



MAER Newsletter

Association for Education and Rehabilitation of the Blind and Visually Impaired
Michigan Chapter

February 14, 2008

President's Message

Mary Beth Kullen

Hello, Everyone,

I would like to thank Dr. Alicia Li at Eastern Michigan University for creating this newsletter. What do you think about it? Our purpose is to get information out to you, and to provide a forum for sharing innovative ideas you may have used in your work.

Our Michigan AER conference is scheduled April 24 and 25 at the Livonia Marriott Hotel. Our theme this year is: Skillfully Addressing New Challenges. Here's what to expect:

This year we are bringing in Dan Kish, a nationally known Orientation and Mobility specialist who is visually impaired. Dan will be the keynote on Thursday, and will present two additional sessions. He's also agreed to spend some time with families and youngsters with visual impairments at dinner. From everything I've heard, he is a very dynamic speaker.

Karen Blankenship is the professional co-chair for the National Agenda. She will speak twice on Friday. One session will review research findings on the impact of the Expanded Core Curriculum. The second session will introduce the 9th ECC Goal – Self-Determination. We have all met children and adults who rarely make decisions for themselves, and this presentation will be appropriate for all of our members. I know I have the Step Back poster from AFB hanging in my office, and I've seen it in other classrooms as well.

Our third national speaker is Debra Sokol McKay, one of the presenters on Diabetes at the 2006 AER International Conference MacFarland Seminar. She will present a background piece on Diabetes and Visual Impairment, a review of insulin devices available (and there are several new products on the market), and a discussion of items that you can take with to a client's or student's home to teach low vision principles. Debra will be on hand Thursday and Friday.



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President's Letter

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Beyond that, the Conference will feature many outstanding local resource people. Dr. Robert Shaffer returns to talk about Neurology, Medications, and Systemic Problem Solving. Dr. Elizabeth Becker will provide a tutorial on Reading the Eye Report, and Tools for Assessing Vision at Home. Our Friday morning sessions will take a look at using techniques from Drama to work with people with visual impairments of all ages, presented by Wild Swan Theater.

Susan Langendonk, Sue Bradley, Beth Kennedy, Collette Bauman, Peggy Dutcher, Michelle Cameron and a team from the Grand Rapids Agency, Amy Free-land, Dr. Susan Gormezano and a panel of experts looking at Seniors and Motivating them in Low Vision Rehab Programs, Dr. Annette Skellenger, Erica Ihrke, and Ted Lennox will all make presentations.

Kathy Konow from the Grand Rapids Agency, and I have been working on the program. Many other board members take on a piece, whether preparing materials for the conference (Susan Langendonk), applying for certification credits (Amanda English and Marcia Pavkovich), recruiting vendors (Catherine Hula and Alicia Li), contacting award winners (Roberta McCall), supporting speakers' technology needs (Dori Bordner) confirming arrangements with the hotel and handling registration (Lynnette Norton), or identifying presenters (all the board), it's a serious commitment of time and effort. A big thank you goes to the board.

Preliminary Registration information has been mailed to all members. Please register as soon as you can. Conference information is also on the www.maerbvi.org website for your convenience. Come and celebrate the 25th Anniversary of MAER!

Remember, too, that the AER International Conference is July 22-27 at the Chicago Downtown Marriott Hotel. It's a great opportunity to participate without a lot of additional travel expenses. Check out the AER website, www.aerbvi.org, for more information.

Recently, a group of us who work with people with visual impairments were sitting around a table at my office in Detroit. There were many with 20 and 30 years or more of experience in the room. I would like to encourage everyone to speak up about the need for more young people to enter our field. In the next 10 years, there will be many retirements. We are already seeing outstanding leaders retiring. Please let us know if you can think of any way to present our field to young people. If you have the opportunity to attend a career fair at a local high school or community college, please volunteer to spend a few hours talking to young people who may never have met someone who is elderly with vision loss, or a child with a visual impairment. We know that we make a difference, and that is often what a person searching for a career hopes to do.

Thanks to all of you for your support. Thanks, especially, to a very committed MAER Board of Directors. Be sure to send your feedback: kullen@gdabvi.org; 313-272-3900.

See you in Livonia.

Mary Beth Kullen

From the Editor

Alicia Li

In this issue, you will find important words from Mary Beth Kullen in *The President's Message*, and the latest information about the April MAER Annual Conference in Livonia.

New in this newsletter is a section devoted to eye conditions. Important concepts are informational as well as a review for teachers and staff working with students with visual impairment. In future issues, other eye conditions will be examined.

"Small Tips & Ideas," is a section of effective, useful resources contributed

by practitioners in the field. This is your chance to take an idea and try it!

In another section, workshops that have taken place in the last four months will be highlighted and resources used listed. The "Bulletin Board" page presents a wide-range of up-to-date announcements of upcoming student activities, job vacancies, and VI related organizations and events. This is the place for you to post your announcements, send them to Alicia Li at tli@comcast.net.

Retinopathy of Prematurity

Alicia Li

Definition and Characteristics

Retinopathy of prematurity (ROP), the most common ocular pathology in premature infants, is an eye disease resulting from abnormal development of the retina. They are not born with ROP, but have increased chance of abnormal retinal growth and subsequent ROP (Dennison, 2003). In normal eye development, blood vessels grow from the back central part of the eye out towards the edges. The development begins at the fourth month of gestation and proceeds until a little after a full-term birth. If the retinal blood supply in the premature infant continues its development just as if the baby were still in the uterus, then ROP will not develop (IRIS Medical Instruments, 1996; Vaughan et al, 1995)

Unfortunately, in some premature ba-

bies, normal development stops, abnormal vessels begin to grow and scar tissue subsequently forms at the edge of the normal retinal blood supply. When the scar tissue contracts, it will pull on the retina and result in retinal detachment. If ROP develops, it usually appears between 35 and 45 weeks of conceptive age (IRIS Medical Instruments, 1996).

The severity of the disease is indicated in the form of zones (locations of the disease) and stages:

A. Locations (Schepens Retina Associates Foundation, 2005):

Zone I is the area around the optic nerve and macula.

Zone II extends from the edge

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Retinopathy of Prematurity (cont.)

of Zone I to the edge closest to the nose. It is doughnut shaped and encircles Zone I.

Zone III is the crescent shaped area toward the ear.

The most dangerous for the child is when Zone I is affected because progression to extensive scar tissue formation and total retinal detachment are most likely to happen in this location. Zone II disease is more severe than Zone III. When Zone III is affected the premature infants tend to have mild involvement leading to a lot of useful vision.

B. Stages (Blind Babies Foundation, 1998; IRIS Medical Instruments, 1996):

a. Stage 1 ROP is the least damaging with a demarcation line separating normal retina from the undeveloped retina.

b. Stage 2: A ridge of scar tissue develops at the demarcation line, partially or entirely.

c. Stage 3: Abnormal “new blood vessels” and scar tissue grow on the edge of the ridge and into the vitre-

ous.

The progression of ROP may stop at stage 1, stage 2, or mild stage 3 and disappear completely. Stage 3 ROP has a 50 % chance to proceed to stage 4 or 5. Thus stage 3 is a critical time where treatment is instituted.

d. Stage 4: Scar tissue pulls the retina, causing partial detachment:

Stage 4A: The partial detachment is outside the macula.

Stage 4B: The partial detachment involves the macula.

e. Stage 5: Total retinal detachment.

In stages 1 through 5, additional changes may occur, including abnormal blood vessels in the iris and engorgement and tortuosity of the normal blood vessels in the retina. If these additional symptoms are particularly bad, the “plus” will be added to the stage number, e.g., stage 3⁺ (IRIS, 1996). If ROP is located in Zone 1 with plus disease present, then Rush disease may occur

as a result of a rapid progression with accompanying retinal detachment (Dennison, 2003).

The visual problems associated with ROP, ranging from minimal visual damage to complete blindness, include acuity deficits, myopia, strabismus, amblyopia, glaucoma, cataracts, and microphthalmia (Steinweg et al, 2005).

Causes

Although several conditions such as excessive oxygen levels, exposure to light, prematurity, and low birth weight have been frequently suggested to cause ROP, studies show inconsistent findings except for prematurity (i.e., less than 32 weeks) and low birth weight (i.e., less than 1500 grams or 3 lb 5 oz) as two most likely factors (Dennison, 2003; IRIS Medical Instruments, 1996; Steinweg et al, 2005). Two thirds of infants weighting 1,250 grams (approximately 2.75 lb) or less develop ROP, and ROP is prevalent in infants weighing less than 1,000 grams

(approximately 2 lb). Infants with gestational age of less than 32 weeks are likely to develop ROP, and those who were born at 23 to 28 weeks gestational age have a particularly high chance of developing ROP (Steinweg et al, 2005).

Treatment (Dennison, 2003; IRIS Medical Instruments, 1996)

Lasers: Laser treatment destroys the abnormal blood vessels and retinal tissues before they produce a retinal detachment.

Cryotherapy (a freezing process): This involves freezing the abnormal part of the retina to halt abnormal vessel growth.

Scleral buckling: If a retinal detachment is present, scleral buckling is used, where a belt is placed around the eye and tightened until the retina is close enough to the wall to reattach itself.

Vitrectomy: If scleral buckling is unsuccessful, vitrectomy can be per-

formed. In this procedure, the eye is opened up, the lens is removed and some or all of the vitreous humor is removed so the surgeon can reattach the retina.

Educational Considerations

Most children with ROP have residual vision and can learn to read print of various sizes (Steinweg, 2005). The use of optical aids (e.g., magnifiers and monoculars) and technology (e.g., video magnification system, CCTVs, and speech access system) needs to be included to maximize the child's learning. Environmental factors (such as good lighting, high contrast, space, color, and time) that are critical for the learning of all students with visual impairment should not be overlooked. Some of the students with ROP may use eccentric viewing and exhibit eccentric head positions. These should not be discouraged because they need to adjust and adapt to find ways to see better.

It is imperative to learn

effective scanning and search systems for students with ROP and have visual field restrictions. If the student is left with limited residual vision, a multisensory approach then becomes important. Tactile input pairs with auditory cues and description of what is happening in the environment is an example of working with students through multisensory channels. Dennison (2003) stated that the most important consideration when dealing with a child with ROP is to continue to receive follow-up eye care, as well as to follow-up on general development to be certain the child is using his/her remaining vision or compensatory skills to his/her fullest potential.

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tions in infants and young children that result in visual impairment and syndromes and other conditions that may accompany visual disorders.

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Small Tips and Ideas

Patricia Smith

As a teacher of the visually impaired, I am always looking for ideas on how to make my lessons more meaningful for students. Once we start paying teachers the way we pay professional athletes, my classroom will have every device and modification that exists. Until then, I have to become creative.

During summer school this past July, I found myself in a room with no access to a braille and had one totally blind student. Most of the time, the students did hands-on work, and did not need to take notes; however, I once had the students write down a phone number for a social services agency. I tried to sniff out a braille; but with no luck. I did, however, have a bulletin board, a pushpin, and some paper. Taking the pushpin, I gently imprinted the back of a piece of paper with Braille numbers. When I turned it over, the numbers were right, but in the wrong order. Oops! I redid it, this time reversing everything. I made the numbers very big, but the totally blind student was able to read them back to me clearly.

Since I am teaching four core subjects at three different grade levels, blending lessons is a must. During “bell work,” I tried to use a variety of teaching techniques, one of my favorites was “listening comprehension,” where I read a story followed by questions that gauge how well students listened and understood. Rather than have the students write or Braille their answers, I made them tactile letter cards with A, B, C, D, and E on them. Then, when I read the questions, I ask them to hold up the correct letter for the answer. I recorded their answers on a sheet of paper, and tallied up the grades. This saved a lot of time!

As most VI teachers know, puffy paint is our friend. I have found it especially useful in modifying art lessons. For better or for worse, art is a popular main-

streaming subject for students with special needs. Since art teachers often have lessons that include different textures or colors, I use my puffy paint to modify these worksheets. When different colors are part of the assignment, I use different tactile objects to represent the different colors. You can use puffy dots, cotton balls, felt, etc.

Recently, I noticed that my students were having a difficult time with grammar. One technique that I used was to Braille some sentence strips and write others in large print. Then, I cut the strips apart. It was then up to the students to put them in the right order, using a CCTV. We also have been doing “mad libs,” which has been a huge hit. You may recall “mad libs” from your youth, and they are just as much fun. You only need to find a short story, and identify the nouns, verbs, adjectives, adverbs, etc. I start the lesson by reading the title of the story, and then asking each student to provide the various missing words (the nouns, adjectives etc.). At the end, I read the nonsensical story back to them.

Our current social studies project is to write a report about a country in Africa. The students begin by writing 10 questions of things they want to know about their country. Since books in large print or Braille are very hard to find, I brailled some random articles and gave them to the students, encouraging them to go on a “treasure hunt” for the answers to their questions. Later, they will put their answers into a report.

These are just a few of the tricks that I have used this year. I hope you find them useful...at least until our rock star salaries start rolling in, and we can get every single book in Braille and on demand, with CCTVs and JAWS for everyone!

Workshops and Resources

Alicia Li

On Nov.9, 2007, “Project Math Access” was presented by Dr. Gaylen Kapperman and Ms. Jodi Sticken from the Research and Development Institute, Sycamore, Ill. Topics covered in the workshop included obstacles for students with visual impairments in the pursuit of studying math, perspectives of a math educator, collaboration with a math educator, Project Math Access, spoken mathematics, printing math with the Braille Note and PAC Mate, and Nemeth Code resources. Each participant received a package of two CDs and six DVDs. This included a documentation CD, a CD containing a Nemeth Code tutorial for Braille Lite, and six DVDs illustrating various strategies for providing instruction in mathematics for youngsters who are visually impaired. They were: basic number concepts (early childhood-primary grade levels); basic number concepts (intermediate grade levels); abacus, algebra and graphing, graphing (part 2); application of math skills and facilitating inclusion in the general education classroom; geometry; and perspectives of a math educator. For more information on Project Math Access visit: www.tsbvi.edu/math/projectmathaccess.

Also in November, Dr. Jan Van Dijk presented “Autism vs. DeafBlindness: and the Implications of Stress on Children with Multiple Disabilities.” The full-day workshop was sponsored by DB-Central, Oakland Schools, and Bloomfield Hills Deaf and Hard of Hearing Program. During his presentations, Dr. Van Dijk elaborated on the limbic system, stress in children with

sensory impairments, autism spectrum disorder and deafblindness.

Some video clips of screening instruments and teaching strategies were shown in the afternoon. Three CD-ROMs, authored by Dr. Van Dijk along with other professionals, were made available to the participants. The titles of the CD-ROMs are as follows:

“Child-guided Strategies for Assessing Children who are Deafblind or Have Multiple Disabilities” authored by Dr. Jan Van Dijk and Dr. Catherine Nelson.

“Charge Syndrome: A 5 year follow-up of 6 children with Charge Syndrome” authored by Dr. Jan Van Dijk, Dr. Cathy Nelson, and Arno de Kort, MD.

“From Russia with love and care for children with sensory impairment and challenging behaviors: Demonstration of an Intervention Model” authored by Dr. Jan Van Dijk, Dr. Catherine Nelson, and Dr. Ton van der Meer.

The resources listed above can be obtained by making a check of \$45, payable to Mr. Joe Franken, 4619 Spyglass Drive, Dallas, TX 75287. For further information, visit <http://aapnootmuis.com>. The first item, “Child-guided Strategies” can also be obtained through APH (catalog #: 1-31001-00, \$55, not on federal quota funds).

Bulletin Board

1. *The Blind & Visually Impaired Children's Fund (BVICF)* is a 501c3 non-profit organization created by three VI teachers who saw that there was not enough time in the day to teach and expose students to every important concept. These three teachers, with years of hard work, put together various programs for the blind and visually impaired students in southeast Michigan. Fundraisers for BVICF cover most of the costs for the various programs, and rarely do students have to pay to participate. Also, there is no overhead or administrative costs, so all raised money goes directly to programming. Some past events included 3 day camping trips, ADL overnights, horseback riding, and more. Please see BVICF's website for more information! www.bvicf.org
2. The Michigan Braille Transcribing Fund, Jackson, donated a set of Braille *Harry Potter (Harry Potter and Deathly Hallows)*. The books are currently housed at Eastern Michigan University and are available on loan; please contact Dr. Alicia Li at (734) 487-3300 or via email at tli@comcast.net (Alicia Li, Eastern Michigan University).
3. BOWL-A-THON 2008: An email from Dr. Patricia Smith, Detroit Public Schools

Hello, family and friends!
This March, I am participating in a Bowling for Braille fundraiser with Seedlings books. Seedlings is a

wonderful organization that provides books in Braille for children and adults. Nationally, there is a huge shortage of Braille transcribers, and therefore, many books never get transcribed. Please help me give the gift of reading to a child with a visual impairment. (Or, you can join me at the bowling fundraiser!!!)

How to pledge:

<https://www.epkdesign.com/seedlings/pledge.php>

More info: Come bowl with our crazy celebrity bowlers from WNIC! Help put Braille books into the hands of blind children by raising pledges and bowling at Super Bowl in Canton. Every year our bowlers win lots of prizes and awards! Each \$10 raised makes another book possible! Businesses are needed to sponsor lanes and to contribute door prizes.

BOWL-A-THON 2008!

WHEN: Sunday, March 9, at 12:00 p.m.

WHERE: SUPER BOWL in Canton

WHAT: Lots of fun and prizes...and lots of money raised to help make more books available in Braille!