SEE/HEAR

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IEP Basics: What the School Forgot to Tell You
By DeAnn Hyatt-Foley, M.Ed., Parent, Lubbock, Texas

Editor's note: DeAnn has vast experience with the special education process, both personally and as past West Texas Director for PATH, the Parent Training and Information Center for Texas, <www.partnerstx.org>. DeAnn continues to work with parents of children with special needs, teaching them how to advocate for their children. She and her husband, Matt, have a teenage son with Asperger Syndrome. The article that follows this one, "What the Schools May Not Know About a Student with a Visual Impairment", discusses the additional evaluations required to specifically address the needs of a child with a vision impairment. It includes a good checklist specific to vision issues that can be used in conjunction with the basic IEP checklist described below.

For more than 20 years, children with disabilities have been guaranteed the right to a Free Appropriate Public Education (FAPE). States that receive Federal special education funding are subject to Federal laws that require local school districts to identify and provide FAPE to children ages 3 to 21, in the Least Restrictive Environment. This Federal law is called Individuals with Disabilities Education Act (IDEA). An interesting aspect of IDEA (formerly known as Education of All Handicapped Children Act) is that parents were the driving force with their "right-to-education" suits which eventually led to these Federal laws. As a result of these efforts, all parents are equal participants in the IDEA decision making process.

Some school districts do little to ensure the parents know their role and their rights in the IEP process. Consequently, many parents of children who qualify for services under IDEA do not know the basics of writing an Individual Education Plan (IEP). They are typically unaware of what must be in this document and what makes a good IEP.

Every child who receives services under IDEA is entitled to an IEP. School personnel and the child's parents must develop the IEP before the beginning of the student's school year and then implement the plan. Federal law clearly states that a team of people, which includes the parents of the child, must write the IEP. Parent participation is the result of recognition by lawmakers that parents have a wealth of valuable information regarding their child. The IEP is a written plan designed for one student. It is the agreement between the school and the parents that specifies how the student will be educated. The IEP has three basic components.

EVALUATION, CURRICULUM AND PLACEMENT

Evaluation

Evaluation is the first step in the IEP process. All the IEP team's decisions must be based on evaluation data. The child must be evaluated in all areas of suspected disability. The evaluation includes formal testing (i.e., WISC-III, Woodcock-Johnson, etc.), informal testing (i.e., daily grades, classroom tests), interviews and observations. The team must consider all data from evaluations, even evaluations from the parents. The team must also consider information brought in by the parent.

Curriculum

Curriculum is the next step. Present Levels of Performance (PLOPs) are taken from the child's evaluation data. They state exactly what the student is currently able to do. For example, "According to the Woodcock-Johnson Reading Mastery Test, Johnny is able to comprehend reading material on a 4th grade level with 90% accuracy." Formal assessment is just one method of determining PLOPs. Daily grades and teacher/parent reports can also be used.

After the PLOPs have been identified, the team begins the process of writing *measurable* annual goals. According to Federal law 34 CFR 300.347 (2) (i), they must be "related to meeting the child's needs that result from the child's

disability to enable the child to be involved in and progress in the general curriculum," and (ii), "Meeting each of the child's other educational needs that result from the child's disability." The goal is a statement of what the IEP team expects the child should be able to master by the end of the school year. For instance, "By May 29, 2000 Johnny will be able to comprehend reading material independently on a 5th grade level with 90% accuracy as measured by the Woodcock-Johnson Reading Mastery Test." The key to annual goals is that they must be observable and measurable. In other words, could you go into the classroom and see the student working toward the goals. I have seen many goals listed as, "The student will make measurable progress in reading (math, writing)." Another example of a common goal is, "The student will act appropriately in the lunchroom." As you can see, neither goal is measurable or observable. Avoid vague wording such as appropriate, will learn, etc. When considering goals, a good question to ask your IEP committee is, "How will we know by the end of the year if Johnny has been successful? What will successful look like?"

Developing measurable objectives or benchmarks follows the writing of goals. These are best thought of as three or four intermediate steps between the PLOP and the goal. For example, we've determined that Johnny can comprehend on a 4th grade level and we want him to comprehend on a 5th grade level by the end of the school year. The IEP committee determines the steps and process that need to take place for Johnny to reach the goal. Maybe by the end of the first semester Johnny will be able to comprehend written material on a 5th grade level with teacher assistance, or maybe he will be able to comprehend written material on a 4th grade-sixth month level independently.

Federal law requires that the IEP have a statement describing how the child's progress will be measured.

An important reason for making sure your child's IEP goals and objectives are measurable is to hold the school accountable for how they are working with your child. It is very difficult to establish that the child has not made progress with vague wording. When the goals are specific, observable and measurable, the parents have a system of keeping up with their child's progress. The IEP must also list how the child's parents will be informed of their child's progress toward the annual goals. The parents must be notified as often as parents of a nondisabled child would be (i.e., report cards). The IEP must include the extent to which the child's progress is sufficient to enable the child to achieve the goals by the end of the school year. I highly recommend that the IEP team use a standardized assessment to measure the child's progress during the middle part of the school year. A standardized tool in conjunction with report cards can be an effective system of "checks and balances." If the student is not making the expected progress, the IEP committee then has some time during the middle of the year to meet and make changes in the IEP.

After writing goals and objectives, the IEP committee must write a statement of special education services (i.e., related services, program modifications and support for school personnel) that will be provided to the student. These services must support the child in advancing toward mastery of the annual goals. They must also help the child be involved and progress in the general curriculum, including extracurricular and other nonacademic activities.

Placement

Placement is the last step of the IEP process. There must be a statement that includes how the child will be educated and participate with other children with disabilities and without disabilities. If the child will not participate with his/her nondisabled peers in the regular class and activities, the team must note why in a written explanation. Placement decisions are based on the child's IEP goals and objectives. The child is placed in more restrictive settings only if the goals and objectives can not be met in the general classroom with supplementary aids and supports. The IEP team must make a good faith effort to provide appropriate support before removing the child to a more restrictive setting.

For over twenty years, the language in IDEA has been very clear. Parents are expected to play a primary role in developing their child's IEP. Many parents do not know the basics of the IEP process. Uninformed parents are not equal participants in the decisions being made for their child's IEP. It is important that parents are involved and informed about the IEP process. There are many sources of support for parents in their state. The Internet is a

wonderful resource for information on the special education process. A well written IEP not only follows the intent of the IDEA; it holds the school accountable for how your child is educated. It has been my experience in working with parents for several years (and my own personal experience) that once parents understand the IEP basics, they become truly effective advocates for their child.

IEP: A Parent's Checklist

The following information must be written in the IEP document.

- ☐ Evaluation data was discussed.

- ☐ Present Levels of Performance (PLOPs) based on the evaluation data were written for the following areas:

    - √ academic skills

    - √ nonacademic skills

    - √ communication skills

    - √ social/behavior skills

    - √ assistive technology

- ☐ Measurable and observable annual goals were written based on the PLOPs.

- ☐ Measurable short-term objectives or benchmarks (intermediate steps between PLOPs and goals) were written.

- ☐ Goals and objectives were based on your child's individual educational needs.

- ☐ A method for measuring your child's progress (at least as often as nondisabled peers) was established.

- ☐ A target date for the completion of each objective was established.

- ☐ A statement described the special education and related services to be provided.

- ☐ Modifications, and supplementary aids and services were specified (so your child can participate in the general curriculum with his/her nondisabled peers).

- ☐ Time your child will receive each instructional service and related service was noted. This includes minutes per session and frequency of sessions. This also includes related aids the teacher will need to enable the child to participate in the general curriculum.

- ☐ Date when all services will begin was established.

- ☐ Person responsible for implementing each service in the IEP was identified.

- ☐ Placement was based on goals, objectives, supplementary aids and services.

- ☐ A statement described how your child will be educated and participate with other children with disabilities and without disabilities.

- ☐ Your child's participation in statewide testing was clarified.

- ☐ Transition, if appropriate, was discussed.

Special thanks to Matt Foley with Foley, Hyatt-Foley and Associates and Mary Durheim with Educational Rights Information & Consulting Center for their help editing this article.

What Schools May Not Know About a Student with a Visual Impairment

By Jean Robinson, Family Specialist, TSBVI, VI Outreach

Your child may be the only student, or the first student, in your school district with a visual impairment. It is critical for you to be informed, so you can share information about your child's unique needs with the professionals on his or her educational team. As a member of that team, one of your roles is to gather information and bring it to the table.

There are specific additional requirements in developing an IEP for a student with a visual impairment. The Full Individual Evaluation (FIE) must include an eye report by an ophthalmologist or optometrist. To meet minimal compliance with federal regulations, state law, and State Board of Education rules, the following information must be addressed: visual acuity (Exact measure of corrected visual acuity at distance and near in each eye should be noted. The eye specialist must state if exact measures cannot be obtained, then give a best estimate.); visual field (exact measure or best estimate of visual field); diagnosis (type of visual impairment); prognosis; statement of severity of loss (i.e., the student has no vision or has a serious loss after correction). The (FIE) must also include a Functional Vision Evaluation (FVE) conducted by a certified Teacher of the Visually impaired (TVI) or a Certified Orientation and Mobility Specialist (COMS), and a Learning Media Assessment (LMA) developed by a certified TVI.

At every IEP or IFSP (Individual Family Service Plan for children under the age of three) meeting, a document such as the "Supplement for a Student with a Visual Impairment" should be discussed. This will describe in detail the arrangements made for instruction in braille, large print, orientation and mobility, compensatory skills, and access to special media. It also addresses strategies for instruction in daily living/self help skills, social skills, career readiness, auditory/listening skills, and self-advocacy.

The following checklist was developed in Pennsylvania by The National Agenda for Blind and Visually Impaired Youths Including those with Additional Disabilities. It incorporates some of the unique needs of students with visual impairments. These items are not appropriate for every student but should be considered for all students. You may also want to read "The Core Curriculum for Blind and Visually Impaired Students, Including those with Additional Disabilities," by Dr. Phil Hatlen, Superintendent at TSBVI. It can be found at <http://www.obs.org/napa/goal8.htm>. From there you can link to the "Parent IEP Checklist for Expanded Curriculum Topics to Consider for Inclusion in Your Child's IEP" (shown below), or go directly to <http://www.obs.org/napa/parentchecklist.htm>.

PARENT IEP CHECKLIST FOR EXPANDED CURRICULUM
TOPICS TO CONSIDER FOR INCLUSION IN YOUR CHILD'S I.E.P.

Communication/Learning Skills/Materials Needed to Access All Areas of the Core Curriculum

☐ Abacus
☐ Ability to access library materials
☐ Appropriate, controllable lighting
☐ Augmentative devices
☐ Braille
☐ Braille printer
☐ Braille writer
☐ Calendar system
☐ Computer with access technology

☐ Electronic magnification
☐ Electronic note taker
☐ Hand writing instruction
☐ Keyboarding instruction
☐ Large print
☐ Learning Media Assessment
☐ Magnification/optical aids
☐ Preferential seating
☐ Proper seating / Adaptive seating
☐ Recorded material

☐ Regular print
☐ Scanner
☐ Sign language
☐ Slate and stylus
☐ Tactile materials/graphs
☐ Tactile symbols
☐ Talking or large print calculator
☐ Tape recorder
☐ Unlimited time for test/tasks

FAMILY

Orientation and Mobility - Ability to Know Where You Are and to Move Safely in the Environment

- ☐ Body awareness
- ☐ Cane instruction
- ☐ Concept development (right, left, under, over, etc.)
- ☐ Mobility/movement

- ☐ Protective techniques
- ☐ Pre-cane instruction
- ☐ Retrieve dropped/lost items
- ☐ Self orientation to engage in physical activities and games

- ☐ Sighted guide
- ☐ Trailing
- ☐ Yearly evaluation

Social Interaction - Ability to Effectively Interact Socially with Others

- ☐ Gain knowledge of personal abilities/goals
- ☐ Gain physical/sexual understanding
- ☐ Make and maintain friendships

- ☐ Make effective use of personal service people
- ☐ Obtain help from others when needed
- ☐ Understand your disabilities

- ☐ Use appropriate non-verbal communication and body language
- ☐ Use correct body and head orientation
- ☐ Use problem solving

Independent Living Skills - Ability to Manage Daily Living Tasks

- ☐ Food prep/eating management skills
- ☐ Household tasks

- ☐ Organizational skills
- ☐ Personal hygiene
- ☐ Personal safety

- ☐ Telephone
- ☐ Time and money

Recreation and Leisure - Skills Needed to Participate in Recreation and Leisure Activities

- ☐ Adapt activities

- ☐ Gain knowledge of preferred activities available

- ☐ Schedule transportation to participate in activities

Career Education - Opportunity to Learn First-Hand About Work

- ☐ Accept and respond to suggestions and corrections
- ☐ Adhere to policies, rules and work schedules
- ☐ Carry out plans for work needed
- ☐ Communicate effectively on the job

- ☐ Exhibit work quality that meets employer standards
- ☐ Exhibit work rates to meet employer standards
- ☐ Gain independence in work setting

- ☐ Maintain responsibility for belongings and materials
- ☐ Organize tasks toward meeting goals
- ☐ Set realistic goal

Visual Efficiency Skills - Ability to Utilize Functional Vision

- ☐ Classroom adaptation (color, contrast, lighting)
- ☐ Eye-hand coordination instruction
- ☐ Knowledge of eye condition and its effect on visual functioning

- ☐ Participation in eye exam
- ☐ Optical aid instruction - near, intermediate and distance
- ☐ Personal responsibility for eye care

- ☐ Tracking, scanning instruction
- ☐ Yearly Functional vision assessment

Together We See

By Michael Beukenkamp, Student, Amarillo, Texas

My name is Michael Beukenkamp. I am in the eleventh grade at Amarillo High School. I am seventeen years old and I have a Seeing Eye Dog. His name is Sporty. He is a Golden Retriever/Black Lab cross. He is two years old, weighs seventy-five pounds and is twenty-four inches at the shoulder. Sporty was specially trained to lead me around obstacles in the middle of a sidewalk or a hall or wherever I might be walking. Sporty was born at the Seeing Eye's campus, and stayed there for the first six weeks of his life. After that he went to live with a 4-H family. The 4-H family taught him to do basic things like sit and stay. They also housebroke him. While Sporty was with the 4-H family he went to different social events to get exposure to people and other common noises that he would come in contact within his work. He stayed with the family for about a year and a half.

When Sporty was sixteen or seventeen months old he went back to the Seeing Eye's campus and lived in the kennel. He went back there to start learning to be a Seeing Eye dog. He learned to stop at curbs and stairs. He also learned to watch traffic. Another thing he was taught was to watch for overhead obstacles. He went through four months of rigorous training to get to the point he is at now.

During Sporty's fifth month of training, I went to the Seeing Eye to train with him. I stayed at the school for twenty-seven days. I spent all of those days learning as much as I could about Sporty's training and how to take care of him. Sporty stayed with me twenty-four hours a day while I was at the school. I was in charge of feeding and grooming him. While I was there I went on a walk twice a day and went to lectures at night.

Many people have asked me if Sporty is really beneficial to me. Definitely. He gives me a lot of confidence. When we are walking down a sidewalk and we come to a curb, Sporty will stop. I reach out with my foot to see what he stopped for. He also does the same for stairs or rough places in the sidewalk. After I know what he stopped for, I tell him "Forward." He goes over the curb or whatever it might be. Sporty also watches traffic. It is my responsibility to make the first call when it comes to starting across the street. If he doesn't think it is safe he will not go. He might even turn in front of me to stop me. If we are already in the street and someone runs a red light or turns right on red, Sporty will stop, slowdown, speed up or even backup. If I follow what Sporty is telling me, chances are very good that I will be safe. Traffic work is one of the most important things he does. I have full confidence in what Sporty does. I know if he is trying to tell me to move to the side of the sidewalk, there is a reason.

Often, I get asked what a command means that I give to Sporty. "Forward" means to go forward and also to go past the obstacle he stopped for. "Hupup" means move up closer to the obstacle he stopped for. For instance, Sporty might have stopped a foot back from a tree branch, so I say "Sporty, Hupup." Then he moves a little bit closer. "Left," and "Right," basically means go left or right. If I am walking with a group, I can tell Sporty to "Follow." He will follow whomever I am with but just a few feet back. That works well in restaurants when you are being seated. "Rest," means stay. I use that a lot in airports. When I am getting

ready to go through security, I put him at sit and tell him to "Rest." I make his leash longer and back through the doorway. Then I call him through. I can also tell him to "Leave it." If there is a dog barking up ahead, I say "Sporty, leave it," and he will not pay attention to it.

Daily life with Sporty is a routine. He gets fed at a certain time. He goes outside at a certain time. He also comes to expect the routine. When I take Sporty outside I tell him "Park time." "Park time" means it is time for him to go to the bathroom. He knows when I give the command that he only has a few minutes. I bring Sporty out four times a day. In the morning I bring him out for park time and feed him three cups of water and two cups of food. In the afternoon it's park time again and only three cups of water. At five o'clock I bring him out and I give Sporty three cups of water and two cups of food. I bring him out again at bedtime and give him three cups of water. Every morning after the first park time I groom Sporty. Grooming makes his coat look better. It also keeps the dog smell down. I use two brushes, a wirehaired brush and a soft brush. I was taught to brush his teeth. There are different flavors of dog toothpaste. I have used chicken and liver flavors. I also bathe Sporty when I think he needs it. One of the most important things I do on a daily basis is obedience. During obedience I make him sit, lay down, rest or stay, and come to me. During obedience I can tell how he is going to listen to me that day. The obedience keeps up with his training.

When you go to the Seeing Eye you go alone. I changed planes in Dallas/Fort Worth and then went to Newark, NJ. I met a limousine company in baggage claim. Then we drove for a half-hour to get to Morristown where the Seeing Eye is located. At the Seeing Eye you have your own room and your own phone. The people are very friendly. You get your dog a few days after you arrive. The instructors try to match you up with the perfect dog that will match your school, work and home situation. I was given Sporty because he calms down fast for school.

New students stay at the Seeing Eye for twenty-seven days. During those days you encounter just about every situation you would come in contact with in your everyday life. In the first half of training you walk preplanned routes. They go from very easy to very hard. You learn how to listen for traffic, how to give commands, how to handle your dog around other dogs, and anything you would need to know about travel with a dog guide.

In the second half of training the Seeing Eye instructors do more specific things for each person. I went to restaurants, department stores, groceries stores, office buildings, rode trains and buses, and walked nature trails. I also went on a day trip into New York City, where we rode the subway. We also walked the streets of Manhattan. The subway was a very good learning experience. The platform was very crowded. There were trains going by on both sides and you had to trust that your dog was not going to lead you off the platform. Sporty would not go close to the ledge.

I have had quite a few experiences in the short time I have had Sporty. A couple of days ago I was out walking around my neighborhood and as I was walking along, I heard another dog come up behind me. Sporty turned to look, and I told him to leave it. Sporty turned back around, and we went on. The other dog kept following me. It even crossed a few streets behind me. It followed me all the way to my house. When I got home I found out it was a big pitbull. Sporty acted like he didn't know it was there.

The law states that service animals can go anywhere the public is able to go. That includes schools, airports, stores of all kinds, restaurants and everywhere else you would go. I carry a book that has all of the laws for the United States and Canada. Canada has the same laws as the United States. Going to other countries can be hard sometimes. England is a good example. If you go there with a guide dog it will have to be quarantined for six months. Australia has one month of quarantine. Hawaii had quarantine, but that was recently abolished.

Getting a dog guide is one of the best choices I have ever made. I was not sure what to expect from having a dog guide. Having always had a family dog, there were some adjustments to make. Dog guides might not be the right choice for everyone, but it is a good advancement in my life. Sporty gives me more independence than I ever thought I would get from him. He and I do things that I never imagined we could do.

RESOURCES

From American Council for the Blind Website - <http://www.acb.org/resources/guidedogs.html>

A Guide to Guide Dog Schools, 2nd Edition, 1994, by Toni and Ed Eames, is available through the National Library Service in braille or cassette, or for sale for $10 in print or computer disk from:

Disabled on the Go
3376 N. Wishon
Fresno, CA 93704

Guide Dog Users, Inc. is a peer support network and membership organization which promotes acceptance of blind people and their dogs, works for enforcement, expansion and standardization of laws admitting guide dogs into public places, advocates for quality training and follow-up services, publishes a quarterly cassette newsletter called *Pawtracks*, and has a catalog of items available for sale in braille, large print, cassette and IBM disk.

Guide Dog Users, Inc. (GDUI)
14311 Astrodome Dr.
Silver Spring, MD 20906-2245
Phone: (301) 598-5771 and (888) 858-1008
E-mail: jcsheehan@smart.net
Website: <http://www.gdui.org/>

From National Federation of the Blind Website - <http://www.nfb.org/guidedog.htm>

National Association of Guide Dog Users
National Federation of the Blind President - Suzanne Whalen
9407 Mixon Drive, Apartment 216
Dallas, TX 75220-5004
Phone: (214) 358-5002

My First Scuba Diving Lesson
By Lee Ann Bryan, Amarillo, Texas

Editor's note: Lee Ann is deafblind because of congenital rubella syndrome. In 1965, she was born blind with cataracts and has had a total of twenty-three eye surgeries, as well as heart surgery at the age of six weeks. Her parents also suspected a hearing loss, which was confirmed when she was sixteen months old. When Lee Ann was two-and-a-half, a doctor told them that she would never learn anything, but she has proven him wrong. In 1972, Lee Ann was the first student accepted at TSBVI's Deaf-Blind Annex. She returned to Amarillo in 1977, and graduated from school there. For the past four years she has taken exercise, art and reading classes at Amarillo College, where she's improved her reading from a second to seventh grade level. Lee Ann is very interested in sharks, and has been to Sea World in Texas, Florida and California. For a long time, she's wanted to open a Sea World in Amarillo and "swim with the sharks." Learning how to scuba dive is her next step towards achieving what some might consider an impossible goal. We'll see what happens. So far, Lee Ann has defied other people's ideas about what she can accomplish.

I first read about scuba diving in a magazine in 1986. I want to learn how to scuba dive so I can catch crabs and swim with baby sharks and <u>big</u> whales.

My mother arranged my lesson with Mike Beezley (my instructor) and his wife. I took the class on August 3, 2001 in Mr. Beezley's back yard. He has a 4-foot deep above ground pool. There were no other students in the class. My lesson lasted about 30 minutes.

Helen Porter, who has been my interpreter for more than 20 years, helped me and Mr. Beezley communicate with each other. She is afraid of water, though, and could not go in the pool. Melody (Mr. Beezley's daughter) knows how to sign, and she went underwater with me.

I was excited to see how I could do in the water with scuba gear. I did good! First, Mr. Beezley and Melody helped me put on the scuba gear. Next, Melody told me how to go underwater and move around. Then, I lost my mouthpiece. Since I don't know how to panic or be scared, I closed my mouth, felt around till I found the mouthpiece and put it back in my mouth. I didn't swallow

Lee Ann gets ready for her first scuba lesson.

water or choke. Mr. Beezley said I was incredible, and a friend of his who is a scuba diver said I was awesome.

My most exciting experience in scuba class was wearing a face mask that let me keep my contact lenses in so I could see under water. There was nothing scary about my lesson. Besides having my own nurse shark ("Sharky", who lived from January, 1990 until December, 1995) it was the most wonderful, exciting thing I've ever done.

Lee Ann signs, "I love you" underwater.

Since my class only lasted 30 minutes, I'll need many more lessons before I can really dive. When it becomes warmer next spring, I want to take classes again, then swim with the sharks!

My Day at Sports Extravaganza
By Jacob Burton, Student, Plano, Texas

Editor's note: Thanks to Brenda Szymkowiak, teacher of the visually impaired with Plano ISD, for sharing this article. Jacob Burton is a 13-year-old young man attending Rice Middle School in Plano, Texas. He has low vision due to septo-optic dysplasia and reads large print and braille. He can be contacted at <JB041588@aol.com>.

I went to Sports Extravaganza last Saturday (October 27, 2001). Sports Extravaganza is a sporting event for blind and visually impaired people. It took place in Irving, Texas, at Nimitz High School. People from the North Texas area, Colorado, and New Mexico participated in this event. Over 150 athletes were in this event.

Many events were available to the athletes, including the 100-, 200-, and 400-Meter Dashes, Shot Put, and Archery. I participated in the Running Long Jump, the 50-Meter Dash, and the Softball Throw. The Running Long Jump is where you run and jump as far as you can into a sandpit. My best jump was 2.49 meters. I won third place in my heat. There were 18 athletes in this event.

The next event I was in was the 50-Meter Dash. I almost didn't make it in time to run, but I won first place anyway.

The 50-Meter Dash is where you run 50 meters. I was competing against two girls.

The last event was the Softball Throw. The Softball Throw is where you throw a softball, and they measure the distance. Each competitor threw three times in a row. I got fourth place.

In conclusion, it was a big event. I saw lots of my friends there, and I really enjoyed myself. I also won two medals and a ribbon. I hope to do it again next year.

Visual Stimulation: A Personal Reflection on Its Role and Benefit
By Millie Smith, Educational Consultant, Austin, Texas

Sometimes new knowledge shows me that something I have been doing is even more helpful than I thought it was. That has turned out to be the case with vision stimulation for infants and toddlers, and students with the most profound disabilities at any age. When I first began doing visual stimulation activities with students, I was very focused on increasing their visual efficiency. I wanted them to get in the habit of using whatever vision they had to, as best they could, interact with people and objects in their environments. I still want that, but I know now that something much bigger is happening as a result of these sensory experiences. In this article, I want to share some of the most important things I have learned about this, and give a couple of examples of how I have used this information with students.

WHAT I'VE LEARNED

Children around one year of age or younger, either chronologically or developmentally, are what Jean Piaget called sensory-motor learners. What he meant by that is that they learn about their worlds by sensing it and acting on it. The sensory part is seeing, touching, hearing, tasting, smelling, and moving (vestibular). The motor part is using muscles to respond to the sensory source by exploring it, by trying to make it do something, or by stopping it. A sensory-motor experience includes both a sensory event and a motor response. The very best learning takes place when these two things happen together --- when a sensory event is taken in, and muscles are used in response to it. This tends to happen in two phases. For example, a baby sees something it likes, maybe the glasses on your face. She gazes at the glasses. This is the passive phase. Then, she is likely to try to grab these miraculous light-reflecting glasses. If she can get them in her mouth to explore them, she will. This is the active phase. Together they make up a sensory-motor experience. The result is high quality learning. Our knowledge of our world is made up of the accumulation, interpretation, and organization of thousands of these kinds of experiences. If there is a sufficient ground of experience at this level, the child can begin to know that objects continue to exist when they are not immediately part of the sensory-motor experience. This is called object permanence. Now the child is beginning to be what Piaget called a preoperational thinker. This kind of thinking opens up the world of symbols, imitation, and imagining (Furth, 1970).

The science of neurobiology, through use of technologies like PET scans and MRIs, has added much to our understanding of sensory-motor learning. At birth, the brain is the most immature of all our organs. It continues to grow and develop during the first years of life. In normally developing infants, its size actually doubles in the very first year of life (Kotulak, 1996). We know now that brain growth occurs as a result of the building-up of thousands of neurological connections between brain cells. These connections, or pathways, are established as children participate in sensory-motor experiences. When these experiences are repeated, connections strengthen. This is practice. You play the piano better after years of practice because neurological pathways related to the playing of a specific piece of music are very well established. A baby brings his hands together at midline better after he has practiced that action hundreds of times. A neurological groove is in place. These grooves make things easier and more efficient (Greenough, 1985).

This growth and refinement is highly dependent upon the infant's early sensory experiences. Experiences in all the senses are important, but early visual experiences play a particularly important role no matter what the quality of vision

may be. A huge portion of the brain is dedicated at birth to visual processing. This may be because vision is the first sensory channel an infant uses intentionally to access information about his world. The eyes and head move voluntarily, and with more refinement, much sooner than any other part of the body. Gradually, portions of the cortex available for processing visual information begin to be used for processing other kinds of sensory information, if the quality of that information is significantly better. The only way this process can unfold as it should, is by providing in infancy sensory experiences in all channels, including vision (Kolb, 1998).

Children deprived of rich and frequent sensory experiences develop brains 20% to 30% smaller than normal for their age. They suffer corresponding decreases in cognitive ability. This effect has generally been studied in children from impoverished backgrounds (Campbell and Ramey, 1994). Children with significant sensory impairment at birth are also at risk in the area of cognitive development because, without intervention, the quantity and quality of their sensory experiences may be significantly diminished. They cannot access many of the ordinary sensory events in their environments. If a visually impaired child has a mobile over her crib that is too far away, or has objects on it that are too hard to see, it is the same as if it were not there (Barraga, 1976). The children most at risk are those with visual impairments, hearing impairments, severe motor impairments, and especially those with some combination of these impairments. The quality of intervention we provide will determine whether or not children and students with these challenges have adequate sensory experiences for cognitive growth.

Now, it is time for a big caution. If sensory-motor experiences aren't provided in just the right way, they may be harmful. For the last several years there has been a lot of material in neurology, child development, and behavioral journals about the relationship of stress hormones to learning. It seems that stress hormones inhibit memory function, and prolonged stress can actually break down neurological pathways in parts of the brain. Young children with multiple and severe impairments are constantly stressed as a result of having limited or no control over when, how, and what kinds of sensory input they might be subjected to. In addition, when interactions with others around these sensory events are associated with demands, stress levels are even higher. As demands increase, so does stress (Gunnar, 1996).

Quality sensory events must have a level of intensity that is accessible to the sensory impaired learner. The only way to provide those quality events without producing stress is to choose events we think the child will enjoy, and to make sure the child knows that we will respond to his signals to continue or to stop the event. The only way to invite motor responses to events without creating stress is by following the child's actions. We must join, not demand. We do this by watching to see what the child is doing and then gently beginning to do it with him, matching his pace and level of intensity. After a while we might pause, and wait to see if the child does something that invites us to "go again." When a bond of trust is established, we can expand on the initial child initiated response and invite a new behavior (van Dijk, 2000). An instructional strategy called "routines" is a very good way to structure sensory-motor learning experiences that avoid stress.

When children have severe motor impairments, the motor part of sensory-motor learning is very challenging. What is motor learning for these students who can move very little? Most of us were taught to facilitate their participation by moving their hands for them. This was called hand-over-hand instruction. There is something obviously problematic about this approach. How does the child learn anything if somebody else's brain is doing all the planning and some-body else's muscles are doing all the work? Event-related brain potential research indicates that a motor event isn't what most of us always thought it was. It turns out that there are several phases to every motor event. The electrical activity in the brain can be measured during each phase. A motor event begins with a preparation phase during which the person plans and gets ready. The electrical activity in the brain is very high during this phase. Next is the initiation phase, beginning to move, which is also accompanied by very high cortical activity. The execution phase, the carrying out of the activity, is next. Surprisingly, brain activity levels drop significantly. Finally, there is a termination phase, with relatively quiet levels of brain activity (Deecke, 1996). This is such good news. The two most important phases are preparation and initiation. They are the two phases that all children, no matter how severe their motor impairments, can participate in independently. All children can prepare if they know two things --- what is happening next and some-

body will wait for them to do their part. All children can initiate if they can tense a muscle, blink an eye, open or close a mouth or hand, lean a head forward or backward, or extend an arm or leg a tiny bit. Then we can go ahead and facilitate the execution phase by helping their hands, preferably with a hand-under-hand technique whenever possible. Again, structuring experiences using the instructional strategy of "routines" helps ensure that these elements will be in place.

WHAT I HAVE DONE WITH THIS INFORMATION

Julie

I met Julie several years ago when she was three years old. Her teacher was at a loss. Julie didn't seem to respond to any of the lights, colors, textures, or sounds that were part of her educational environment. Julie was drowsy most of the time and seemed to actually go to sleep when the teacher put her on the mat to work with her. The teacher and I did an arousal state baseline and found out that Julie was alert only 15% of the time she spent at school. Alert states were about forty-five seconds in duration and happened most often as a result of being moved or touched. Julie's drowsiness was largely a result of under-stimulation. The things available to her weren't in the sensory channels she was ready to use or they did not have the levels of intensity she needed. Some of her experiences with sensory events were too stressful. She didn't know what was going to happen to her, and she didn't like some of it. Julie's "going to sleep" when her teacher tried to work with her was really withdrawal brought on by stress.

Our first goal was to begin building up Julie's cognitive stamina by increasing the amount of time she was alert. A state of alertness is necessary for learning. We began by doing a sensory response assessment to determine what kind of sensory input Julie enjoyed most. Julie's team spent several days carefully trying different sensory events in each sensory channel, with lots of recovery time between each one. They paced each of these events to allow time for Julie's sensory-neural system to process the information they provided. They avoided startle responses, and repeated events only if Julie showed a positive response. Julie's mom had to come in to help them interpret her responses. Mom showed them how to watch for muscle tone, skin color, and breathing changes. She told them that tightening of the muscles around Julie's lips was smiling, and flushing was mad. Brief light breathing was excited. If it went on for more than a few seconds, though, it was scared. After about a week, they had an appetite list for Julie. These were the things she liked. They also had an aversion list. These were the things she didn't like.

We took items from the appetite (like) list and made routines. For a student like Julie, routines tend to be basic.

1. Find out what's going to happen.

2. Transition to the place where it is going to happen.

3. Do it.

4. Ask to do it again.

5. Find out it's finished.

Each step is critical, but none is more critical than the first. Cueing students to let them know what is about to happen sets the stage for learning. It lowers stress and enables them to focus cognitive energy on the activity. Unfortunately, it is also the step most often left out. We have to change that.

The first routine we wrote for Julie was swinging on the platform swing. Tim, the teacher, did this routine with Julie.

1. Tim told Julie what was going to happen by presenting her object cue for the activity. Object cues will be different for each activity and for each student. They should be an object from the event that is very important to the student. Julie's swing had a sheet of bubble wrap over a foam wedge placed on the platform. She loved the wrap. So, Tim cued her for swing time by first letting her hear the bubble wrap as he scrunched it up near her ear, then touching it to her arm, then her cheek. He had to be very careful not to

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startle Julie. By talking to her as he approached with one of the cues that helped her prepare for the presentation, Tim taught Julie to trust him.

2. Tim pushed her travel chair to the swing, lifted her, placed her supine on the wedge, and then rolled her to prone. He did all of this exactly as the physical therapist trained him to do it. He waited a couple of minutes to allow Julie to get used to her new position.

3. Tim began gently swinging Julie. He sat on the floor by Julie's head so he could watch her face while she was swinging. Her eyes opened wider, her lips stretched a bit into what we had learned to recognize as her smile, and the muscles in her neck and shoulders tensed. The latter is what the physical therapist was hoping for. At first, Tim just did the swinging until Julie began to poop out. When her stamina increased to about two minutes, he began to do step four.

4. Tim would stop the swing and wait. He treated the first thing Julie did during the wait as a signal to start again. The first time he stopped and waited, she blinked her eyes several times; he started. The next time, she moved her head a little; he started. After many days of this, she began to understand that if she did something, the swinging would start. Blinking became her favorite signal. When this was pretty consistent, Tim waited for the blink. That whole process took about two months.

5. Tim told Julie that swinging was finished by rolling her over and removing the bubble wrap from under her as she was turned. He gave her about fifteen seconds to process this information and to notice the absence of bubble wrap. Then he lifted her from the swing.

Some of Julie's other favorite routines included:

- listening to music while lying on top of a big stereo speaker (good vibrations),

- moving her feet or hands in warm water (temperature changes),

- and getting squashed with the beanbag (deep pressure).

Exciting things happened in each routine. She gave the team her first vocalizations with the stereo speaker routine and the first voluntary movement of her hands and feet with the water routine. They began by moving the water themselves. Then, much to their surprise, Julie began moving her own hands and feet a little bit when they stopped and waited. They kept her aversion (dislike) list and reintroduced some of the things she hadn't seemed to mind too much. Some of these became appetites. If she responded negatively, staff never repeated them without a long break. They didn't ever repeat the ones that got strong negative responses. After three months, Julie was alert for 40% of her time at school and the duration of each alert episode was about three minutes. After six months, she was alert 70% of the time and the duration was six minutes. By now, she was able to orient and stay alert when she was on her own. For instance, she had never responded to colored lights, which had only been presented as colored filters on a flashlight. At this point in her progress, though, a color wheel was tried. The combination of light and movement worked. Julie would watch it for about five minutes, smiling her Julie smile. This type of passive stimulation is not good for learning, but it will, at least, help maintain alertness when a teacher can't be present or when the student needs a break. That is important. During the times somebody was with Julie, she worked on lots of cognitive, communication and motor skills that were targeted in her routines.

Zap

I met Zap when he was twelve years old. Zap's teacher, Sue, asked for help because she couldn't get Zap to do anything with objects. If she tried to put something in his hands, he dropped it or threw it. He spent most of his time watching his waving hands in front of light sources like ceiling lights, windows and doors. Our first goals were to give Zap the sensory input he was craving in more appropriate ways and get him to hold objects. We knew he liked creating visual displays and that he needed a lot of contrast and some movement to do this. We knew that he did not

like the tactual characteristics of the objects he was being given, particularly in his hand. We also suspected that Zap did not like being acted upon by another person. Part of what he liked about his self-stimulatory behavior (watching his hand wave in front of light sources) was that he was in charge of it. Part of what he didn't like about objects was that somebody else put them in his hands. In fact, this avoidance had generalized to a dangerous level. Zap moved away when people approached. He sometimes pushed, or hit out if they persisted in being close to him. He was stressed by the very prospect of something being imposed on him.

The team began by trying to lower Zap's stress level. They wanted to join him and build trust. For instance, when Zap would scoot over to the window and begin waving his hand in front of his face, Sue sat near him and waved her hand in front of her own face. When Zap got used to this, Sue would reach over every once in a while and wave her hand in front of his face. Zap looked intensely at her whenever she did this. At least he was interested and didn't move away. Then, Sue started saying, "Here comes my hand," in a voice with a kind of singing quality, and slowly moved her hand toward Zap. After a while, Zap would look at Sue and smile when he heard the words. Now, Sue always waited for Zap's look before moving her hand. Zap learned that he was in charge. He learned that his look was a signal he could use to control his teacher's behavior. He learned that his teacher would always honor his signal and, therefore, could be trusted.

We turned this into a routine that gradually grew over time as steps were added. It started with these steps.

1. Go to window and sit down. (This was Zap's cue to his teacher to start the routine.)

2. Begin to wave hand.

3. Look at teacher to request her part.

4. Repeat as desired.

5. Stop looking at teacher to end routine.

Sue elaborated on the game. She started putting different things in her hand. She would say, "Here comes the shoe," and wave the shoe in front of Zap's face. They built up quite a repertoire of objects --- a shoe, a plate, a piece of chain, a wind chime, a mirror, a towel, a glove, a wiggle pen, etc. Sue put all these things in a basket so Zap could hear her getting the objects out of the basket and putting them back in. When Zap ended the routine, Sue left the basket and walked away. She hoped that Zap would reach in there and start exploring the objects. Eventually, he did. If Zap wanted the piece of chain, he would dig around in the basket until he found it and then wave it. Sue added more things to the basket. He always chose the heaviest and smoothest objects - a barbell, the glass pitcher part of a blender, a weighted spoon, a horseshoe, etc. He was now holding and exploring many objects.

After a good trusting bond was established, Sue tried to expand to new environments. Zap's parents were very disappointed that he would not work at a desk like other students his age. Sue put a mirror against the wall next to the window. She waved the object in front of Zap's face as he sat on the floor and then wave the object in front of the mirror. That became a new step in the routine. She already knew Zap liked the mirror. Sure enough, he was very interested in this addition. When the routine ended, he would dig in the basket for his favorite objects and wave them alternately in front of the window and in front of the mirror. Next, Sue put the mirror on a low desk. Things proceeded as usual. Zap gradually lost interest in the window. Sue began to raise the desk legs so he had to stretch to see the mirror. She introduced a chair and Zap accepted it. Mom and dad were very proud the first time they walked into Zap's classroom and saw him sitting in a chair at a desk, picking up various objects to inspect in front of his mirror.

The team went on to develop routines with many of Zap's favorite objects. They made a horseshoe game routine packed with social, communication, and motor skills. They used the blender in a smoothie making routine. Zap used his barbells in a mainstreamed P.E. class.

WHAT NOW?

Not all interventions I have been involved with have been so dramatic. I can honestly say, however, that I have never seen these principles applied correctly without good results of some kind. It takes information and training to provide this kind of programming. One of the reasons so much skill is required is that each intervention is unique. No two sensory-neural systems are alike. Experiences and behaviors are different. Everything must be taken into account to design the right combination of cognitive, social, behavioral, sensory, and motor elements. Usually, to pull this off, a team must work together. A very good book to start with is *Essential Elements in Early Intervention* by Deborah Chen. Almost all the regional education service centers have workshops on routines. Some are also beginning to offer workshops on using sensory experiences to manage arousal states. You can request these workshops by getting in touch with the person in charge of training for low incidence populations at your region's education service center. Technical assistance for individual children and students is available from most education service centers, and from the Outreach Program at the Texas School for the Blind and Visually Impaired.

My experience confirms my belief that, with the proper attention to sensory-motor learning, all children and students can be active learners with the possibility of realizing their full potential, regardless of their age or ability or the complexity of their challenges.

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Math Technology for Visually Impaired Students
By Susan Osterhaus, Secondary Mathematics Teacher, TSBVI

The use of scientific graphing calculators is now a mainstay of secondary math classrooms, and they must be provided to students for the End-of-Course Examination for Algebra I. When the new statewide assessment (TAKS) begins in Spring 2003, the Algebra I exam will be eliminated, and it is expected that the TAKS 9th, 10th and 11th Grade (Exit Level) Mathematics will require the use of a scientific graphing calculator. Initially, calculators will not be permitted on the 8th Grade math TAKS. However, their use may be included in the near future. Each student must also have access to a graphing calculator for routine classwork and practice. Visually impaired students must meet the same requirements as their peers, and Teachers of the Visually Impaired (TVIs) must be prepared to teach their students the skills needed to be successful in mathematics courses. A review of the technology currently available may help TVIs determine the most appropriate ways to teach their students and prepare them for statewide assessments.

The Administrator's Manual of the 2001 End-of-Course Test states that each student must have access to a graphing calculator during the testing. Students may use any graphing calculator *except* those with typewriter-style keypads (known as QWERTY) or those that include a computer algebra system. Students may also use any four-function or scientific calculator on the test, but hand-held minicomputers or laptop computers may not be used. TEA usually accommodates the needs of special education students on an individual basis. If a visually impaired student uses, or wishes to use, a piece of technology not currently approved by TEA, the student's TVI should contact the Accommodations Task Force at TEA, which may give permission to use it on statewide assessments. For further information, the TVI might also call the Student Assessment Division of TEA, at (512) 463-9536. Remember, the device must be an accommodation that the student *routinely* uses in class.

LARGE DISPLAY SCIENTIFIC/GRAPHING CALCULATORS

TI ViewScreen Solutions (Current price: $300) <http://education.ti.com/>

Texas Instruments (TI) makes a ViewScreen package for several TI calculators including the TI-82 and TI-83. It has worked well with some low vision students. They use a ViewScreen calculator connected to a ViewScreen LCD display panel placed on a light box. Some students prefer using their calculator on the newer color CCTVs. This technology is easily available and has been approved by TEA. The ViewScreen package is already used by math teachers on their overhead projectors, so they should have no problem training visually impaired students with this technology.

VisAble (Current price: $269) <http://www.betacom.com>

The VisAble is the only large display scientific calculator made as a one-piece portable unit, and is an alternative for low vision students who are unable to use one of the TI solutions. However, it does not have graphing capabilities. Betacom Corporation manufactures it. Although most general education math teachers will be unfamiliar with the VisAble, the various functions are easily identifiable, and a willing math teacher should have little difficulty orienting the visually impaired student to the VisAble. This technology is more expensive than some, but it does meet with TEA's approval.

TI-83 Trainer (Current price: $49.50) <http://www.goldedtech.com/index.htm>

Professor Goldstein's TI-83 Trainer is an affordable computer software program with complete TI-83 calculator emulation. When installed on a laptop, the student has a very portable device. The addition of magnification software provides even better accessibility. If the math teacher has selected the TI-83 as the class calculator of choice, the TI-83 Trainer is an excellent option for the low vision student. The math teacher should have little difficulty orienting the visually impaired student. However, this option has not been approved by TEA at the present time.

Scientific Notebook (Current price: $129) <http://www.mackichan.com>

Scientific Notebook (SN) is another software package. When installed on a laptop, the student has a very portable device, which is more than just a graphing scientific calculator. SN is also a math/text processor, so the student can do all assignments, calculations, and graphs in one document directly on the laptop. It has onscreen magnification up to 400%, or additional magnification software may be used. In addition, two large print fonts are available from MAVIS at NMSU, which will allow further onscreen magnification and large print hard copies. Metroplex Voice Computing is even working on voice recognition software to make it accessible to the totally blind. With the right techniques, it is also possible for a blind student to work with matrices using Scientific Notebook and a screen reader to solve systems of equations and find regression lines. Furthermore, math teachers can enter all their worksheets, tests, etc. on SN, and the teacher of the visually impaired can easily translate them into Nemeth code. Many general education math teachers are just now discovering SN and seem quite excited about its potential. Although it has not been approved by TEA at the present time, most math teachers should find it to be affordable and user-friendly.

BRAILLE SCIENTIFIC CALCULATOR

Leo Braille Display Calculator (Current price: $1000) <http://www.sensorytools.com/>

The Leo is the only stand-alone braille-display scientific calculator, and is an alternative for the deafblind student who does not use a notetaker with braille display. However, it does not have graphing capabilities. Robotron Sensory Tools manufactures it. Most math teachers will need training before they can assist the student with this technology. The cost may be prohibitive for most, but it does meet with TEA's approval.

TALKING SCIENTIFIC/GRAPHING CALCULATORS

ORION TI-34 (Current price: $199) <http://www.orbitresearch.com/>

Certain low vision students may prefer a stand-alone talking scientific calculator, and although there are many such calculators on the market today, the ORION TI-34 from Orbit Research is currently the most affordable and user-friendly. It is also approved by TEA. While it does not have graphing capabilities, it is easily accessible by totally blind students (unlike the TIs and the VisAble), and features a built-in learning mode. The ORION's LCD display and functionality are identical to the TI-34, so math teachers should feel very comfortable orienting the visually impaired student.

Graph-It (Current price: $49) and Graph-It PC (Current Price: $149) <http://www.freedomscientific.com>

Graph-It is a tactile scientific graphing calculator program for Blazie Engineering Note-Takers. Graph-It PC is designed for use with IBM compatible PCs. Both are available from Freedom Scientific. The student can type in an equation and produce a tactile graphic on most embossers. An audio representation of the graph can also be played through the speaker for a quick, sound-picture of the graph. The software is quite limited, however, and the tactile graphics and audio graph lack precision. The note-takers also include a built-in scientific calculator. Although this combination is not the most user-friendly or time efficient scientific graphing calculator solution, it may be the only option for a deafblind student. Most math teachers will need training before they can assist a visually impaired student with Graph-It, and this is not a TEA-approved solution.

Accessible Graphing Calculator (Current price: $75) <http://www.ViewPlusSoft.com>

The Accessible Graphing Calculator (AGC) from ViewPlus Software, Inc. is a self-voicing graphing scientific calculator software program. Unlike a hand-held calculator, it displays results through speech and sounds, as well as visually presenting numbers and graphs. This program is intended to have capabilities comparable to a full-featured hand-held scientific and statistical graphing calculator. The AGC is truly accessible for all students, and could be used for the entire class. The onscreen graphics are easily seen by a low vision student via an enlargement feature, and the graph can be listened to by using the sophisticated audio wave feature. Print copies can be made with any standard printer using a variety of fonts, including braille. The print copies with braille fonts can be copied onto swell paper and run through a tactile imaging machine. One of the best ways to use the AGC is with a TIGER Braille/graphics embosser from ViewPlus Technologies, Inc., but the TIGER is rather expensive. Although considerable time is typically needed for training a blind student to use the ACG totally independently, the math teacher is usually able to assist the student because it is so user-friendly for the sighted individual. The AGC cannot do matrices or parent functions, but the various functions it will perform are quite impressive. (The vendor plans to continue upgrading the software, including working with matrices.) It has not been approved by TEA at the present time.

CONCLUSION

Teachers of the visually impaired must make many decisions about appropriate programming and technology for their students. They must not only be aware of the different kinds of technology that are available, but also be able to teach their students how to use them. For TEA to approve the use of a piece of technology, it should be routinely used by a student to complete assignments at school. The student should (a) have access to a graphing calculator, (b) know how to use a graphing calculator, and (c) use it to practice routine class work at the same time as his or her classmates.

TSBVI is committed to being a resource for visually impaired students, their teachers, and their families. It sponsors a variety of workshops and training opportunities, and maintains a math website at <http://www.tsbvi.edu/math/>. The website not only provides information about appropriate materials, tools and technology, but also offers specific suggestions for collaboration between teachers of the visually impaired and general education math teachers. In addition, the Special Programs Department offers a three-week summer class, Adaptive Tools and Technology for Accessible Mathematics (ATTAM), and a one-week ATTAM class during the regular school year. They also offer several one-week sessions of individualized instruction on specific IEP objectives throughout the year, which might include math and/or math technology goals. Finally, the Comprehensive Programs Department offers Algebra I, Geometry, and Algebra II in two-period blocks during the academic school year. The two-period block allows additional time for learning the necessary Texas Essential Knowledge and Skills (TEKS), perfecting the Nemeth code, and training in the use of adaptive math tools and technology.

If you have questions about teaching math to students with visual impairments, contact Susan Osterhaus at susanosterhaus@tsbvi.edu or (512) 206-9305.

EBooks
By Holly Cooper, Technology Specialist, TSBVI, Outreach

EBooks are electronic texts containing special formatting features which allow for reading with specialized software. EBooks are a recent development in the book market and can be downloaded into your computer, PDA (Personal Digital Assistants or Palm type device) or pocket computer, as well as into dedicated devices or special eBook readers. The exciting news for our readers is there is now voice output availability for eBooks, using Microsoft Reader on a Windows computer. This means that you can have an eBook read to you by your computer without the use of JAWS. (By the way, you can now download *SEE/HEAR* from TSBVI's website in Microsoft Reader.)

Here is some background information. Electronic books came on the market a few years ago and were promoted for their ability to save paper, space, and money. A few different companies developed special portable devices to read eBooks that were approximately the size of a typical paperback book. RCA and Franklin (which we in the field of visual impairment know as the maker of the Franklin Language Master talking dictionary) currently have eBook readers available in retail stores which sell electronics. There has been a certain amount of media hype debating the joys of printed books versus the technological advances of eBooks, and the market for eBooks lagged after their initial introduction. The introduction of PDAs and Pocket Computers into the mass market unexpectedly helped the spread of eBooks. PDAs and Pocket PCs have very small screens, but the devices with color screens are much more readable. They are also becoming more affordable.

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MAGNIFICATION

eMonocle Reader has features for low vision users (usable in Mac, Linux and standard Windows, but not Palm OS or Pocket PC) such as print size 4 to 144 points, adjustable color and contrast, and modifiable icons. It has keyboard commands for non-mouse users. Available at no charge at <http://www.ionsystems.com/emonocle/>.

BRAILLE

Pulse Data, maker of BrailleNote, made an agreement to use Microsoft eBook Reader so users can have output of text in eBook format. Users of BrailleNote can download eBooks in Microsoft Reader format from the Internet into their computer and sync into their BrailleNote. They can choose to output the text in voice or refreshable Braille on their BrailleNote. Because many eBooks are copy and print protected, the ability of a BrailleNote user to output in print or hard copy Braille of an eBook is not consistent at this time.

Books on disk in text format can be purchased from National Braille Press. These disks can load text directly into a braille notetaker without the use of a computer, if you have a disk drive which is compatible with the device. For more information, see National Braille Press at <http://www.braille.com/otherfor.html#anchorport>.

EXAMPLES OF BOOKS AVAILABLE AS EBOOKS

There are an amazing number of books available as eBooks. Many best sellers from current reading lists, classics, reference books, books for young adults and children can easily be downloaded. Prices are similar to the price of a paperback book or, in some cases, even less expensive. For parents who enjoy listening to audio books, this could be a reading experience for both you and your child. Here are just a few examples of titles that can be found in eBook formats: *The Hardy Boys: The Castle Conundrum, Aftershocks, Alice's Through the Looking Glass, Anorexia*

Nervosa: Starving for Attention, Dangerous Mammals, Heather and the Snow, Creative Activities that Teach about Africa, Langston Hughes and the Harlem Renaissance, Focus on Inventors, Beyond Stone and Steel: A Memorial to the September 11, 2001 Victims, Presumed Innocent, and *Along Came a Spider.*

CONCLUSION

For many of our readers, eBooks can be a great way to access information. In review, here are some of the assets of eBooks for blind and visually impaired users:

- EBooks can be loaded into BrailleNote and Pocket PCs, and Mac or Windows computers, depending on the product.

- Textbooks and reference materials are available.

- EBooks are portable, and cheaper than print.

- Voice output software is free.

- EBooks can be ordered and downloaded on-line and charged to a credit card.

The van Dijk Approach to Child-Guided Assessment
By Catherine Nelson, Clinical Instructor of Special Education, University of Utah

Marisa is six years old, deafblind and has cerebral palsy. Testing results describe her as "untestable with probable profound mental retardation and severe behavioral problems." Marisa's standardized evaluation got off to a bad start, when her mother was asked to leave the testing room and Marisa began to scream when she could not locate her. The assessor came up from behind and put his arms around Marisa in an attempt to comfort her. Startled and upset by the unexpected touch of a new person, Marisa managed to get her mouth on the assessor's hand in time to deliver a hard bite. The assessment continued when both Marisa and the assessor stopped screaming. But Marisa again became very upset when she could not understand what was being asked of her and what she was supposed to do with the strange objects that were being pressed into her hands. She had no idea what the assessor was asking of her. She could not perform many of the required skills because her visual, auditory, and motor impairments had severely limited both opportunities and motivation for learning. Marisa's score was far outside of the range of test norms, and her extreme agitation made any results unreliable. Sadly, at the end of the stressful day, her teachers and parents were led to believe that Marisa was both incapable of learning and severely behaviorally disordered.

Fortunately, such a scenario does not have to happen. In the 1960s, Dr. Jan van Dijk and his colleagues in the Netherlands developed strategies for assessment that look at the processes through which children learn, rather than individual, discrete skills. Such processes include the (a) ability to maintain and modulate state, (b) preferred learning channels, (c) ability to learn, remember, and anticipate routines, (d) ability to accommodate new experiences with existing schemes, (e) approach taken to solve problems, (f) ability to form social attachments and interact with others, and (g) communication modes.

The techniques used to obtain such information are guided by the child and thus avoid the unhappy situation that Marisa was presented with. The foundation of this assessment is the establishment of a relationship between the assessor and the child that builds from a secure base. The children assessed are never unduly stressed by having those with whom they feel secure leave before the new relationships are developed. They are given time to explore and become comfortable in new environments. The child's interests and abilities determine what materials are used and the direction the assessment takes, thus increasing both motivation and understanding. The assessor is responsible for

adjusting his/her emotional level and communication to those of the child. Child-guided strategies are conversational in nature and often begin with establishment of an interactive routine. The assessor imitates what the child is doing, and adds new information as turn-taking routines are built. Communicative signals are elicited by stopping the pleasurable routine and waiting for the child to signal continuation. In this fashion, children are able to demonstrate their abilities to learn, and the methods through which they can best be taught are identified. It is from this information that meaningful educational plans can be developed.

Because the child guides this holistic process, there are no standard materials or instructions. In order to help professionals and parents learn the assessment process, Dr. van Dijk and I developed an interactive CD-ROM entitled *Child-Guided Strategies for Assessing Children who are Deafblind or have Multiple Disabilities*. The CD uses more than 40 video clips of six children to demonstrate these strategies and their implications for intervention. Users are asked to answer questions pertaining to the video clips, each of which demonstrates several specific assessment techniques. The answers are then discussed, and if more in-depth information is desired, relevant literature is accessed by the click of a button. After getting an overview of the process, the user can interactively view two complete assessments and participate in designing intervention plans for the children being assessed through an interactive question and answer format. The CD-ROM contains an index of many terms having to do with deafblindness and each term is defined, explained in depth and illustrated with video clips. Twelve full text articles by Dr. van Dijk and his colleagues, that explain the "van Dijk" approach to assessment and intervention with children and youth who are deafblind, are also included in the production. The CD-ROM is now available and may be ordered from Joe Franken, 4619 Spyglass Dr., Dallas TX, 75287. The cost is $50.00 per unit. Further information and previews of the CD-ROM may be accessed through the production website at <http://www.aapnootmuis.com>.

All children can learn, but it is our responsibility as educators and parents to discover how they learn best. Through the techniques developed by Dr. van Dijk, children such as Marisa will have the opportunity to demonstrate what they can do. Most importantly, as effective methods for intervention are designed and implemented, they will have the opportunity to realize their full potential.

Vision and Hearing Loss Associated with Goldenhar Syndrome
By Kate Moss, Family Specialist, TSBVI, Texas Deafblind Outreach

Goldenhar Syndrome is one of the many syndromes that can result in a child having vision loss, hearing loss, or deafblindness. Like many other syndromes, there is typically a range of specific conditions. One child with Goldenhar may have only a few of the associated conditions while another child may have many of these conditions. It is important that those of us responsible for addressing issues of vision loss, hearing loss or deafblindness in educational settings are aware of what conditions might be present with each child who has this syndrome. Then, we can appropriately assess and program for his or her needs. Parents and family members need to connect with the medical and informational resources that may help them support their child.

Goldenhar (sometimes called Oculo-Auriculo-Vertebral or OAV Spectrum) is one of a group of conditions known as craniofacial conditions. That means that the impact is primarily to the head and face. Individuals with Goldenhar typically have faces that may appear smaller on one side, or the sides appear very different from each other. The cheekbones, jaws, and bones forming parts of the skull may be underdeveloped or malformed. There is sometimes incomplete development of the facial muscles, cleft lip and/or palate, teeth abnormalities, and what appears to be an abnormally wide mouth due to cleft-like extensions of the corners of the mouth. With Goldenhar, there is also the possibility of vertebral malformations, where the vertebrae may be underdeveloped, fused, or missing. Some children may also have heart, lung, kidney and/or gastrointestinal problems and genital malformation. A small percentage also have mental retardation (N.O.R.D. 2001).

Both the National Organization for Rare Disorders (N.O.R.D.) and Pediatric Database give information about the various conditions associated with Goldenhar. The Children's Craniofacial Association is another resource. Someone familiar with all aspects of this disorder will be better able to plan for the child and support the family's needs.

N.O.R.D.
P.O. Box 8923
New Fairfield, CT 06812-8923
Website: <http://www.rarediseases.org/cgi-bin/nord>

Children's Craniofacial Association
12200 Park Central Drive, Suite 180
Dallas, TX 75251
Phone: (972) 566-5980, (800)535-3643
E-mail: CCA@ccakids.com
Website: <http://www.ccakids.com/>

Pediatric Database
Website: <http://www.icondata.com/health/pedbase/files/GOLDENHA.htm>

World Craniofacial Foundation
7777 Forest Lane, Suite C-621
P.O. Box 515838
Dallas, TX 75251-5838
Phone: (972)566-6669 and (800) 533-3315
E-mail: worldcf@worldnet.att.net
Website: <http://www.worldcf.org>

The Children's Craniofacial Association hosts the Annual Cher's Family Retreat weekend for immediate family members of individuals with a craniofacial condition. The retreat is named for the singer, Cher, who portrayed a mother of a child with a craniofacial disorder in the movie, *Mask*. She lends her support to the organization and to this very special event. This year's event is scheduled for June 27th - 30th in St. Louis, Missouri.

VISION AND HEARING ISSUES

Vision conditions associated with Goldenhar Syndrome include:
- cysts on the eyeballs (epibulbar dermoids and lipodermoids)
- coloboma of the eyelid (part of the tissue of the upper eyelid is missing)
- microphthalmia (small eyes)
- narrowing of the eyelid folds between the upper and lower eyelids
- crossed eyes (strabismus)
- retinal anomalies

When addressing vision programming for these children, teachers must be aware that the child may be photophobic or have problems adjusting to bright light and glare due to the coloboma or microphthalmia. There may be decreased acuity due to the microphthalmia or retinal anomalies. The child may also have a field loss related to many of these eye conditions. Additionally there may be problems with depth perception if strabismus is present. A thorough ophthal-mological examination and functional vision evaluation should guide the team in addressing modification and accommo-dations for the child's specific vision issues. If the child is also hearing impaired, these vision issues may impact his/her ability to read sign language or speechread in certain situations.

Hearing conditions associated with Goldenhar Syndrome include:
- missing or malformed outer ear (anotia and microtia)
- narrow or missing ear canals (atresia)
- abnormal skin and cartilage on or in front of the ears (preauricular tags)
- abnormalities in the middle or inner ear

Appropriate programming for hearing loss begins with a thorough otological and audiological exam. Depending on the different malformations, a conductive, sensorineural or mixed hearing loss may occur. Because malformation of the outer ear and ear canal prohibit the use of certain types of hearing aids, amplification may be an issue. Bone conduction hearing aids may be needed. However, malformation of the mastoid bones might reduce the benefits of this type of amplification. Depending on the type and degree of hearing loss, you might see a child with this condition having

problems localizing sounds, listening in noisy environments, missing critical elements of spoken words or being unable to hear certain speech and/or environmental sounds. If the child is deafblind, this may greatly impact learning orientation and mobility skills. Malformation of facial muscles and the jaw may cause problems in forming certain speech sounds.

Children with Goldenhar should be thoroughly assessed in both vision and hearing. Finding and fitting assistive devices such as glasses and hearing aids may be a challenge. Appropriate modifications made for programming and materials should also consider associated health issues. Children with Goldenhar may be subjected to numerous surgeries to address jaw abnormalities and dental issues. They may have ongoing health issues that impact school attendance and reduced stamina. Problems with teeth and jaws, cleft palate and lip, and general gastrointestinal problems may cause nutritional concerns. All these factors must be taken into consideration when developing an educational program for this child.

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Change . . .
By Terry Murphy, Executive Director, Texas Commission for the Blind

A framed copy of the well-known Serenity Prayer sits on a table by my desk; a copy is glued to my daily calendar; and I can quote it by heart. It has become an integral part of my life here at the Texas Commission for the Blind because of its relevance to what I believe possible for every employee here as well as the consumers with whom we work in partnership. Grant me serenity, courage, and wisdom . . .

*"**Serenity to accept the things I cannot change**."* I can't say that I wear a halo of tranquility about things I cannot change, but I'm farther down the road than I used to be. For instance, blindness exists within our society, and state governments have finite resources. I have railed against both facts in the past, but I have reluctantly come to a point of acceptance because I cannot change either. The essence of this first phrase is also at the heart of one of our core services – the "how-to's" of adjusting to blindness. I see people begin to flourish and open themselves to learning when they and their families begin to accept blindness as something they can't change. Being blind is acceptable.

*"**Courage to change the things I can**."* During my almost 30 years at the Commission I have been responsible for my fair share of changing service delivery methods, staffing, and funding priorities. Change, to me, is usually energizing, so I have to remind myself that others sometimes find it threatening. Recently the agency's administrative staff got together at year-end to celebrate jobs well done. After recognition awards, the group was then challenged the remainder of the day with techniques for adapting to change. During the meeting I heard one confused voice in back say, "If we did such a good job this year, why are we being asked to change?" Good question. One reason is that we are not always the ones calling for change.

The administrative functions in all health and human service agencies are under scrutiny today in an effort to reduce administrative overhead. Our job is to cooperate fully by providing information about our mission, the services we provide, and how we are getting the job done efficiently and effectively. If mandated changes come our way, we will adapt, but we must be diligent in ongoing discussions to educate decision makers about the uniqueness of blindness and the lack of alternative resources available elsewhere if agency services are diminished. Each proposed change must be analyzed carefully for its effect on specialized services. It's imperative that we safeguard the gains consumers and state employees who are blind have made in Texas in the work place, schools, and communities via services available through the Texas Commission for the Blind.

"The wisdom to know the difference." Advocating for change just to stir the water is irresponsible. Even the simplest modification should be for the purpose of producing positive results. For instance, we are thinking about making a change that may seem simple on the surface, but its roots are deep. We plan to rename the Blind and Visually Impaired Children's Program. We may get some questions about making a change. Conventional wisdom might tell us to leave well enough alone because our program is the benchmark used by other states with a children's program or hoping to establish one. However, a name change is a wise decision in this changing climate of Texas government consolidation and streamlining. We do something no one else does and our program's name needs to reflect it. After stretching our meager funds for years to provide services not available elsewhere, other agencies have begun to step forward with funds for providing much of the medical assistance and prevention of blindness we once provided for blind and visually impaired children. We are already focusing our budget more on our main job, helping children with permanent and severe and visual losses.

We also need a new program name that tells legislators and decision-makers how we are fulfilling our mandate to provide services that will assist children with visual impairments to achieve financial self-sufficiency and a fuller and richer life. We promise a program that believes that the vast majority of blind children can look forward to a vocational future appropriate to their capabilities. We promise that all of our services will have a positive impact on the self-confidence of children, from newborn through secondary school age, as well as their families as they adjust to blindness. We promise a program that responds to children who are severely multiply impaired, including children who are deafblind. We will be there to help all children with visual impairments reach their highest potential on an individual level regardless of what the future may hold. Commission services can start the minute a child is born, and providing age- and ability-appropriate, blindness-specific services is our specialty.

Yes, blindness is a fact to be accepted, but we can still change what we can, as we can, to lay the groundwork for a better future. And, there's sometimes wisdom in a simple name change if it tells the world we have confidence that our services will have an indelible impact on your child's vocational and individual potential. By the time this article is published, we will have made a decision, so don't be surprised or alarmed when you hear that a new program's in town. It's just us, delivering the same quality of services we are known for, but working hard at delivering even better. Our children's program helps build a strong foundation of skills that last a lifetime.

The Real Challenge in Tactile Graphics
By Phil Hatlen, Superintendent, Texas School for the Blind and Visually Impaired

Many, many years ago, when I was a beginning teacher, I had a totally blind 4th grader who was taking California history. On one of the first print pages of his textbook there was a map of California, on which were displayed mountains, rivers, major cities, county borders, natural resources, and crops. It was a mess in print, but imagine my dismay when I discovered it had simply been left out of the hand-transcribed braille copy. That was the beginning of a career-long venture into the world of tactile graphics.

Some of the things I've learned along the way:

1. Blind children need to learn, in a gradual, developmental way, that there are systems for displaying real things in abstract form. This learning must be led by a skilled, qualified teacher of the visually impaired.

2. Each new use of tactile graphics will require instruction from the teacher of the visually impaired.

3. We should not try to reproduce three-dimensional pictures in raised line form. No raised-line picture will be three-dimensional to a blind child.

4. Bigger is not necessarily better when it comes to tactile graphics. When the fingers of one hand cannot encompass a tactile graphic, we are expecting the blind child to have a spatial sense that she may not possess.

5. While it may be desirable to have standards for tactile graphics (one shape always means the same thing), this is not likely to happen.

6. Blind people themselves feel differently about tactile graphics. I have friends who tell me that for me to decide what is presented as a tactile graphic, and what is not presented, amounts to censoring by me. They say "Put it all in and let us decide." I have other blind friends that tell me to describe a graphic in narration if I think it would be better understood.

7. Tactile graphics are necessary in three subjects: mathematics, geography, and science. My TVI friends who teach in local schools tell me that these subjects are often the most difficult for a blind child in a general education setting. At the Texas School for the Blind and Visually Impaired, very few students are referred by their local school district because of academic needs, but those that are, need the kind of small class, intensive instruction available at a school for the blind in those three subjects.

8. As local school instruction has continually improved over the years, schools for the blind would do well to find ways to complement the work of general education. We do this by emphasizing the Expanded Core Curriculum, because the subjects contained in it are those that TVIs in local districts often do not have time to teach. The academic subjects that schools for the blind might want to continue to stress are mathematics, geography, and science. Often in schools for the blind there is time to not only teach the academic content of these subjects, but to teach the reading of tactile graphics. Remember, if we don't develop standardized tactile graphics, it leaves us with no choice but to teach the reading of almost every tactile graphic.

The journey from those early days in California has taken many turns through the years, and I know several people who have helped us to significantly improve the production of readable tactile graphics. But I remain disappointed because we seem no closer to making wise decisions about how and when to use tactile graphics than we were forty years ago! Children with blindness need quality tactile graphics. As concerned parents and professionals, we owe it to these children to share this issue and advocate that it be addressed systematically at national, state, and local levels.

The Case for Low Vision
By Dennis Dickinson, Itinerant Teacher of the Visually Impaired
for Gilmer ISD, Ore City ISD, Harrison County, and Upshur County

Individuals with low vision, by any estimate, constitute the vast majority of the visually impaired population. However, more than half a century after this has been acknowledged, there remains a controversy regarding the way they should be treated by educators and rehabilitation professionals. Actually, I should not say "they," for this article is written by such an individual. I am a middle-aged person with low vision. In addition, I am the spouse of a visually impaired person, the father of two adopted children, a low-vision driver, and have been an educator of students with visual impairment for over 25 years. I readily acknowledge that these credentials do not entitle me to speak on behalf of all members of the low vision population. However, I do feel that I represent many within this population who simply wish our voices to be heard.

The low vision population is by nature an extremely diverse group. At its extremes, it includes people with light perception as well as those who can read paperback books and newspapers without using any aid or device. I would submit that despite this diversity, the low vision population has certain unique characteristics that set it apart from both the "fully sighted" and "blind" populations. These characteristics are:

1. Individuals with low vision do not have the same abilities as people with "normal" vision.

2. Individuals with low vision do not have the same characteristics as totally blind individuals.

3. Individuals with low vision have unique needs that set them apart from either population.

As a member of this group of individuals, I also believe that there are three unique needs that should be addressed by educators and rehabilitation professionals.

UNIQUE NEEDS OF THE LOW VISION POPULATION

Our vision should be accurately measured.

To put it succinctly, "LOW VISION IS NOT NO VISION!" The definition of legal blindness is a visual acuity of 20/200 in the best eye with best correction or a visual field of 20 degrees or less. While this definition sounds precise, it is often subjective. An eye specialist who uses an eye chart that does not measure acuities between 20/100 and 20/200 may give "the benefit of the doubt" and declare the patient "legally blind" in order to give the person access to more services. Thus, a person who reads regular print with no aids risks being placed in the same category with people who have a far lesser degree of visual functioning. Why, in an environment where time is measured in milliseconds and gasoline sales are measured in thousandths of a gallon, do we still consider "counts fingers" a viable visual measurement? Why do we continue to cling to an out-of-date standard? Unfortunately, mistakes and misunderstandings still occur. The definition of "legal blindness" is not even the same in all countries. It is simply an arbitrary designation arrived at by people with 20/20 vision to determine eligibility for government services.

An oft-repeated truism in the field of visual impairment is that a fully sighted person gets 80 percent of his or her information about the world visually. In the case of a low vision person, he or she is still receiving a vast majority of their sensory input by visual means. The point at which 80% becomes 50% or 5% is not something that is easily determined. Attempts to state a "percentage" of vision loss frequently fail to take into account factors other than visual acuity. In my opinion, if an individual demonstrates good visual functioning, this individual's vision should be given the "benefit of the doubt" when considering educational and rehabilitation programming. Certainly it does not deserve to be ignored as if it were of no importance.

It should be obvious that a simple measurement of visual acuity is not sufficient to make blanket decisions regarding a person's education or rehabilitation. Other factors should also be considered, especially when they can have such a profound effect upon programming. Visual field, the effects of various lighting conditions, and the nature of the eye condition including prognosis, age of onset, and cognitive functioning are important components of visual functioning. While most of these items have long been included on the State of Texas Eye Report Form, experience has shown that all these factors are seldom addressed. Even though there are many fine eye specialists and low vision clinics that can give great assistance to persons with low vision, more precise and accurate vision evaluations are needed to ensure that accurate decisions are made.

Our vision must be respected.

It has been well documented that an individual's visual functioning is dependent on a great variety of factors. In addition to visual acuity, visual field, and the nature of the eye condition, factors such as lighting, color vision, and visual experience also play a significant role in an individual's ability to use visual information. This is why educators perform Functional Vision Evaluations and Learning Media Assessments; to determine, on an individual basis, the visual

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abilities of each student. The Learning Media assessment makes further recommendations concerning the learning media that will be most effective and the modifications that will enable an individual to function at maximum potential. Admittedly, these assessments are not perfect. No evaluation that depends on observation and a limited amount of contact with a student could possibly make such a claim. That is why the assessment is repeated at least every three years, and it is not relied upon as the sole factor for making educational decisions. It is considered along with medical information, evaluation by educational diagnosticians, teachers and other education professionals, and parental input.

Ultimately, the person best qualified to speak about visual needs is the individual with low vision. In the case of young children and people with multiple disabilities, the determination must be made by observation, caregiver interview, professional judgment, and other means. However, in the field of education, it is a decision based upon the characteristics of each individual. It is our function as educators to help the student become increasingly aware of not only his or her visual condition, but also the adaptations necessary to function in a fully sighted world as a productive member of that society. It is the individual's responsibility to demonstrate what role the visual impairment will play in his or her life. When we make assumptions about what a visual impairment means, we run the risk of limiting what the person may ultimately be able to accomplish.

An individual with low vision should have access to a wide variety of tools.

The literacy tools of a fully sighted person are print reading and writing. The literacy tools of a totally blind person are Braille reading and writing. Both populations will likely use computer technology, listening skills, and other sensory input to supplement these tools. The person with low vision may use either or both of these literacy options. In addition, this person may use a variety of other tools including enlarged print, magnifiers, telescopic aids, screen-enlarging software, and other devices to enhance communication skills. Denying any of these sources, especially print access, to those capable of using them, limits an individual's potential. I am sure no one in the education or rehabilitation field, or the consumer of such services, wants this outcome.

I write this as a member of the largest numerical component of the low vision population. I refer to those whose acuity is above 20/200. I do not think I stretch the point when I say that most of us regard ourselves as basically visual people. Frequently we fail to identify ourselves with the "legally blind" population. Frankly, it is our goal to blend in with the rest of society as much as possible and to attract as little attention as possible. Consequently, we too often fail to speak out on issues which effect programming for persons with visual impairment. It is not my aim to criticize any particular agency or individual. Rather, I simply call for the recognition of individuals with low vision as a distinct population with abilities and needs that distinguish it from both the totally blind and fully sighted populations. As a distinct group, this population deserves to have programming decisions that are based upon its unique characteristics and needs. More precise vision evaluations, respect for the individual's use of all the sensory channels open to him or her, and access to an increased availability of the necessary tools for literacy and life would go a long way toward meeting the unique needs of the low vision population.

Mosquito Netting or Pay Check – Which Will You Choose?
By Ron Lucey, Texas Commission for the Blind, Consumer Resources Coordinator

Each January, I try to motivate families to start planning for their child's summer activities, even though the Central Texas winter seems endless and summer a distant notion. I was recently inspired by my colleagues at TCB to broaden the annual summer camp article to include additional suggestions for using your child's summer break to better prepare them for their future.

WILL YOUR CHOICE BE MOSQUITO NETTING?

There are a lot of benefits to be gained from attending camp, including telling stories on the size of the mosquitoes swarming the campsite. Younger children may benefit from shorter camp sessions or day camp programs recom-

mended for campers who may not be emotionally prepared to spend a week or more away from home. Often city parks and recreation departments sponsor day camps that seek to include youth with disabilities in city sponsored recreational and learning activities. Meet early with the recreation or day camp coordinator to insure that your child's needs for meaningful participation are accommodated.

For many older children, residential summer camp programs offer a good opportunity to practice and learn new skills, develop a greater sense of confidence and independence, meet peers with similar interests, make new friends and, most importantly, have fun. An updated list of popular residential summer camp programs, and other summer programs targeting youth who are blind or visually impaired, may be found on the TSBVI website at <http://www.tsbvi.edu/education/camps.htm>.

SUGGESTIONS FOR SELECTING A CAMP

1. Be aware of camp deadlines. The more popular camp sessions fill up fast, leaving your family with fewer choices for camps and desired sessions if you fail to beat the rush. By Spring Break, make sure you have made a final camp selection.

2. Call early (January or February) to request a camp application form. Some forms take longer to complete and may require a medical release signed by your child's doctor.

3. Talk to other parents, teachers of the visually impaired, TCB children's caseworkers, or transition counselors about the camp you are considering for your child. Visit the camp's website or, if possible, consider a visit to the camp in the off-season.

WILL YOUR CHOICE INCLUDE EARNING A PAYCHECK (OR WORK EXPERIENCE)?

Most of us can remember having a work experience at an early age, even if it was a volunteer job at our local church or hospital. Work experience is crucial for the vocational development of children who are blind or visually impaired. This summer, instead of considering the same camp options, why not think about involving your child in a summer work experience – either informal or formal?

Younger children benefit from having responsibility for jobs around the house, and the reward of earning a little extra spending money. Focus on the jobs or portion of jobs your child is able to perform, and help them develop alternative techniques for accomplishing other more challenging household chores. Suggested chores for younger kids include feeding and caring for the family pet, helping with laundry, washing and putting away dishes and, yes, even yard work. In addition to promoting jobs around the home, consider volunteer experiences with local organizations and/or businesses. Some experiences to consider include folding towels and sweeping at a friend's hair salon, being a junior camp counselor at a local day camp, and volunteering at museums. To explore these options, contact your TCB Children's Program caseworker.

Older youth may wish to explore paid work outside the home through a summer job with a local employer. Local workforce centers offer a good resource for finding paid jobs in the community. The Texas Workforce Commission (TWC) website has a list of all local workforce centers, as well as online job banks for performing a job search. Their website is <www.twc.state.tx.us>. Many city/county health and human service departments sponsor summer youth employment programs, with work opportunities in city departments throughout the community. Recruitment for these programs may begin as early as January, with mandatory pre-work training and orientation classes held in the spring. For more information on paid summer work programs, contact your local TCB transition counselor, Regional Education Service Center, or the Texas School for the Blind and Visually Impaired.

Whether your family chooses mosquito netting or a paycheck, the most important part of the experience is to enjoy the summer and all of the recreational, learning, and work opportunities it has to offer!

Don't Miss This Opportunity!!!

By David Wiley, Transition Specialist, TSBVI, Texas Deafblind Outreach

In the last edition of *SEE/HEAR*, Stephen Schoen, with the Texas Department of Human Services (TDHS), reported on current opportunities for community services that are available through the Deaf-Blind Multiple Disabilities Medicaid Waiver. Steve is the administrator of the DB-MD Medicaid Waiver Program.

I wanted to emphasize that for young people with deafblindness and their families, there is, *right now*, a unique opportunity to receive extremely valuable community services with little or no wait.

What is the opportunity?

Texans can receive services from the DB-MD Waiver specifically designed to provide support at the home of a person who is deafblind with multiple disabilities. This can be the home of the person's family, the person's own home, or a small group living arrangement in the community. These services provide the support a person needs to live in the community, or can assist families who continue serving as the person's primary caregivers.

This Program has the flexibility to meet individual need. People who are deafblind with multiple disabilities, or families, receive only the support they need and want, from minimal to more extensive help, including 24-hour care in the community. Once a person enters the Program, services can continue for life, and be modified or expanded as the needs of the person or family change. There is no family income eligibility requirement, as is the case with many programs.

Who should act now?

If there is an individual in your family who is deafblind with an additional disability, and who will always need support and assistance at home and in community, put his or her name on the DB-MD Interest List *now*. The DB-MD Waiver is for individuals age 18 and over, but people of all ages should have their names on the Interest List. Services for individuals over 18 can begin as soon as eligibility has been established, while those under 18 will be in line to receive services after meeting the age requirement. It is also important for young children to be on the Interest List, because information about the number of individuals who are deafblind with multiple disabilities requiring support will help policy makers plan for future needs. In addition, if there is a policy change regarding the age at which services may begin, younger people on the list will be in a better position to begin services immediately.

Advocates for young people who are deafblind with multiple disabilities should also act. Teachers, caseworkers, and friends should inform families about this opportunity, encourage them to contact TDHS about the DB-MD Waiver and, if assistance is needed, help them complete the Interest List Survey Form (Project Service Link) that will place the name of the deafblind individual in their family on the DB-MD Interest List. The initial paperwork is minimal.

Why act now?

While most Medicaid funded programs have extensive waiting lists, new funding from the Texas Legislature is available to the DB-MD Waiver Program *now*. After TDHS has been contacted, and the Interest List Survey Form has been completed, services can be quickly initiated for eligible applicants. Current information about people interested in the Program, regardless of age, will help ensure that services continue to be available in the future.

For more about the DB-MD Waiver Program, read Steve Schoen's article in the Fall 2001 Edition of *SEE/HEAR*. An electronic version is on TSBVI's website at <http://www.tsbvi.edu/Outreach/seehear/fall01/waiver.htm>. You'll soon be able to find additional information about the DB-MD Waiver on TSBVI's website by following the Texas Deafblind Project link at <http://www.tsbvi.edu/Outreach/deafblind/index.htm>. Steve can also be contacted directly at (512) 438-2622, or <stephen.schoen@dhs.state.tx.us>.

California Deaf-Blind Services Fact Sheets Available in Many Languages!

Are you looking for information on issues common to children who are deafblind? California Deaf-Blind Services has many fact sheets that are available in a variety of languages. The fact sheets listed below are all available in English, but many are also available in Spanish, Chinese, Laotian, and/or Vietnamese.

NO.	FACT SHEET TITLE	SPANISH	CHINESE	LAOTIAN	VIET-NAMESE
001	Communication	X		X	X
002	Light Sensitivity	X			
003	Touch Cues	X		X	X
004	Object Communication	X	X	X	X
005	Tadoma - only in English				
006	Ideas for Recreation and Leisure - only in English				
007	Awareness of Medical Issues in Relation to Changes in Behavior	X	X		X
008	How to Interact with Individuals with Dual Sensory Impairments	X	X	X	X
009	Teaching Body Language - only in English				
010	Developing Independence	X	X		X
011	Appropriate Touch - only in English				
012	Tolerating Touch	X			
013	Encouraging Exploration	X	X		X
014	Making Changes in Routine	X	X		X
015	Relaxation Strategies - only in English				
016	Deaf-Blindness - only in English				
017	Innovative Living Options - only in English				
018	Alphabet Soup: Acronyms Commonly Used in Special Education	X			
019	Creating a Need To Communicate	X	X		X
020	Strategies for Successful Medical Appointments for Individuals with Deaf-Blindness		X	X	X
021	Supported Education - only in English				
022	Neurological Visual Impairment	X	X		X
023	Visual Adaptations	X	X		X
024	Otitis Media	X	X		X
025	How to Create a Communication Directory	X			
026	Considerations When Assessing Children & Youth of Spanish Speaking Families	X			
027	How to Create a Winning Video Resume	X			
028	Maintaining a Home-School Relationship	X			

Most of the fact sheets are currently available online. If they are not, you can contact the California Deafblind Services office to obtain a printed copy. Printed versions of ALL fact sheets are available free of charge. To order any of the California Deaf-Blind Services Fact Sheets, contact them by phone - (800) 822-7884 (voice/TTY), fax - (415) 239-0106, e-mail -cadbs@sfsu.edu, or go to their website at <http://www.sfsu.edu/~cadbs/Facts.html>.

Citigroup Offers $10,000 Plus Paid Summer Internships

Citigroup Bank, one of the national corporate sponsors of Disability Mentoring Day, is offering a great opportunity to people with disabilities. Citigroup's Global Diversity Scholarship Program provides a paid 10-12 week internship opportunity during the summer before the senior year of college and a one-time award up to $10,000, for tuition, which will be granted upon successful completion of the summer internship. While this scholarship program was originally created to enhance opportunities for female and/or minority college students, Citigroup now wants to begin using this Scholarship Program to target students with disabilities.

Citigroup is looking for candidates demonstrating a combination of academic and leadership abilities, coupled with experiences and personal qualities that indicate an individual's potential to excel in the field of financial services. Students of all disciplines and majors, who have excelled in their pursuits, are encouraged to apply. To find out more about Citigroup's Scholarship Program and obtain an application, contact:

Dennis Miranda
Citigroup Bank
Global Diversity Department
388 Greenwich Street, 39th Floor
New York, NY 10013

Phone: (212) 816-2196
Fax: (212) 816-3438
E-Mail: dennis.miranda@ssmb.com

APPLICATIONS ARE DUE FEBRUARY 25, 2002.

APHont™: A Font for Low Vision

APHont™ (pronounced Ay'-font), was developed by American Printing House for the Blind, Inc. (APH) specifically for low vision readers. APHont embodies characteristics that have been shown to enhance reading speed, comprehension, and comfort for large print users. Some of its features include:

- More even spacing between letters
- Higher crossbars
- No serifs
- Wider letters
- Heavier letters
- Underslung "j" and "q"
- Letters more open
- Larger punctuation marks

APHont Regular may be copied and distributed at no charge. To view a sample of APHont Regular (nonbold) or download it for free, go to <http://www.aph.org/products/aphont.html>. (Note: APHont is trademarked material. APHont may not be altered or copied for sale without express written permission from APH. APH makes no claim that APHont is an appropriate font for children who are just learning to read.) For further information about APHont or other products and services available through APH, call (800) 223-1839.

New Braille Resources Now Available

Special Education Technology British Columbia (SET-BC) has developed some new resources to support emerging braille literacy using the Mountbatten Braille Writer (MB). These two new resources, written and designed by Graham Cook, a teacher of students with visual impairments in Peace River, British Columbia, are now available to view and download in Adobe pdf format on the SET-BC website at <http://www.setbc.org/res/mbpro/default.html>.

The first resource, "MB Pro - The Second Generation Mountbatten Brailler-A Visual Guide", is a user-friendly learning and reference guide for teachers that covers the basic operations of the Mountbatten Pro Braille Writer. (53 page document)

The second resource, "MB Pro Braille Writer - Step by Step Introductory Lessons", is a series of lesson modules designed for beginning braille readers and writers, ideally K-1. Lesson plans include many detailed and creative activities for enhancing literacy development as well as concept development. Graham has used these lesson plans successfully with his students and they are shared as suggestions for teachers to adapt to suit the needs of their individual students. (168 page document)

National Braille Press Publishes *The Bridge to Braille*

National Braille Press is a nonprofit Braille printing and publishing house that was established in 1927. It publishes a variety of materials in and about Braille, including Braille versions of the Harry Potter books! One of its publications is *The Bridge to Braille*. *The Bridge to Braille*, written by Carol Castellano and Dawn Kosman, is a step-by-step guide that shows parents and teachers how to help blind children progress from early literacy experiences to full participation in the classroom. Written by the parent of a blind child and a teacher of the blind, this is a very easy to read book crammed full of good ideas. It is available in large print or braille for $12.95.

Chapters include:

Setting the Stage for Success (how parents can help a child get ready to read Braille)

A Quick Braille Lesson (information about the Braille code)

Adapting Materials (quick and easy ways to help children learn to use Braille for labels, worksheets and flashcards)

Beginning Braille Reading and *Braille Reading Skills for School* (the skills a beginning Braille reader needs, including dictionary skills)

About Braille Books (Did you know there are different formats which help the Braille user read more efficiently?)

Writing in Braille and *Braille Writing in the Classroom* (Do you know what a slate and stylus is? Do you know how to help a child take spelling tests in Braille?)

Doing Math in Braille (including a nice Nemeth code cheat sheet!)

Independence in the Classroom (What does desk size have to do with reading Braille?)

Using Technology (an overview of high-tech devices and how to choose them)

Resources (sources of Braille books, instructional books for teachers and parents, materials and information)

Appendices: Literacy, Learning, and Louis Braille; *Making Whole Language Work*; and *A Parent's Guide to the Slate and Stylus*

To order this book or a catalog of other publications, contact:
National Braille Press
88 St. Stephen Street
Boston, MA 02115
Phone: (888) 965-8965
Fax: (617) 437-0456
Website: <http://www.nbp.org/address.html>

AFB Announcements

Braille Bug

Do you have the Braille Bug?? American Foundation for the Blind (AFB) has a web page for you! Check out <www.afb.org/braillebug/>. This page has links to information about Braille (the man and the code), Helen Keller, and games and ideas to help teachers and parents talk with children, sighted and visually impaired, about Braille.

Celebrate Braille literacy anytime!

American Foundation for the Blind (AFB) has developed a packet to help commemorate Braille Literacy Month, observed in January to honor Louis Braille's birthday. January is past, but Braille literacy can be celebrated any time! Packets include, among other things, fact sheets about Braille, Braille alphabet cards, a poster about Braille, and resources and information for parents about Braille. You may obtain a packet by writing The National Literacy Center, AFB, 100 Peachtree St., Suite 620, Atlanta, GA 30303, calling (404) 659-6957, e-mailing literacy@afb.net, or by calling AFB's Information Center at (800) 232-5463 or the National Association for Parents of Children with Visual Impairments (NAPVI) at (800) 562-6265.

AFB Technology and Employment Center

American Foundation for the Blind has a new program, The AFB Technology and Employment Center. Resources at the center focus on two key areas. The AFB Tech Product Evaluation Laboratory is working with software and hardware developers to make mainstream products accessible. The Careers and Technology Information Bank is a data base of over 2000 individuals who have a visual impairment and are willing to give first hand information about their job experiences and use of assistive technology. Check out the variety of professions represented by this group at <http://www.afb.org/info_document_view.asp?DocumentID=223>. For information about the Technology and Employment Center, go to <www.afb.org> or call (800) 232-5463.

New Commissioner's Rules Proposed

The Texas Education Agency has issued proposed new Commissioner's Rules for the governance of the state's 20 regional education service centers. The proposal, open for public comment only until February 20th, would delete the current requirement in rule that each education service center must hire at least one staff member certified as a teacher of the visually impaired.

The Texas Education Agency would like to hear more from the public about this proposed change. Go to <http://www.tea.state.tx.us/special.ed/>, and click on "Commissioner's Rules for Special Education (Proposed)." Comments on proposed rules can be submitted to rules@tea.state.tx.us. Be sure to reference 89.1141 (e) *"A minimum of one staff member certified in the education of students with visual impairments shall be employed by each ESC"*. Written testimony will be accepted until February 20, 2002.

A series of public hearings will be held across the state at these education service centers on the following dates:

January 25th - ESC Regions 4 (Houston), 7 (Kilgore), 9 (Wichita Falls), 15 (San Angelo), and 19 (El Paso).

February 8th - ESC Regions 3 (Victoria), 5 (Beaumont), 10 (Richardson), 16 (Amarillo), and 20 (San Antonio).

February 11th - ESC Regions 1 (Edinburg), 8 (Mt. Pleasant), 13 (Austin), 14 (Abilene), and 18 (Midland).

February 20th - ESC Regions 2 (Corpus Christi), 6 (Huntsville), 11 (Fort Worth), 12 (Waco), and 17 (Lubbock).

The last day for public input is February 20th. Whether you are the parent of a child with visual impairments or deafblindness, or a professional working with one of these children, it is important for your voice to be heard.

NEWS & VIEWS

Reauthorization of the Individuals with Disabilities Education Act

The Secretary of Education invites written comments from the public on the Individuals with Disabilities Education Act (IDEA), to help the Department of Education prepare for reauthorization of the Act in 2002. To ensure that your comments are considered by the Department as its legislative proposal on IDEA is prepared, we encourage you to submit them before February 25, 2002. All comments concerning the reauthorization of IDEA should be addressed to Thomas Irvin, Office of Special Education and Rehabilitative Services, U.S. Department of Education, and submitted by one of the following methods.

1. Comments can be submitted by e-mail to Comments@ed.gov. You must write "IDEA Reauthorization" in the subject line of your electronic message.

2. You can also submit your comments via surface mail to Office of Special Education and Rehabilitative Services, U.S. Department of Education, 400 Maryland Avenue, SW., Mary E. Switzer Building, Room 3086, Washington DC 20202-2570.

Please submit your comments only one time. For further information contact JoLeta Reynolds or Thomas Irvin at (202) 205-5507 (voice) or (202) 205-5465 (TDD). This document is available in an alternative format (e.g., Braille, large print, audiotape, or computer diskette) on request to Katie Mincey, Director of the Alternate Formats Center, at (202) 205-8113. For information about IDEA, you can go to this website<http://www.ed.gov/legislation/FedRegister/other/2002-1/011002c.html>.

IDEA is the major legal basis for special education service delivery on our country. Many advocacy groups in the fields of blindness and deafblindness have developed position statements to prepare for IDEA reauthorization. You may want to contact one or more of the following organizations to see what issues they believe are important to address in the next revision of IDEA.

1. The Alliance of and for Visually Impaired Texans (AVIT)

Phone: (800) 394-0666

2. The Association for Education and Rehabilitation of the Blind and Visually Impaired (AER)

Phone: (703) 823-9690, Website: <http://www.aerbvi.org/>

3. The American Council of the Blind (ACB)

Phone: (800) 424-8666, Website: <http://www.acb.org/>

4. The American Foundation for the Blind (AFB)

Phone: (800-232-5463), Website: <http://www.afb.org/>

5. The Deaf-Blind Multihandicapped Association of Texas (DBMAT)

Phone: (972) 287-1904, Website: <http://www.dbmat.org/>

6. The National Family Association for Deaf-Blind (NFADB)

Phone: (800) 255-0411, extension 275, Website: <http://www.nfadb.org/>

7. National Federation of the Blind (NFB)

Phone: (410) 659-9314, Website: <http://www.nfb.org/>

CLASSIFIED

Fifth Biannual Usher Syndrome Family Retreat
June 7-9, 2002
Austin, TX

Usher Syndrome is a leading cause of deafblindness. People with Usher Syndrome are usually born with a hearing impairment, then begin losing vision later as a result of retinitis pigmentosa. This pattern of deafblindness creates some unique issues for children with Usher Syndrome and their families.

Families from all over Texas come to this event year after year. The experience of meeting other families and adult mentors with Usher Syndrome, and simply having time together, makes this a very special weekend. Topics of this year's retreat will include recreation and leisure, planning for college and post-secondary life, and strategies for living a rich full life while coping with the challenges of Usher Syndrome. Information will also be shared about the supports and resources available to school-aged children with Usher Syndrome, their siblings, and their parents.

Travel assistance from Texas Deafblind Outreach is available for families interested in attending.

Registration deadline is May 21, 2002.
Registration flyers will be available in March.

Mental Health Issues Associated with Usher Syndrome
A special day of training for
Counselors, Teachers, Rehabilitation Professionals and Parents
June 7, 2002
TSBVI Conference Center - Austin, TX

Michael Brenner, currently the Mid-Atlantic Regional Representative for the Helen Keller National Center, will be the featured speaker at this one-day training. Michael brings a unique perspective to this topic. He has Usher Syndrome (Type II). After completing his Masters Degree from Gallaudet University, he established the Mental Health Counseling Program at Deaf Community Services of San Diego, California. Michael was also Coordinator of Research and Training on Mental Health and Deaf-Blindness, under a grant at Alliant University. He is a licensed Marriage and Family Therapist (MFT), has extensive knowledge and experience in the field of psychosocial issues and deafblindness, and is well-versed in the challenging emotional adjustments caused by dual hearing and vision loss.

The registration fee of $50 includes the cost of lunch and materials.
Checks or agency purchase orders should be made out to Texas School for the Blind & Visually Impaired.

Registration deadline is May 21, 2002.
Registration flyers will be available in March.

For more information about the retreat or one-day training, or to request a registration flyer,
contact Beth Rees
Phone: (512) 206-9103 or E-mail: BethRees@tsbvi.edu

NEWS & VIEWS

Coming in June
to various locations around Texas!

Motor, Vision & Travel:
**Working as a Team to Address
the Motor and O&M Issues of the
Young Child with a Visual Impairment**

Movement and exploration of the environment play important roles in the development of concepts, strategies for interacting with objects, and body awareness. Vision loss can significantly impact these areas. This workshop will share fun ideas for working on orientation and mobility, motor and sensory skills. The importance of teamwork will be emphasized, and roles of the OT, PT and O&M Specialist will be discussed.

This workshop (still in the planning stages) will be offered to families and professionals at a variety of locations around Texas. Look for information on dates and locations in the Spring Edition of *SEE/HEAR*.

For information, contact Karen Scanlon

Phone: (512) 206-9314 or
E-mail: karenscanlon@tsbvi.edu

TAER Annual Conference
April 4-6, 2002
Harvey Hotel in Richardson, TX

"Taking Charge of Our Future" is this year's theme for the annual conference of TAER (Texas Chapter of the Association for Education and Rehabilitation of the Blind and Visually Impaired).

This conference is for educators, orientation and mobility specialists, rehabilitation teachers and counselors, parents, and consumers. Session topics will include the use of technology, writing IEPs for employment, social skills, orientation and mobility, personnel preparation, and much more.

For more information, contact Neva Fairchild
Phone: (214) 688-7007 or
E-mail: nevaf@tcb.state.tx.us

INSITE Training:
A Home-Based Model For Infants, Toddlers, and Preschoolers Who Are Multiply Disabled Sensory Impaired

INSITE is a 6-day training for school and ECI professionals working with families who have children (birth to 5) with multiple impairments, including sensory impairment.

Ft. Worth
Region XI Education Service Center
Part I - February 19 & 20, 2002
Part II - March 20 & 21, 2002
Part III - April 9 & 10, 2002

Austin
Texas School for the Blind and Visually Impaired
May 13 - 18, 2002

Silsbee
Region V Education Service Center
Part I - June 4 & 5, 2002
Part II - August 19 & 20, 2002
Part III - September 17 & 18, 2002

For information, contact Gigi Newton
Phone: (512) 206-9272
E-mail: GigiNewton@tsbvi.edu

Texas Focus 2002:
Looking At Access
June 13-14, 2002
Renaissance Hotel, Houston, TX

This conference is for people involved in the education of children with visual impairments, including multiple impairments and deafblindness.

This year's theme, "Looking At Access," will draw our attention to ways students with visual impairments can be given more and better access to the school curriculum, their community, and the world in general.

For more information, contact Jim Durkel
Phone: (512) 206-9270 or
E-mail: JimDurkel@tsbvi.edu

TSBVI Outreach Video Conferences

Sharon Nichols and Holly Cooper of TSBVI Outreach continue to offer a number of video conference workshops for the 2001-2002 school year. All broadcasts will be held from 8:30 - 11:00 a.m. (CST). From 10:30 - 11:00 a.m., participants will be able to ask questions about the specific technology discussed that day, as well as any questions about any piece of technology. If possible, participants should bring to the training the piece of technology being discussed.

These workshops can be accessed by anyone who is part of the TxED network (formerly known as ESCONETT), and up to five sites that are not part of that network. To get connected, please contact Scott Wimpress at ScottWimpress@tsbvi.edu. Questions can be sent to SharonNichols@tsbvi.edu, HollyCooper@tsbvi.edu or JimDurkel@tsbvi.edu.

March 27, 2002
Braille Lite, Braille 'n Speak & Type 'n Speak

April 10, 2002
Home Page Reader and Internet Access

May 9, 2002
Matching Technology to the Student

16th Josephine L. Taylor Leadership Institute
"Facing the Future: Learning from Legends,
Preparing New Leaders"
March 8-10, 2002
Washington, DC - Marriott Hotel
Sponsored by
American Foundation for the Blind (AFB)

The 2002 JLTLI will explore how current and prospective leaders can learn from the experiences of those who became legends. JLTLI 2002 will address: personnel shortages; enhancing skills through the train-the-trainer model; mentoring; accountability; competency standards; and the promotion of new and longstanding professions in the field of services for people who are blind or visually impaired.

Contact: Gabriella Smith-Coventry
Phone: (212) 502-7654 or E-mail: gsmith@afb.net
Website: <http://www.afb.org>

April 5-7, 2002
(Pre-conference day April 4)
International Parent to Parent Conference
In the Spirit of Sharing: Making the Connections
Philadelphia, PA
Sponsored by Parent to Parent of Pennsylvania
Contact: Kathy Brill
Phone: (717) 540-4722
E-mail: ksbrill@aol.com
Early Bird Conference Fees: $225; $75 (one-day rate)

April 3-7, 2002
Council for Exceptional Children's
Annual Convention and Exposition
New York, NY
Division on Visual Impairments
The Council for Exceptional Children
(888) 232-7733 or <www.cec.sped.org>

April 8, 2002
Autism in the Visually Impaired Child
Presenter: Terese Pawletko
Region X ESC, Richardson, TX
Contact: Kitra Gray, (972) 348-1580 or
E-mail: grayk@esc10.net
Handouts from this presenter's session at AER 2000
can be found on the TSBVI website at
<http://www.tsbvi.edu/Education/vmi/index.htm>.

May 29-31, 2002
Family Support:
Three Days for Spouses, Significant Others,
Adult Children of Persons with Deaf-Blindness
Helen Keller National Center - Sands Point, NY
For information and an application, please contact
Dr. Therese Madden Rose at (516) 944-8900 or
E-mail: theresentt@aol.com

National Federation of the Blind
NFB Convention 2002
July 3 (Seminars)
July 4 through July 9 (Formal Convention)
Location: The Galt House Hotel, Louisville, KY
For information, visit the NFB website at
<http://www.nfb.org/coming.htm>
Phone: (410) 659-9314
E-mail: nfb@nfb.org

BRAILLE FUNdamentals

BRAILLE FUNdamentals is a comprehensive program for teaching the Braille code. The sequence for introducing the Braille configurations has been organized into fifty-six clusters of letters, numerals, contractions, short forms, punctuation and special signs, with specific clusters devoted to the reading and writing practice of previously learned contractions. Also included in this curriculum are a Pre-Braille Assessment, Braille Checklists and ideas for games.

This program can be used with beginning Braille readers, as well as those readers who need to learn Braille when they are older. In an effort to incorporate current best practices in teaching reading and writing, a wide variety of age-appropriate activities are included at each level. Within each cluster an extensive set of instructional materials is included, in order to provide an adequate amount of ready-made materials.

BRAILLE FUNdamentals is organized into four volumes:
> Volume 1: Overview and Assessments *
>
> Volume 2: Clusters 1-16
> (alphabet and whole word signs)*
>
> Volume 3: Clusters 17-37
>
> Volume 4: Clusters 38-56

written at four levels:
> Level 1 – Primary, grades K-2
>
> Level 2 – Upper Elementary, grades 3, 4, 5
>
> Level 3 – Middle School, grades 6, 7, 8
>
> Level 4 – High School, grades 9, 10, 11, 12

> *Vols. 1 & 2 available now*
> *(Vols. 3 & 4 available later in the year)*

BRAILLE FUNdamentals can be ordered as a complete set including all levels, or in individual levels. *Braille FUNdamentals* is available through the Texas School for the Blind and Visually Impaired.

For ordering information, please contact
Trudy Ross at (512) 206-9215 or
E-mail: TrudyRoss@tsbvi.edu

Calendars for Students with Multiple Impairments Including Deafblindness

Calendars for Students with Multiple Impairments Including Deafblindness, by Robbie Blaha with the Texas Deafblind Project, is now available.

This book is written for use with students who need help structuring and organizing their time and activities. It includes information about:

- The benefits of calendar systems
- Calendar programming based on individual students' needs and skills
- The continuum of calendars available for expanding students' skills
- Communication and time
- Benefits of anticipation calendars, daily calendars, and expanded calendars
- Parents and calendars
- Assessing and evaluating with a calendar

For ordering information, please contact
Trudy Ross at (512) 206-9215 or
E-mail: TrudyRoss@tsbvi.edu

New Publications from DB-LINK!

Two new publications may be downloaded from the DB-LINK website at <http://www.tr.wosc.osshe.edu/DBLINK/products.htm>. Adobe Acrobat Reader is required to view these documents online.

Research to Real Life - This publication, produced by DB-LINK, demonstrates how current research is making a difference in the lives of children who are deafblind. *Contact DB-LINK for a free CD-ROM.*

Sexuality Education for Individuals Who Are Deaf-Blind and Significantly Developmentally Delayed - This book is for parents and professionals. It offers information and instructional guidance for teaching sex education to deafblind students who also have cognitive disabilities. Issues of self-expression related to gender identity, modesty, and appropriate touch are discussed. Specific information is included about menstruation, masturbation, hygiene, health, and sexual abuse. *Check with DB-LINK for available hard copies.*

Voice: (800) 438.9376, TTY: (800) 854-7013
E-mail: dblink@tr.wou.edu

NEWS & VIEWS

Texas School for the Blind and Visually Impaired
Outreach Program
1100 West 45th St.
Austin, Texas 78756