

Testimony
to the
Texas Senate Interim Committee on
Dyslexia and Related Disorders

Marilyn Hagle
marilyn@hagle.com
marilyn@ourdyslexicchildren.org

August 2, 2010

Thank you for inviting me to speak about dyslexia this afternoon.

My children will be in fourth and sixth grades next year. Both are dyslexic and were diagnosed at the Scottish Rite Hospital (which was wonderful, thank you), but their experiences in school have been quite different. My oldest, Hannah, had a third grade teacher who read "Overcoming Dyslexia" by Dr. Sally Shaywitz, and followed all of her suggestions. This teacher used choral reading in class, read passages to Hannah personally, and had student helpers who read to Hannah. She encouraged Hannah on every front and taught her to stick up for herself. While Hannah's second grade teacher wanted to retain her, at the end of fifth grade, Hannah was commended on all TAKS tests and received the "President's Award for Academic Excellence."

Sam, age nine, did not have that experience in third grade. Even though he scored higher than Hannah on his Scottish Rite tests and we had two 504 meetings for him, his third grade year frustrating and he scored poorly on his TAKS tests. Blooming Grove Elementary departmentalized third grade last year. Hannah's 3rd grade teacher had moved away, so Sam had six different teachers and no dyslexia therapist. Even though his teachers cared about him and tried to do the best for him, they were restricted by the new schedule and frustrated at the lack of time. He was read to very little, did not receive enough personal encouragement, and was not taught to stick up for himself. I tell him he is a smart kid but he says, "Mom . . . you're just saying that because you're my mother!"

Hannah did not have to "read-to-learn" in third grade because everything was read to her. Very little was read to Sam.

I am a technology and music teacher, the mother of two dyslexic children, and I have two dyslexic siblings. My expertise comes not from formal training, but from personal experience with dyslexic individuals. I have read the current scientific findings of Dr. Sally Shaywitz (Overcoming Dyslexia), and those posted by dyslexia therapist, Susan Barton (<http://brightsolutions.us>), and many other Internet sources on dyslexia. My children were diagnosed at the Scottish Rite Hospital in Dallas. My sister was diagnosed at the University of Iowa in the late 70s.

The scientific discoveries made about dyslexia during the past fifteen years have changed everything. MRI technology has given scientists the opportunity to watch the brain working while reading. Individuals who have trouble reading (dyslexic children) were compared to those who read well. Scientists discovered that their neuropathways are organized differently and that the right hemisphere of the brain is larger in dyslexic individuals.

I don't like calling dyslexic people disabled. There are two things different in their brains . . . one is bad, but one is good. The neuropathways make reading difficult, but a larger right hemisphere is a wonderful advantage. It is the extra edge on creativity and holistic thinking. However, when dyslexic children hit the reading snag they often are disregarded.

Before these revelations, much of the information available about dyslexia was a collection of educated guesses. Some of those theories were tried

and remain, others have been exposed as false. The most serious problem facing the education of dyslexic individuals today is the misinformation. The myths about dyslexia need to be demolished in the face of new scientifically discovered facts.

Probably 95% of classroom teachers, special education teachers, and administrators still believe the dyslexia myths (See <http://www.dys-add.com/myths.html>). The very recent scientific discoveries showed us how dyslexia works. Dr. Sally Shaywitz's book "Overcoming Dyslexia" was only published in 2003. If you have not read it, or comparable recent scientific literature, you do not know what dyslexia is. Most teachers and administrators have not learned about the new findings. This is at no fault of their own. When we went to college, no one knew. You heard the testimony on April 28, that most colleges still do not teach the scientifically based information. Since dyslexia is invisible, if you do not understand it, you will not see it.

Teachers and administrators need to understand that the physical reading process in a dyslexic person's brain is (and will always be) different. If two students, one dyslexic and one not dyslexic, read the same text out loud and it sounds the same, that is misleading. The uniformed observer (most teachers) would assume that these two brains processed the information the same way. This is not true. The dyslexic student has used seven times more brain area to read. Plus they may have recognized a word by its general shape and not by the letters. The dyslexic student may

have guessed at a word by its context. Reading that looks and sounds the same on the outside, is far more mentally exhausting on the inside for a dyslexic child. These children see an "S" but do not hear "sssssss" in their heads. They must be taught phonemic awareness. The neuro pathways in their brains do not carry the information of a sounded out word to the section of the brain that stores it. That is why a dyslexic person may sound out a word at the beginning of a sentence, but will not recognize the same word by the end of the sentence.

My son, Sam's experience this year (3rd grade) in school with the practice TAKS tests illustrates this point. Sam does not read well yet. (His school does not have a trained dyslexia therapist so he has not been receiving appropriate multi-sensory reading instruction.) A teacher had been reading him the story, questions, and answers. He had been scoring fairly well on the ELA practice tests.

His school made the false assumption that since he scored in the 80s on his reading tests that he did not really need to have math problems read to him. If you understand how a dyslexic person reads, you know there is a big difference between reading a story with many educated guesses, and being able to read and understand a math word problem that may ask for several different calculations in one sentence. He just can't do it. However, if you read the math problem to him very slowly and repetitively you will discover that he understands the math concepts just fine and can answer the question. On the real test they read to him slowly and he passed the

test.

Once dyslexic students learn to read, they are still at a disadvantage. They will always need to read slower to make sure they are getting it right, and reading will always be mentally exhausting. "Reading to learn" systems will never work for them.

The new discoveries about dyslexia are profoundly transformative and affect a very large group of students. Twenty percent is the number given by Dr. Shaywitz. In my classes the number is often higher. Most have not been officially diagnosed. I counted 51 of my 114 high school students (45%) who exhibit dyslexia symptoms. Only three of those students have received phonemic awareness and multi-sensory reading instruction and dyslexia intervention. Five more of them have a 504 classification, but the students themselves do not understand what that means. It is not only the severely and profoundly dyslexic students who need intervention. Those who are moderately and mildly dyslexic do too and are nearly always overlooked.

It is my view that the current methods for diagnosing dyslexia are completely inadequate. They take too long, they are too expensive, they leave too many students out, they depend too much on guessing and opinions - if an attempt at diagnosis is made at all. Our school would never have diagnosed our children had it been left up to them. We arranged for their appointments with Scottish Rite Hospital through our pediatrician. My husband and I are both educators so we had the resources to find out for our-

selves. Initially we never suspected dyslexia, because like everyone else we thought dyslexia was the odd disease where you see backwards.

In a perfect world, we would do MRIs on the brains of every Kindergarten student to see if the neuropathways were wired for dyslexia. There would be no guessing and we would start the multi-sensory reading instruction immediately. You have already heard testimony about the great advantages of early diagnosis.

Since this isn't a perfect world, I think it would be better to initiate a diagnosis procedure that is overly inclusive. What would be the harm if we educate children as if they are dyslexic and they are not? Wouldn't any child benefit from multi-sensory reading instruction, more audio and video books and textbooks, live demonstrations, hands-on projects, and creative animated interesting lectures? Wouldn't any child benefit from more fine arts and career tech classes? I say, "treat every child who has trouble with reading still at age 6 as if they are dyslexic." Then we will not miss anyone. When dyslexic students do not receive this type of intervention, they lose and we lose them.

Schools are not going to service dyslexic students properly if you do not make them. Administrators and teachers are not going to learn about dyslexia if you do not make them. Unless you come face to face with the suffering of a beloved dyslexic family member who does not receive appropriate help, you are not motivated to find out about dyslexia.

When Hannah's third grade teacher, Jo Lynn Fisher, did all of the right

things for her and encouraged her, her confidence soared. Consequently, even though Hannah has not had all of the dyslexia intervention she should have since that time, she has been OK.

Again, Sam's story is different. This past year for several months, without our knowledge, the school pulled him off his Orton-Gillingham computer reading program (not good but better than nothing) and put him in a reading instruction system called "Read Right." This program is terrible for a dyslexic child in every way. There is no instruction in phonemic awareness, the children are supposed to read a passage aloud until they can do it without pausing, and no one in the group is allowed to advance until everyone has succeeded. Ultimately the children memorize the passage and then can recite it back. They have not "read" the passage - they memorized it from hearing it read.

The other activity which is detrimental to both children is a computerized worksheet drill system called "Study Island." If Study Island had an audio option, it might not be so bad. If dyslexic students could listen to audio, watch video, and go at their own pace, they might do well. As it stands, it is expecting children to "read-to-learn" - the one thing a dyslexic student cannot do and will never do well.

After reading the last few paragraphs, you probably think that I think that my children's school is horrible. Actually, my husband and I really like the school. The principal, counselor, and the teachers work hard and care about our children. Our kids like school.

This is why it is so important that the Interim Committee on Dyslexia and Related Disorders takes action to enforce House Bill 461 and the Texas Dyslexia Handbook.

I do not think that the parents should have to be the enforcers! That is not our responsibility. We need to be able to work with our school personnel in a positive manner for benefit of our children.

In the current scenario, parents seem to only have these choices:

1. Do nothing and watch your child fail
2. Hire an attorney and file charges against the school (make the school mad at you)
3. Home school
4. Find a school that specializes in dyslexia (not many exist)

We have been fortunate. Last week I was offered a job with a neighboring school district that has a fabulous dyslexia program. Sam will come with me to school and be able to work with a dyslexia therapist.

That was a miracle. We think Sam has been saved.

For everyone else, TEA must require that schools comply with the law. Then they must monitor and withhold funding from schools who fail to conform. This does not have to mean new funding. Why not tie it to existing funds, like all of that "at-risk" money? Dyslexic students are certainly the largest at-risk population in schools.

Let's talk for a moment about just how "at-risk" a dyslexic student is.

I have first hand experience here with two dyslexic siblings. My younger brother, Daniel (now age 48), was never officially diagnosed, but had similar reading issues although not as severe. His salvation was that he liked shop class. Now he is a Master Electrician for the State of Minnesota. Also to his advantage is his easy going personality. Dan was lucky. (Note: If he were in high school today in Texas he would be at-risk with the new four by four philosophy offering far fewer career tech and art classes.)

My older sister, Diana, was actually diagnosed in her mid-twenties by the University of Iowa as dyslexic with an I.Q. of 140. Diana's story (age 57) is the other extreme. She is profoundly dyslexic and also has dysgraphia. She was not diagnosed until her senior year in college, consequently she did not receive appropriate help at all during school. She never had multi-sensory reading instruction, never had audio books, no one read math word problems to her, and no one knew why her handwriting was so poor. Even though she was raised in a home where her family loved her and tried to do the best for her, she has been completely misunderstood her entire life. Since her intelligence was apparent, she was viewed as lazy, stubborn, insolent, and contrary. In first grade her teacher sent her to the principal almost every day. The principal put her in the paper closet. In fourth grade, her teacher chose a student to be "citizen of the week" every week - but she never chose Diana. The level of frustration Diana has experienced is beyond imagination. It is like a Helen Keller experience.

Dyslexic children, particularly those with a higher I.Q., know things . . . and they know that they know . . . but they are unable to communicate what they know. I can remember when Diana was younger she carried around Hamlet. No one thought she could understand it, but now I am sure she could. And when Diana was in college she was always taking a heavy load of upper level science courses and failing some of them. Now I know that she could understand the material, but could not pass multiple choice tests. Diana wanted to be a scientist, but instead has struggled for many years with mental illness. I believe her mind went into some self-preservation mode to protect itself and started to create an alternate reality. Even when she was diagnosed as dyslexic in her twenties, it did not really help because no one understood what that meant. If only Diana had had the proper intervention in school. She still does not understand what dyslexia is and she is embarrassed by it.

Now I look around at the dyslexic students in my high school classes who have not received help. Many became class clowns to cope. Some are in trouble all of the time. Sometimes they are in trouble simply because dyslexic kids are naturally disorganized and they lose notes home or forget to attend detentions. Frustration becomes bad behavior. Their opinion of themselves is that they are stupid and lazy. Sadly, that is often what their teachers and parents think of them as well. They might be able to read, but probably cannot follow written instructions, or read quickly and accurately enough to keep up with assignments. They cannot "get Spanish." I have

a dyslexic student who moved here from Mexico and she cannot "get English." She is bright, hard working, and personable but her neuropathways are not sending the new language information to the section of the brain that stores it. It just slips away.

Because I am a career and technology teacher I have to attend many ARDS (meetings where they review information for special education students). I believe that at least 80% of the students I have encountered in these special ed meetings are dyslexic. The big clue is "problems with reading fluency and comprehension, but oral comprehension is great." Many of these students obviously have dysgraphia (poor handwriting), poor spelling, and foreign language issues as well. They appear to be ADD because reading cannot hold their attention. How sad it is to hear these children scolded because "they are not trying hard enough." In reality, the school has been failing them.

I read this first in *Overcoming Dyslexia* and a report from The Dyslexia Institute titled, "The Incidents of Hidden Disabilities in the Prison Population" also suggests that about 50% of the prison population is dyslexic. These writings say there is not evidence that suggests dyslexic people are predisposed to committing crimes. The link comes from being misunderstood, having difficulty succeeding in school, medicating themselves with drugs or alcohol, dropping out, being left out, etc.

When dyslexic children succeed, something or someone has saved them. Since virtually less than 1% of dyslexic students to this date have

received proper reading instruction and intervention in school, they have learned coping methods for reading, and otherwise been inspired by art, music, athletics, agriculture, building trades, computer graphics and other career tech fields. Maybe a parent has made them stay in school. Maybe they joined the armed forces and found a niche.

These 51 students dyslexic students I have in my classes are all much more intelligent than they think they are. When I show them how, they get it. If they see, or hear it they get it. If they have to follow a written tutorial, they can't do it. During the past three years teaching 3D modeling and computer animation, my best students, doing amazing work have been clearly dyslexic. They mostly just dig in and figure things out on their own.

Not everyone has the something or someone to save them.

With knowledge comes responsibility. You, the members of this committee, now that you know - will you save them?

Since schools start requiring children to "read-to-learn" in third grade, dyslexic students "miss out" in all their subjects for all of those years. They keep falling farther and farther behind. A dyslexic student starting high school has already missed six years.

Another important point is that we are wasting a valuable natural resource by neglecting dyslexic children. Dyslexic students have the neuro-pathway system that hinders reading, but scientists have also discovered that the right hemisphere of their brains is larger than non-dyslexics. They have creative thinking skills, including lateral thinking, the ability to ,

a holistic approach to problem-solving (able to see the), visualization and creative talents. Many of the world's great thinkers, inventors, athletes, artists, and composers were dyslexic = Ludwig van Beethoven, Winston Churchill, Albert Einstein, Thomas Edison, Gustave Flaubert, Nolan Ryan, Cher, Agatha Christie, W.B. Yeats, Harry Belafonte, Nelson Rockefeller, Leonardo da Vinci, George Patton, Edgar Allen Poe, Jules Verne, Charles Schwabb, Henry Winkler to name a few.

Yet in Texas schools we have been systematically dismantling career and technology programs, industrial arts, fine arts, music, choir, orchestra, and home economics programs in favor of Four by Four. We have been removing the programs that will encourage dyslexic students to become the world's great thinkers, inventors, athletes, artists, and composers. We have removed all of the courses where students make things.

Plus, some of these remaining programs have evolved to exclude dyslexic students. For example, secondary music contests over-emphasize sight reading, a skill dyslexic students will find difficult — even though they may be a fabulous musician. A student may have a lovely voice, but not participate in school choir because they can't read the words in choral music fast enough.

In my opinion, the push for literacy during the past twenty years has unintentionally hindered dyslexia education. The emphasis on teaching everyone to read came without provisions for dyslexic students. "Read to Learn" has become a bigger monster. We have forgotten that the story is

the objective. The story is the objective.

I agree with Bonnie Garza who said, "there must be a massive, collective effort." Every year you wait, these children are left behind. Please help them. At twenty percent, there are at least 969,817 attending Texas Schools.

Somewhere among these million dyslexic students are those who could find the cure for cancer, develop new clean fuel sources, design a future city, compose a symphony, solve problems, bring peace.

It does not have to be expensive! Here are two things you can do for free.

1. Make every administrator and teacher in the state go to <http://brightsolutions.us> and listen to Susan Barton's FREE videos about what dyslexia is and how teachers can accommodate dyslexic students. This one action at no cost would have great effect because many teachers would respond to conscience and immediately begin to modify for dyslexia.
2. And you can require that the 4077 campuses in Texas each contribute to a website for collecting and sharing dyslexic friendly multimedia materials. Students need audio and video for every subject at every grade level. I have already setup a format we could use. Moodle is a Learning Management System that many school districts are using. It is a free and Open Source Software package. The Texas

Computer Education Association had a conference called Moodle Moot centered around using this software last June in Fort Worth and is scheduled to have another in Austin this month. For example, <http://kindergarten.ourdyslexicchildren.org>, <http://1stgrade.ourdyslexicchildren.org>, through <http://12thgrade.ourdyslexicchildren.org>

Here are two actions that will cost a little:

1. Susan Barton also has a DVD training series to train dyslexia therapists. Maybe they do at Scottish Rite as well. Every special education and reading teacher must have this training, but the Scottish Rite Hospital and the few other training centers cannot possibly accommodate them all with face to face instruction. You can train all of the special education and reading teachers on campus using Susan Barton's DVDs. Buy a set for each school. Do it now.
2. Hire additional staff for Brenda Taylor who is the TEA Dyslexia Consultant. I don't know how it should be done, but somehow we need to track the schools and make sure they are doing the right thing for dyslexic children.

According to Dr. Shaywitz, audio books, word processing, spell check, text-to-speech and voice recognition software can equalize the opportunities for dyslexic students. New technologies like netbooks, cell phones, mp3 players, tablets (iPad types), and even flash drives containing whole

operating systems and storage can offer these tools. Add these devices to the multi-sensory resources on a web portal and we can give dyslexic students the chance to excel in literature, science, history, mathematics, and the arts. If they do not have to read it, they can learn it.

To make this system practical for dyslexic students we need to collaborate on implementation systems. (This collaboration can be facilitated by the Moodle Web Portal.) How should it be used in school? Possibly, while the class is reading chapter five in their social studies books, the dyslexic student is listening to the chapter in audio and then watching a video that relates to the topic discussed. She sits at her desk for the audio on an mp3 player, phone, tablet, or wireless netbook. Maybe she walks over to the media center at the side of the room and plugs her flash drive with the dyslexia friendly operating system or just uses the classroom computers to access video linked from the dyslexia web portal.

Other interventions include Internet research by high-lighting text and listening to the text-to-speech voice read it. And for writing assignments, dyslexic students can speak content into the voice recognition software, and afterward edit and check the spelling in a word processor.

How do we create the rhythm of learning this way? Dyslexic children have to learn to read, but need to listen to audio books to keep up. So they read a bit of their science lesson, but listen to most of it. I think they should start listening to children's stories immediately as part of their reading assignments. Otherwise they are missing the stories of childhood.

Similarly, dyslexic children must learn to write and practice their writing, but they need to type well, use word processors and spell check to keep up. They have far more stories in their heads than they have the ability to write on paper by hand.

For secondary school students, you must take all of those with dyslexia symptoms and start immediate intervention. Some will need the special reading instruction they never received. All need to hear that they are smarter than they think they are. Their difficulty with reading does not reflect their intelligence or their ability to solve problems. Build their confidence. Help them become more organized, and to advocate for themselves.

Bibliography

[1] Overcoming Dyslexia, by Dr. Sally Shaywitz

[2] Bright Solutions for Dyslexia, <http://brightsolutions.us>, Susan Barton