had a group of six deafblind, their interveners and several students in the sign language program at Douglas College.

With our normal school programs we need to work to a fairly tight schedule, given that there are generally several student groups in the museum at any given time, as well as lunch breaks and school buses to consider. Shirley and I realized that we could only work at the pace of the group. Being Saturday gave us unfettered access to areas reserved for programs. We touched on parts of several school programs and developed a series of modules. If the need arose we would simply leave out one or more modules and no one would be the wiser.

We started outside at the Haida village, with its cedar big house, totem poles, and white shell beach. Inside the big house, the smell of cedar permeates the air. It underscores the importance of the cedar tree to the first nations of the coast. Cedar is lighter than other wood, the wood is softer and easier to work with simple hand tools. It splits easily and cleanly and the cedar oils are a natural insect repellent. The trunks were used for totem poles and canoes or split for lumber. The bark offered many different layers that could be used to make wide variety of products, from clothing such as hats and capes to the softest cloth.

Inside the museum there was the opportunity to handle a number of artifacts such as masks that have been created specifically for the school programs. Touching and handling

*The Deafblind Club Experiences the
UBC Museum of Anthropology*



Traditional cedar bark hat. Worn year-round as protection from sun and rain, hats such as this one are prized works of art today.

Outside view of MOA from the Haida Village.

gave a much greater appreciation of what the particular piece was and how it was made. One member of group, who is losing his sight in middle age, had been an avid woodworker as a younger man and he was able to share his observations with the group.

As important as touching the physical objects was, it was even better to be able to be part of a much broader discussion across the group of the culture behind the masks and the other regalia. Transformation is a key concept of the spirituality of the First Nations culture. The masks that play such an important role in defining who a person is within a community are often based on transformation of the character of the mask. As the child moves through adolescence and becomes an adult they earn the right to take a name and wear that mask within the ceremonies and the spiritual or mythical powers that come with it.

Shirley and I spent three hours in and around the museum with our group, not counting introductions beforehand and a group debriefing afterwards. We had set no time limit other than the museum hours and let the group tell us when it was over. That was the key to the success of the day, we let them lead us and we simply provided the information. The program material is aimed at children, but strong enough for adults and this group certainly proved it. It was a very intense day, in a way that only the most exhilarating things can be. We can't wait to do it again.

For more information on the Museum of Anthropology go to – www.moa.ubc.ca For more information on the Deaf Blind Services Society of BC go to – www.deafblindservices.com

To see Eddie Morton on YouTube go to -www.youtube.com/watch?v=Iw19V2ciaJ4

Believe in more hearing



Nios S H2O

PHONAK

life is on