

Learning Disabilities

By Cyndi Ringoen, BA. BS, Neurodevelopmentalist, copyright 1999

Someone you know or love has been labeled "learning disabled." What does this mean? What are you to do now? The first and most important thing you can do is try to find out and understand what exactly does this label mean. It absolutely does not mean that someone has a disease. It does not have anything to do with how intelligent a person is. And it does not mean you have to accept it and live a life learning how to 'cope' with this problem. You need to try and find out what exactly the underlying inefficiencies are and then start eliminating them.

Eliminate it?? Yes, learning disabilities can be eliminated. But in order to do that you must identify the causes, and create a plan of attack to address each of them. The reason that more learning disabilities are not eliminated has to do with how they are perceived. Often they are viewed as static, meaning they do not have the ability to change. In essence, they are what they are and nothing you can do will impact them. This is an incorrect view. Other times, professionals become microscopic in their assessment of learning problems. Each professional sees only within a very small, narrow scope, the width of their profession and expertise. If 15 clients with reading problems came to be assessed, it is likely that such a professional would find somewhere between one to three reasons why the person was having a problem. The worst part is after you have paid for an assessment, often the professional identifies a problem or two and sends you on your way without the most important piece of information that you need: THE SOLUTION! In reality, if 15 clients came to me with a reading problem, it is likely that I might find 30 or more reasons, or combination of reasons, as to why reading was not working for them. After identifying the major underlying problems, it is then necessary to develop an individualized plan for addressing each area of inefficiency. Identifying and addressing each inefficiency is the key to eliminating the learning problems.

The organ that you use to learn with is your brain. Therefore, if learning is a problem it becomes necessary to take a look at the brain and how it is functioning in order to pinpoint possible problem areas. According to the Information Processing Theory, the components necessary for learning are the ability to receive, process, store and utilize information. By looking at each of these, we may be able to find areas of weakness that are causing learning problems.

RECEIVE:

It makes sense that in order to learn anything you must first be able to receive the information. We take in information in two major ways- visually (through the eyes) and auditorily (through the ears). If there are any problems with the information coming into our brain, it will stop or decrease our ability to learn. It is necessary to check out the eyes and make sure that everything is working well. Some common problems with the eyes receiving information properly are: acuity (seeing well enough), convergence (the eyes working together), enhanced peripheral vision (seeing too much from the sides of the visual field), underdeveloped central/detail vision (not seeing enough of what is right in front of you) and various other eye sensitivities.

Common problems with the ears are: hypersensitivity to sound, causing a defensiveness to sound, hearing, and listening; tinnitus (ringing or sounds in the ear); and ear fluid problems. Fluid in the ears is a major developmental problem in that it causes inconsistency in the ability to hear good quality auditory input. The consistent hearing and processing of auditory input is necessary to develop good auditory processing skills.

After assessing how the information is being received, the next step is to take a look at the processing ability.

PROCESSING:

Processing is the ability to hold information in your short-term memory. We have two types of short-term memory- auditory and visual. The average ability to hold

pieces of information in our short-term memory appears to be age related early on. This means an average two year old can hold two pieces of information, a three year old three pieces, etc. But the average for our society from 7 years up to adult is 7 pieces. A short-term memory of 7 is average, but it is not great. You can test your own family at home. Slowly (at one second intervals) and in monotone say 6 -4 -1 -9, then have the person repeat it back to you. If they can do it correctly they have an auditory short-term memory of 4. Continue in this fashion until you reach the highest level they can complete successfully. This indicates their auditory digit span or auditory short-term memory capacity. You can also test this visually by holding up a card with a sequence of numbers on it. You hold the card for about 3 seconds, take it away and have the person repeat what they saw. If anyone over 7 years of age has a short-term memory less than 7, they are working with an inefficiency. The greater the discrepancy, the greater the inefficiencies will be.

For younger children, you may test the auditory memory by saying words that they can repeat back. For example, you say (slowly) dog -cat and have them repeat back. If you have a nonverbal child you can say simple directions and see if they can respond. For example, you can say "Touch your nose and hair." If they follow the directions they have an auditory sequencing ability of two. You can continue increasing the number of objects, words, directions or numbers until they reach their maximum success level.

If a person is found lacking in their short-term memory, it is likely to cause many learning and behavior problems. Improving the processing ability will improve the overall function of the individual. One exercise that appears to be useful is to repeat the above process several times a day for about 1 -3 minutes each time. Over time the brain is able to hold more and more pieces of information, and this will be reflected in an increase in the number of sequential pieces recalled.

STORING:

Storing information is the same as long-term memory. As opposed to short-term memory, which is only from 3-20 seconds long, long-term memory is for use at a much later time. Many researchers believe that all or almost all of the information that makes it to long-term memory is in fact there. The problem becomes one of retrieving the information at will. It appears that the most efficient way to enable a person to retrieve information is by ensuring that a person has established laterality or dominance of their hand, eye, ear and foot. This means that if a person is right-handed they should also be right eyed, right eared and right footed. The difference between storing information in a brain that has established laterality and one which has not can be understood easier through the following example:

You write down the name and number of a very important person (which you will need at a later date). You walk to the file cabinet, file it alphabetically under the last name and close the file drawer. In about a week you need the number. You go to the file drawer and easily retrieve the name and number. This is an efficient way of storing and retrieving information, as opposed to--- You write down the name and number of a very important person (which you will need at a later date). You walk to the file cabinet where you discover the entire contents have been emptied out and thrown around the entire room. You toss your paper onto the entire mess. In about a week you need the number, so you go to the file, which is all over the room. You begin searching frantically for the information. Maybe you find it, but probably you will not; if you do it might be too late to use anyway.

One of the major components to not having established dominance is inconsistency. You never know if the information will be there or not. Sometimes parents interpret this as the child purposefully withholding information. Since they knew it yesterday, the parent is sure that they must know it today. The reality is, they did know it yesterday, and the information is in their brain, but they do not have access to it at this moment in time. This causes much frustration with the child and the parent.

To determine where you or your child is with dominance, you can observe some of the following things in your own home. First, it is necessary to determine if the child is right or left

handed. If a child is too young or has not developed a hand, then you may need professional guidance before going further. You do not want to influence handedness in any way, as it is a very important neurological foundation. If the child is right handed, you would want the other dominant functions to also be to the right. If the child is left handed, you would want the other dominant functions to be to the left.

To determine which ear is dominant, you can make several observations over a period of a few days. Watch which ear your child holds the phone up to. Ask them to try and hear a conversation on the other side of a door and watch what ear they put to the door. Put a watch on the table at their midline and ask the child to see if they can hear it ticking, then observe which ear they turn to or put on the watch. You can also notice while speaking with a child sitting directly in front of you if they tend to lean in with one ear closer than the other. The closer ear is usually doing the work of in taking most of the information. If they do everything with the right ear consistently, they are probably right eared. If they do everything left, they are probably left eared. If they do variations and are inconsistent they are probably mixed eared. Any degree of mixed dominance can cause learning inefficiencies. To help move the dominant ear (if necessary), you can plug the other ear for a few hours a day, thus forcing the open ear to start taking in information.

To determine which eye is dominant you must look at the use of the eye at two distances: near-point and far-point. Near point is anything from your nose to several feet away. You can observe as they look into cameras, kaleidoscopes, telescopes, key holes, etc. To determine far point, you can have the child stand about 8 feet away from you, but lined up straight in front of you. Extend your arm with your finger pointed and point at the child's nose. Ask the child to point back at your finger with their finger. When they have it sighted, notice which eye is sighting the finger. You can usually tell by looking straight at their finger up to the eye behind it. Have them switch hands and point again with the opposite hand. If they are not using the correct eye, or if they are inconsistent with which eye is used, then they are mixed dominant. To help insure use of the dominant eye, you can patch the other eye for a couple of hours a day for several months. During the hours patched, it is helpful if the child is doing something visually stimulating, i.e. reading, writing, playing computer, watching television, etc.

I have done this type of dominance work with many of my children and have seen significant improvement in their ability to learn, remember and control emotionality.

UTILIZING:

Using the information that you have is a final area of exploration. One of the most important things necessary for utilizing the information you do have is a positive, relaxed environment in which to output the information. If a child gets upset or anxious (as is often the case when kids having learning problems), then they lose access even to the information which they do have. This happens because emotionality is a subdominant function, whereas retrieval of factual information (analytical and logical thought) is a dominant function. If a child is in a negative learning environment, that, in and of itself, will impair their ability to output information.

By assessing each of these areas, you will learn important information about how your child takes in information. Or you may find answers to your questions about why your child is having such a difficult time with learning. Each of the above areas is extremely important to the ability to learn easily. I often find that it is the combination of inefficiencies that make each person's learning problems unique, and this is the reason that 'packaged programs' do not work well for the majority of people.

Author's Contact Information:

Cyndi Ringoen, Certified Neurodevelopmentalist
Christian Access to Neuro-Developmental Organization (CAN-DO)
P. O. Box 9822, Spokane, WA 99209
Phone: (509) 292-2937 Fax: (509) 891-2476
Email: cdarling@icehouse.net Website: www.ican-do.net

Sensory Play

By Neurodevelopmentalists Marilee Nicoll Coots, B.A. and Cyndi Ringoen, B.S., B.A.

Sensory play, self-stimulating behavior, or “stimming” are all terms used to describe a group of behaviors seen in many delayed children. It is repetitive, it often appears compulsive, and it can occur using any of the senses. Parents usually describe it as something that does not seem quite right.

As Neurodevelopmentalists, we view sensory play as negative, self-perpetuating, self-isolating behavior. High functioning children and adults do not engage in significant amounts of sensory play, but low functioning individuals do. Our goal, and the goal of the parents we work with, is to help each individual develop to their highest potential. Therefore, we discourage any behavior that will be counter-productive to high function.

Sensory play is a learned behavior that an individual develops for several reasons. Primarily, it feels good and so the behavior is repeated. With typical young children, playing with toes and fingers is pleasurable. Developmentally, it is important as connections are made in the brain about where their body is, but the child soon moves on to the next exciting step in development. When senses are delayed or impaired, the child can become stuck and the behavior becomes obsessive and can actually stop development.

You may have heard some say that sensory play is beneficial, calming, a communication attempt, or even a type of psychological mechanism. It is possible that on an unconscious level, some children use stimming to control their environment or to avoid the things they wish not to do. For example, if a child stims he may be able to avoid uncomfortable social situations. It is important to consider that many adults engage in various behaviors for the same reasons--- some to note are smoking, drinking, drugs, overwork, etc. Just because a behavior has a purpose does not mean the behavior is healthy or developmentally helpful.

There is often a metabolic component to stimming. When children are out of balance metabolically, their stimming is increased. Appropriate metabolic intervention can often reduce stimming and occasionally halt it.

Repetitive sensory play creates endorphins, “happy,” “feel good” chemicals in the brain, much the same as the “runner’s high.” These chemicals become addictive, causing the individual to repeat the activity in order to renew the good feeling. Thus, the child becomes trapped in a compulsive behavior. Development stops progressing, becoming more and more delayed, and for many children actually begins regressing.

We seek to stop sensory play, not as an end in itself, but as part of an overall treatment plan, which includes addressing the underlying neurodevelopmental causes of the behavior. The causes often relate to dysfunction in one or more sensory channels. To address sensory dysfunction, we need to determine why the sensory information is not going into the brain correctly (where it would organize and progress to the next level), stop the sensory play, and address the root cause of the dysfunction with specific, appropriate neurodevelopmental activities.

In order to stop a child from stimming we first need to be able to recognize it. The behavior will appear strange and repetitive, and there is often a compulsive element to it. Typically, a child who is stopped from stimming will become quite angry. Stopping stimming is equivalent to breaking an addiction such as smoking or drinking caffeine. The intensity of the anger can be a clue to parents as to how “stimmy” a behavior is.

To stop sensory play, parents can redirect the behavior, distract the child and get them engaged in other activities, or remove the implements the child is using to stim. It is usually best not to try to explain or attach a negative feeling to the stim. Nagging does not work and can sometimes intensify the behavior.

When the quantity of stimming has been reduced, it can sometimes be refined into something more appropriate. An example is teaching a child who makes strange throat noises to form words.

The following is a list of stims in which children have engaged. This list is not a complete list of all possible stims. It is designed to give parents an idea of what behaviors function as sensory play.

The “Stim” List

VISUAL:

dangling strings
shaking toys
wiggling fingers—
 in front of or to the side of face
 usually in exactly the same spot
lining up toys
excessively, repeatedly stacking toys
 and knocking them down
spinning wheels on toy cars/trucks
pushing toy trucks and cars
 while tilting head to watch wheels
watching out the window at cars driving by
staring out window
watching dust specks in the air
watching ceiling fans
staring at dining room lights
looking sideways and/or upside down at TV
nose on TV
flipping pages without looking at pictures
flipping toys
wall walking
opening/shutting drawers and doors
spinning bowls
spinning toys
walking in patterns
pacing
splashing
watching water
running sand/beans etc.
 through hands while watching
spinning coins
looking at maps with nose about 1" away
following roads on map with nose

box hopping or lining up chairs, laundry baskets,
 boxes and storage containers in a path
 and stepping from one to another
rocking: from foot to foot back and forth
 back and forth while sitting
 side to side while sitting
repeatedly throwing or dropping toys
throwing toys over shoulder
picking fuzz
shredding paper
looking out car window
 with peripheral vision (while giggling)
walking down hall with head to one side
standing on head on furniture
running in circles
rewind video while watching it rewind
excessive drawing
rubbing pencils together
watching own reflection in doorknobs, toasters,
 windows at night, oven door, shiny faucets,
 TV screen when off, clean cars, blank computer
 screens and mirrors
holding up small toys (usually characters) in front of
 TV while video is going
perseverating on Thomas the Tank or other train stuff
turning head in light patterns made by blinds
obsessively pouring a "slinky" from hand to hand
watching a yoyo with peripheral vision over and over
multiple cartwheels frequently and excessively
head shaking
spinning own body or twirling around
twirling self under own arm which is against a wall
dangling pieces of grass or twigs
twirling long hair or braids (girls) in peripheral vision

VERBAL or AUDITORY:

blurting out loud and/or high pitched noises
repetition of odd noises/sounds
talking to self-- excessive and nondirective
echolalia of phrases, movies, songs.....
humming
nose humming
banging on everything
throat sound--compulsive
pounding toys or books
excessive giggling
excessive pretend play

electronic games that repeat
inappropriate giggling (often a sign of stimming)
repeating a video scene over and over
telling the same story over and over
constantly singing
reciting alphabet over and over

TACTILE:

chewing on insides of cheeks
rubbing clothing between fingers
biting fingernails
chewing fingernails
scratching obsessively/to bleeding
head banging
teeth grinding
spitting
grabbing someone's arm
 with both hands and squeezing
 with head against arm
rubbing face/hands
bobbing up and down with
 top part of body while sitting in chair
sucking on tongue

VESTIBULAR:

spinning
rocking
swinging

OTHER:

excessive pretending
acting out a movie scene repeatedly
sharpening pencils over and over
writing numbers over and over

Authors' Contact Information:

Marilee Nicoll Coots, Certified Neurodevelopmentalist
Help With Learning Neuroeducational Consulting
20651 Hwy. 178 or P. O. Box 1009, Weldon, CA 93283
Phone: (760) 378-4357
Email: helpwithlearning@lightspeed.net
Website: <http://www.help-with-learning.com>

Cyndi Ringoen, Certified Neurodevelopmentalist
Christian Access to Neuro-Developmental Organization (CAN-DO)
P. O. Box 9822, Spokane, WA 99209
Phone: (509) 292-2937 Fax: (509) 891-2476
Email: cdarling@icehouse.net Website: www.ican-do.net

THE NEURODEVELOPMENTAL APPROACH TO DEVELOPMENT

By Linda Kane, Neurodevelopmentalist, Sound Therapy Specialist

The Neurodevelopmental Approach is like no other approach to human development. It is unique in its approach of looking at the whole individual, not the separate pieces. Taking the individual pieces without an understanding how they interrelate will severely impede the success you have working with individuals.

Whether you have received a label, should receive a label, or are searching for a label for your child; whether the labels are due to learning concerns, genetic disorders, or brain injury sustained, I encourage you to understand labels. Labels are nothing more than symptomatic identifications of problems or concerns. Labels do nothing but limit, nothing but lower expectations. The potential of any individual is based upon the opportunities presented them. If appropriate, specific opportunities are presented, there will be greater outcomes. If opportunities are not offered, often due to the limitations set forth by the self-fulfilling prophecy of the label expectations, less will be achieved.

Learning disability labels are interesting in nature. Most believe they are unchangeable conditions you must learn to live with. They are treated as diseases. The term disease gives one the impression that there is nothing you can do to change the situation. Left unchecked, Dyslexia, ADD, ADHD, etc. seldom see much change. Dyslexia, ADD, ADHD, etc. are not diseases. When you understand the root cause of symptoms of these learning disability labels, you can treat the cause and alter the symptoms. Often, you can eliminate the symptoms, and thus eliminate the label entirely. If not eliminated, you can improve the situation immensely. Treating some of these conditions with medication is nothing more than treating symptoms. Learning how to cope and compensate with these conditions will never bring you to the point of eliminating them. Only by addressing the root causal level will freedom from labels, with all their frustrations, pain, and limitations, be achieved.

When genetic labels are a concern, you have to reach beyond the expectations which have been set based on past observations. An example would be a label of Down Syndrome. The genetic condition of Down Syndrome was first identified by Dr. Langdon Down. Once Dr. Down identified the twenty-first chromosome abnormality, he began assessing the commonality of individuals who shared this condition. The individuals he observed were all people he worked with in the institutions. The assessment was made on individuals who had very limited opportunity presented to them. I would suspect any one of us would have far different outcomes had we spent our lives institutionalized. I challenge you to look beyond the expectations and reach for typical, normal function. You will never achieve typical, normal function for your brand new baby with genetic concerns if you have subnormal goals. No one really knows how much a person with a genetic condition can achieve. Without any question, though, normal function will never be achieved if that is not at least the targeted goal. Most all the individuals we have worked with have far surpassed the predictions and expectations their genetic conditions offered.

In the case of brain injury, roughly the same scenario occurs. Limited opportunity produces limited results. Traditional methods of dealing with the injury are typically insufficient to create the stimulation needed to produce change. The brain is a magnificent piece of creation. Modern science is now beginning to understand what Neurodevelopmentalists have known since the 1930's. The brain is not hard wired. There is incredible plasticity and redundancy of the brain. If you stimulate, with appropriate stimulation, you can improve function. If you stimulate with appropriate frequency, intensity, and duration there will be improved function. It has been erroneously thought that structure determines function. However, the truth is that function determines structure. By inputting the proper function, you can improve function, and thus alter and improve structure. With proper stimulation, appropriately administered, you can have healthy parts of the brain take over the function of damaged, unhealthy parts of the brain. It is a matter of knowing what stimulation is needed. Traditional methods for working with brain injury do not follow the normal developmental progression.

Bypassing levels of development will only limit success. A typical example would be putting a non-walking child into a stander prior to that child going through crawling and creeping stages of development. Crawling (on the stomach as an army crawl) and creeping (on hands and knees) are the only activities that organize the lower levels of the brain. Bypassing these steps will make a very weak foundation for higher brain level function. A child is not born with their hip sockets developed. The activity of crawling and creeping develops hip sockets, in order to properly bear weight. If those imperative steps of crawling and creeping are missed, standing in a stander will put the hips and related structure in jeopardy. Correctly working with tone (whether high or low) is another area that is often misdirected. Ranging of muscles generally will cause high tone to increase; similar to stretching a rubber band. You may get that band to stretch out further. However, when the pressure is released it snaps back even tighter than previously. By knowing how to release the lower bodies own reflex system, you can work spastic leg muscles without risking injury to them.

Autism Spectrum Disorder is a concern with wide ranging problems. It is usually determined by a check list. When a certain number of symptoms on this checklist are associated with an individual, he will receive this label. Differing symptoms within the checklist will also determine if the label also includes Aspergers, Pervasive Developmental Disorder (PDD), or high functioning Autism. Most often, when working with children with this label,

you are primarily working with children who have sensory dysfunction and metabolic problems. Getting to the root of the problem and aggressively addressing the sensory distortions can result in significant improvements, and in some cases, complete recovery for the individual.

From the time of birth, brain cells die. Every second, every minute, every day, brain cells die. Although brain cells continue to die, the brain does increase in size. The increase in size and weight of a maturing child's brain is a reflection of the growth of the connections between the brain cells. The brain grows those connections through stimulation, specific stimulation. There is a paramount difference between specific stimulation and random stimulation. Much of what is done is random stimulation. This will not produce change quickly or efficiently. It produces change almost by accident. A kindergarten classroom is usually covered with loads of stimulation. Colors splash across bulletin boards and posters. Items hang from the ceiling, and the walls are full. Unfortunately, the stimulation does not produce learning as it is too scattered and random. A room which offers little stimulation actually is far more successful in endeavors for learning.

Stimulation needs to be given with proper frequency, intensity, and duration. Frequency means having enough opportunity and repetition in order for the stimulation to produce a change in the brain and become learned information. Often, we are testing for output without ever properly putting in the information. Intensity refers to the strength of the input of the stimulation. Is the stimulation at a level where the individual is actively engaged with it, or have they tuned out because of lack of intensity? You can drag an individual through an activity, but without a high level of involvement and interaction, change or learning will not occur. Duration has dual meaning. It refers to the time the stimulation is being given. Usually the shorter the duration the higher the intensity. Five or ten minutes of mathematics will have a far greater impact than dragging a child through an hour of math. Duration also refers to staying with the stimulation for however long it takes to produce change. Specific stimulation will produce change. It may take time, though. Many times the stimulation is creating, developing, and building new pathways to the brain. Usually that work produces internal changes that are not always seen. Just because immediate improvements are not evident does not mean it is time to stop offering the stimulation. Again, specific stimulation does produce change, but one must stay in for the duration needed to see the outward changes, which brings us back to the Neurodevelopmental (ND) Approach. By knowing what is specific, through the ND Approach of looking at things, you can have significant change.

The ND Approach uses a developmental profile to look at two primary areas. The first area addresses sensory input. In the area of sensory input, auditory, visual, and tactile function is identified. The second primary area addresses motor output. In the area of motor output, gross motor, fine motor, and language function is identified. You can not have good output without good, clean input. It is important to look at the whole individual. If the tactility is not developed, you can have problems in all the other areas. If an individual can not feel their feet, they will not stand unaided, no matter how many hours are spent in a stander. If an individual can not feel their hands, it is hard for them to write. If an individual does not use their central detail vision properly they have a hard time formulating language, coloring within lines, and doing anything that requires detailed vision. They also can have many problems that develop through having an enhanced peripheral vision. An individual who does not process sequential information auditorily will have many problems. They will be limited in their ability to follow directions, stay on task, and keep up with normal conversational language. They will have problems with distractibility and conceptual thought processes. Language problems encompass looking at the tactility of the mouth, oral motor control, control and utilization of the lips, vital capacity, resonance, phonation, sinus passage development, auditory sequential and tonal processing, auditory processing rate, health, and the condition of the ears (ear canal, inner ear, middle ear, eardrum). All pieces need to be evaluated in order to effectively design a treatment program.

Most families desire to take primary responsibility for their children's welfare. Sadly, too often the family feels the least equipped to take on that role. They are overwhelmed by the needs of their child, the newness or complexity of the diagnosis, the medical community, and/or the educational community. The ND Approach gives the power back to the family, the true experts of their children. The ND Approach was created to equip the parents with the knowledge, expertise, and exact "how to" for working with their children. Once equipped, the family has the ability to make wise choices for their child. Families will have the on-going support of the Neurodevelopmentalist, as well as a network of parent's internationally who are actively guiding their children in the pursuit of reaching their maximum potential.

For more information regarding the Neurodevelopmental Approach to Child Development, please contact:

Hope and a Future, Inc.

Linda Kane, Certified Neurodevelopmentalist

Phone: (801) 395-1979 Fax: (801) 627-1831

Email: hopeandafuture@hotmail.com

Web: www.hope-future.org

The Neurodevelopmental Approach to Developmental Delays

By Kay Ness, 2000

There is much hope for the child with developmental delays. This hope lies in the very nature of the brain and the central nervous system. A review of scientific literature reveals that the human brain displays plasticity. This means that, with specific stimulation, changes in function, structure and even chemistry of the brain and central nervous system will occur. This tells us that human function, which is controlled by the central nervous system and more specifically the brain, is changeable. If we can evaluate what is causing problems in development and if we are wise enough to find the specific stimulation that can impact that development, we can accelerate the development and help improve function.

In order to explore the neurodevelopmental approach to dealing with developmental delays, we must understand the meaning of the term. To be developmentally delayed simply means that in some way, a child is functioning at least one to two years behind in areas of cognition, speech and language, gross and/or fine motor areas. The term in no way indicates causes of delays. They can be attributed to genetic anomalies, brain injury, chronic ear infections, metabolic problems or a combination of these and many other causes. A Neurodevelopmentalist treats a child with developmental delays the same way that he treats any other child: find out where the child is functioning; find the specific causes of problems; and design a specific stimulation and educational program to accelerate development to the next levels. Any sensory system can be too sensitive (hyper) or insufficiently sensitive (hypo). Specific stimulation can normalize the sensory systems no matter what the present condition.

Evaluating Developmental Delays

Motor Function

A simple but universal principle of a neurodevelopmental evaluation is if there is a problem with a specific function (OUTPUT) such as gross motor function, then the input to that system must be examined. In this case, it is the tactility and the vestibular system.

The tactility system is broken into 3 major areas: the deep sensors next to the bones (responsible for deep pain sensation, muscle tone and mobility); the soft touch on the skin surface (responsible for feeling textures, tickles and so forth); and temperature sensation.

Low muscle tone is a sign that the deep sensors have low sensation. The evaluator looks at the pain sensation system by squeezing arms and legs then watching how the individual responds to this and how he is able to distinguish different pressures. Also, the parents are questioned as to how the child responds to pain. For example, does the child come in with mysterious bruises, bumps and even is slow to respond to broken bones, etc. Also, a child with low deep sensation may have ear infections and not feel them appropriately. There have been children whose eardrums burst before the parents knew that the child had an ear infection, the pain sensation was so low. This is a child that could be walking around, a little awkward, tending to bump into things and not quite knowing where his arms and legs are going (proprioception). This child is often described as uncoordinated and awkward.

Many children are sensitive on the skin surface to tickles, textures, temperature and still have low pain sensation. Specific evaluation of each system is important in deciding a program design for that individual.

The vestibular system can be hypo (not sensitive) or hyper (too sensitive). Specific tests are done to decide how to help normalize this system. Signs that the vestibular system is not functioning normally are carsickness, balance problems, eye tracking problems, dizziness and so forth. Chronic ear infections can involve the vestibular system and keep it from developing normal function.

If an individual has never gone through normal developmental steps of crawling, creeping and learning to walk in a cross pattern, the foundations for smooth and coordinated motor function has not been laid. Taking an individual back through these steps while working on specific tactile and vestibular problems can remediate these problems.

Fine motor function also involves the tactility system. Little hands with low muscle tone or unbalanced muscle tone and development make it hard to develop good fine motor function. Some children are too sensitive on their hands and avoid handling things or do not like feeling certain textures. Some children can have strong muscles to grip something but very weak muscles that open their hands. They can be quickly identified by those cute little dimples on the back of their hands. Some children just have very weak hands from low muscle tone. It is important to note that low muscle tone prevents muscles from building. Developing normal tactility helps build the ability to develop muscles.

Intellectual/Cognitive Delays

A label of mentally retarded is often devastating to parents. Many children come to us with labels like Mentally Retarded, Central Auditory Processing Disorders, visual processing disorders, figure/ground discrimination problems, etc. Some children have low eye contact, participate in sensory play, hand flapping, rocking, and other self-stimulatory activities. These labels are simply terms describing what they are doing. It by no means describes what they are capable of doing once the specific problems are addressed and teaching is accelerated according to how that individual learns best.

The way to begin evaluation of problems with cognition is to look at the main ways we learn: the visual and auditory systems. With the visual system, we evaluate whether the central detail vision is well developed; whether the individual uses the peripheral vision inappropriately (visual sensory play and/or low eye contact); whether the eyes track and converge smoothly; and the level of visual processing. All of these problems are easily remediated with appropriate exercises and specific stimulation to normalize function.

With the auditory system, the "normal" years of chronic ear infections can interfere with auditory development to result in cognitive delays. Since hearing is developmental, fluid in the middle ear will distort the hearing and delay auditory development and processing. Some individuals have actual hearing loss, some have tonal processing problems, some are sensitive to certain frequencies (covering ears in noisy or confusing environments or changes in behaviors in noisy environments). These individuals can test with normal hearing on an audiogram but still have significant problems with processing tones. All of these problems are open to remediation with sound therapy and specific training to improve auditory processing.

Processing, both visual and auditory, are very significant in intellectual function. If an individual can only process 1 or 2 pieces of information and is older than 5 years, this individual is unable to function with his peers. This individual would be considered "retarded". If we improve the processing (short-term memory) to 6 or better, this individual can now process information in the environment and can function normally. This is discussed in more detail in the paper: "Hearing, Learning and Listening".

Once the sensory systems and processing abilities are evaluated, neurodevelopmentalists evaluate how the individual thinks, either visually or linearly. An individual needs both abilities but often, due to developmental issues, lopsided development takes place and we often see individuals with great visual abilities and no logic, or the contrary, great linear thinking but no ability to think globally. Balancing these thinking abilities is important in helping the individual function normally and eliminates some "strange" behavior.

Speech and Language Delays

There are many pieces to developing good speech and language skills. As in other areas of development, neurodevelopmentalists first look at the inputs: hearing and oral motor issues.

Hearing and processing skills were already discussed. When a child is sensitive to sounds, there is a tendency to shut down auditorily and not listen. Hence, the child will not develop good auditory processing and the ability to speak in sentences. Not distinguishing certain sounds may interfere with enunciation also. Samonas sound therapy is used to remediate these problems.

Oral motor issues are a bit more involved and can interfere with articulation. First, looking at the ability to move and control the tongue and jaw is important. Does the child chew properly? Is the child sensitive to textures in his mouth? Is the child aware when he has too much food in his mouth? Does he choke easily? These can involve mouth tactility issues and specific mouth stimulation is important to help normalize this function.

In looking at tongue control, can the child stick his tongue out and raise the tip towards his nose? Can the child lateralize his tongue, moving it from corner to corner of his mouth smoothly? If not, mouth stimulation and tongue exercises are called for before any specific speech therapy will be effective. A tongue thrust or being tongue-tied can also interfere with articulation.

Once processing and oral motor pieces are in place, specific training can take place to model good articulation and practice it with the child. Without those pieces, it is very difficult to make good progress.

Conclusions

Though an individual has problems and has been labeled as disabled in some way, this by no means is indicative of the ultimate level at which that individual may be able to function. We evaluate the causes of the problems and treat these causes. Then we teach the individual in an intense way that emphasizes his strengths while remediating weaknesses. Ultimately, functional improvement can be achieved.

Author's Contact Information:

Kay Ness, Certified Neurodevelopmentalist Southeastern Neurodevelopmental Consultants (SENC)
Phone: (770) 619-9843 Email: kyness@mindspring.com Website: www.icando.org

Make Learning Easier With a Strong Foundation

More and more parents are wondering why their children are struggling...

Why is reading, spelling or math so difficult for my child? Why do they seem to know something one day and not the next?

does it seem to take so long to something called Dyslexia,

Processing Disorder, or have something like Autism or struggling so much with reading

right! Why is my bright child struggling to learn? If you have asked some of these questions, you are not alone...



Why are they so disorganized? Why teach him? I wonder if my child has

ADD, ADHD, Low Auditory something else? Does my child Asperger's Syndrome? Why is she comprehension? Something is just not

These are all signs of a weak foundation.

Little Giant Steps (www.littlegiantsteps.com) helps children who are struggling to learn as well as help in the prevention of learning problems. Learning difficulties do not have to last a lifetime or even exist at all. They are simply symptoms of a root cause.

Why is my child struggling

The most important part of any structure is the foundation and that includes the brain. First, imagine a building that has cracks in the walls, door frames are pulling away, and the windows and doors do not close properly... all of these “problems” are symptoms of an underlying root cause, a weak foundation. When you fix the foundation, the “problems” are correctable. The same applies to a person. Struggling to learn is an indicator of a “foundation problem.” The “problems” your child is experiencing are symptoms of an underlying root cause. When troubles appear, don't look to the symptoms, but to the source: repair the foundation of the brain.

Why would my child have a “weak foundation”

A child may have a “weak foundation” when they are missing some developmental steps that are necessary for their brains to be organized, which is the very foundation of learning. We'll discuss a few here. When babies are born, they have a built-in, precise program that enables them to complete their developmental steps. If given the opportunity and placed on the floor on their tummies, babies will move through these steps. Unfortunately because of our societal practices of keeping babies upright in carriers, walkers, swings, etc. many are not given the opportunity to work through their developmental steps. In turn, this has affected every aspect of their life. We have progressed in the wrong direction wanting to keep our babies in various contraptions which are detrimental and not developmental. As a result, any special programs, trying to teach with new learning styles or changing curriculums each year will not help a child until their “foundation” is fixed. There are exceptions, of course, that can

naturally keep a child off the floor like surgeries or reflux problems, but when possible a baby should be on the floor in a clean, safe environment.

Influencing the “handedness” of a child is another huge aspect of learning. With children going to preschools and daycares earlier and earlier they are many times being influenced to use the wrong hand. Hand dominance is a huge factor in neurological efficiency.

We’ve moved from an auditory to a visual society in this nation; causing many to experience, “Low Auditory Processing”. When a person increases their auditory processing, learning becomes easier. Our preoccupation in this nation with “screens” like video games, computers, TVs, iPhones, etc. can cause a child to be labeled ADD or ADHD for the reason that attending is an auditory skill.

Another societal change that has greatly affected the brains of our children is that we have become a very sedentary nation. Instead of children being outside playing ball, jumping rope, etc. they are sitting in front of a TV and playing video games – need we go on! Exercise is for the brain! Recess and P.E. classes have become a thing of the past, just like this nation’s high math and science scores. Little Giant Steps wants to help get this nation and your kiddos back on their feet again!

The GOOD NEWS is that this is all fixable due to the neuroplasticity of the brain!!

What is neuroplasticity

Neuroplasticity is just a big word that means your child’s brain is not hard-wired and is changeable... the developmental steps can be completed at any age! So whether a person is in those pivotal years from zero to six-years-old or any age, developmental steps can be completed! The foundation of the brain can become strong and in turn struggles with learning can disappear!



Armed with this new information, please check any areas listed below (which is not an exhaustive list by any means) where you see your child struggling and come talk to us about the “foundation repairs” needed to remedy your child’s current symptoms to help put them back on the road to make learning easier!

- | | |
|--|---|
| <input type="checkbox"/> Difficulty in reading or math | <input type="checkbox"/> Difficulty with spelling |
| <input type="checkbox"/> Overly sensitive to sound | <input type="checkbox"/> Clumsy-poor sense of balance |
| <input type="checkbox"/> Picky eater | <input type="checkbox"/> Difficulty expressing themselves |
| <input type="checkbox"/> Difficulty following directions | <input type="checkbox"/> Socially immature |
| <input type="checkbox"/> Difficulty grasping math concepts | <input type="checkbox"/> Distracted and/or disorganized |
| <input type="checkbox"/> Very emotional | <input type="checkbox"/> Unable to retain information |
| <input type="checkbox"/> Hyperactive or Hypoactive | <input type="checkbox"/> High or low pain tolerance |

Remember!

Learning difficulties and disabilities do not have to last a lifetime!!

ASK YOUR QUESTIONS! We have the answers you are looking for today!
www.littlegiantsteps.com



Brain Training

By Ruth Young ND, BS



Have you ever had this experience? You recognized someone but cannot remember the name? Here's why: The image of a face is stored on one side of the brain and the name is stored on the other. You have to have a good bridge between the two sides to go across and retrieve the name quickly. This bridge is called the corpus callosum.

Dr. Leaf, a neuro-metacognitive learning specialist from South Africa, wrote *Who Switched off My Brain?* In her book she explains that the corpus callosum is the thinking part of our brain. This bridge between the two hemispheres pulls in information from each side to consider both perspectives. Your child answers all your questions on the bridge!



As you look at this picture, your brain is going back and forth to see a smiley face and then to notice that it is a puzzle. One side of your brain processes “detail to big picture” and the other side processes “big picture to detail.” They both are mirror images of each other and work together to offer different perspectives. Here is another example: One side stores a detail, the fact of $2 + 2 = 4$ while the other side understands the big picture that four is two groups of two.

It is important that the bridge between the two hemispheres is built strong from the foundation up with brain-organizing activities. Your child may be bright and know everything you ever taught him. However, if the bridge construction is sketchy, then he may have difficulty accessing what he knows, finding words to express his ideas and following through on what you ask him to do. Have you ever asked your child to go clean his room and an hour later walk by the room and see a bigger mess than before? It may not be an obedience issue; it could be the result of expecting organized behavior from a disorganized brain. The brain controls everything we do! The good news is that you and your family and even your school can do a brain training program. Then education will be easier for your children and life will be more manageable for you. When the brain works better, learning is faster and life is easier!

A brain training program includes stimulation to five specific levels of bridge construction for the corpus callosum, and you have probably heard of some of them:

- **Sensory Integration:** Your senses like seeing, hearing and touching are learning pathways. We have to be sure eyes and ears are working well and that other senses like smelling, tasting, and feeling pain are appropriate, too. For example, deep pressure to arms and legs sends signals up to the brain and back so a child can experience better brain/body connections for holding a pencil correctly, resolving bedwetting and becoming more coordinated for sports, among other things. This foundational part of the bridge must be organized and integrated for the rest of the structure to be built well.
- **Medulla:** Picture a golf tee in your mind. Now, imagine the tee as a spinal cord and the top of a tee as the medulla. This special part is responsible for autonomic functions like heartbeat, blood pressure, breathing and focus. Specific physical exercises can stimulate the Medulla area to integrate primary reflexes, mature the central nervous system and reduce stress.

- **Pons:** The lower level of your brain is responsible for perception of pain, heat, cold, hunger, threatening sounds, fight/flight responses, self-preservation, survival, life, empathy, bonding, attachment, interpretation of social cues, cause and effect and moral choices. Trauma at any age (including abuse, adoption, a difficult birth, surgery or high fevers) can compromise the Pons and produce anxiety if there is a new person in the room, a new food on the plate, going to the park or sleeping alone in a bed. Perception and trust can be a big problem and manipulative behaviors can be an attempt to gain control when individuals feel they have little influence on the world around them. An army crawl can build the Pons for better behavior and to improve side-to-side eye tracking.
- **Midbrain:** The middle of your bridge construction impacts body chemistry, the endocrine system, immune system, allergies, controlling anger, sleeping well, waking up in the morning and motivation. The midbrain influences impulse control, memory for learning, emotional responses and eye/hand coordination for sports.
- **Cortex:** The upper level of a corpus callosum is organized and constructed with cross patterns like walking, jogging, marching and skipping. The cortex is responsible for formal reasoning, language, inner speech (thinking before acting), test taking and the ability to respond quickly and intelligently to new situations.

Everyone in the family, children, teens and adults, can benefit from a tune-up! Your time commitment for brain training can range from an hour a day to a full school day program four to five days a week. Each program is designed for four months and can be implemented for an entire year or more for amazing results. Here are a few testimonies:

- Jonathan was seventeen, a senior in high school who bombed the ACT test with a score of 14. He wanted his brain to work better so he could raise his scores to get into college. Jonathan was faithful to work on a brain training program five days a week. Three months later he took the ACT again and scored 20!
- Mrs. S., age 55 was a Montessori teacher and did not read much because she didn't like to. She faithfully worked for four months on brain training. It was amazing to see her reading comprehension jump three and a half years without any type of reading program during that time! When her brain became more organized, she could easily access what she already knew.
- Mercy was eleven and in the fifth grade when she began a brain training program. In four months she advanced two years in maturity (auditory processing), jumped an entire year in reading comprehension and improved a whole year in understanding math concepts! She did math and reading every day for school but nothing was new in these subjects or out of the ordinary. It was the brain training program that helped organize her brain!

Make your plans to add brain training to your daily routine and organize your brain for a lifetime of success in learning at school and on the job. Choose a brain training program that strategically stimulates five levels of brain development for children and adults. Online instructions for every brain training activity is available. Many have video introductions and demonstrations. A shopping list of supplies is included with each program.

Building success for school, success as a leader, success in a career or success in managing a home can happen if you make your plans now to work toward a goal for gaining full potential. A brain training program of specific physical and mental activities for a year or more can result in a lifetime of academic benefit and learning pleasure.



Little Giant Steps

P.O. Box 863624 Plano, TX 75086
 Phone (972) 758-1260 Fax (972) 325-4119
 Website: www.littlegiantsteps.com
 Email: office@littlegiantsteps.com

Your Short-Term Memory

By Faith Haley

Before a person can enter information into long-term memory, he/she must first be able to hang on to the information for a brief time in short term. This is called processing. Once information comes in, the brain must process it, store it and then use it. Since you receive information through your ears and eyes, we call this short term memory ability auditory and visual processing. It is a greatly overlooked and misunderstood concept in a person's ability to learn. Many children today are being diagnosed with low processing disorders.

We'll discuss auditory processing in this article. A one-year old should have the ability to grasp one piece of auditory information and respond to it. When you say, "Hi or goodbye," they should respond in kind by waving to you. When you would ask a two-year old to touch his nose and then his ear and he can respond correctly, then you know he is able to hold two pieces of auditory sequential information in short term. Likewise a three-year old should be able to hold onto three pieces of information in order. Up to the age of seven the number of pieces of information a child should be able to hold in short term is age equivalent. Whether you are seven--years of age or an adult, you should be able to hold onto seven pieces of information. (That is a phone number.) If you can hold onto eight pieces of information then you also have the ability to carry on a good conversation, having the capacity to remember what the other person says and respond in kind. Auditory processing ability has nothing to do with intelligence. You may know a bright student who cannot focus or follow directions well and often acts younger than his age.

The more pieces of auditory information you can hold onto, the better your conceptual skills can become. Conceptual ability helps people to see the "bigger picture" in situations and in the world around them. You need a high level of auditory processing ability to have the skills necessary to be adept at seeing the "bigger picture".

The problem is that we've moved from an auditory society to a very visual one. Our children are growing up in a very visual society, which is much different than our ancestors. Although many are good at computer, phone, and video games, they lack the skills to be conceptual learners. Young parents today immerse their children in a lot of TV, computer, gaming systems and perhaps even phone time and then send them into classrooms where a teacher stands up in front and addresses them auditorily. Then when they "just don't get it" they are labeled ADD which stands for Attention Deficit Disorder. Now, what is the attending skill in which they are deficit? Attending is an auditory skill. So what's happening in epidemic proportions is this: Unless young children have the benefit of a language rich environment where they are read to and talked with at home, they are going to be "deficit" in their auditory processing ability when they enter school. So be sure that your children are getting a lot of auditory input like lots of listening to books on CD, lots of talk-time with adults and lots of dinnertime conversation with family. Then they can develop the listening skills necessary for good auditory processing and can flourish in school.

The problem of auditory deficit is affecting adults, too, in this country. Everyone jokes about their short-term memory problems, but it's really no laughing matter. Because we have made a big shift to a visual society, adults, too, have to work on their short-term memories to make and then keep them strong. As people get older it is said that they start out babies and then return to that stage once again in their old age. It does not have to be that way! If retirees will keep up their auditory processing skills, they can keep their maturity at a normal level and not digress into acting like a three or four-year old.

Again, you have questions and we have the answers you are looking for!

Little Giant Steps

Faith Haley, Neuro-Educational Specialist
P.O. Box 863624, Plano, TX 75086
Phone (972) 758-1260 Fax (972) 325-4119
Website: www.littlegiantsteps.com
Email: office@littlegiantsteps.com

LONG-TERM MEMORY

The Question of Dominance by Faith Haley, Neuro-Educational Specialist

Long-term memory. What a lovely thought! To have really good, long-term memory a lot depends on what we call dominance. When the term dominance is used, however, there are always many questions. What is dominance and why is it important? It is perhaps one of the most important factors in having a truly wonderful life and yet few of us know what it is.

All animals on Planet Earth have two hemispheres in their brain. We humans, however, have the benefit of having a dominant hemisphere that allows us to have language abilities and to reason. In the dominant side of your brain you have a magnificent filing system that is especially made for the systematic filing of language. It is from here that you have the ability to speak, reason logically, have common sense, have the ability to read and all that encompasses speech and language. It's called your long-term memory. You also have a sub-dominant hemisphere, where your creative abilities are located, to draw, sing, and to be creative in so many different ways. Processing emotions takes place in the sub-dominant hemisphere as well.

Many have heard the terms right brain, left brain. Your left brain is for reasoning and logic and your right brain is for your creativity. That's exactly correct if you are right-handed. However, if you are left-handed then the right brain/ left brain theory is not true. If you are genetically predisposed to be left-handed, then your right brain is where your reason and logic and language filing system are located and your left brain is where your creativity and your emotions are. Remember, we are crossed-wired. The left brain controls your right side and the right brain controls the left side. Therefore, to enjoy the most efficient brain if you are truly, genetically, right-handed, you must take all information in through your right side: your right hand, foot, eye and ear. If you are truly, genetically left-handed and you want to experience the benefits of an efficient brain, then you must take all information in through your left side: your left hand, foot, eye and ear.

You see, everyone has a dominant eye and a dominant ear. Even though you use both your eyes and ears, only one eye and ear are chosen to take in information for long term storage. Your dominant eye takes in information to be stored for long term memory. Your dominant ear receives auditory information that will be stored in long term memory. Therefore, because you want to be able to remember what you see and hear, you need to be sure that you are receiving that information through your dominant side for rapid recall.

These are just a few of the symptoms that accompany individuals who are what we call "mixed dominant": A student might know something one day and not be able to remember it the next. You may know someone with one of those artistic personalities, highly talented in music, art or drama but is highly emotional, too. A person might be bi-polar, may have a stutter or might be ambidextrous. Those using their dominant ear but not their dominant eye will be able to better remember what they hear but not what they see. They are called auditory learners. If they are using their dominant eye and their sub-dominant ear, then they are mostly likely what you would call a "visual learner" because they more easily remember what they see. Why, because they are placing the information in the dominant side of their brain for easy retrieval of those stored facts.

Little Giant Steps

Faith Haley Neuro-Educational Specialist
P.O. Box 863624 Phone (972) 758-1260
Plano, TX 75086 Fax (972) 325-4119

Website: www.littlegiantsteps.com Email: office@littlegiantsteps.com

Developing Your Home Schooled Child's Long Term Memory and Emotional Control

By Marilee Nicoll Coots, Certified Neurodevelopmentalist, Copyright 2003

Does your child reverse letters or numbers, experience right/left confusion or produce "mirror writing"? Has this child been called "dyslexic"? Is remembering letters, numbers or sight words difficult? Does your bright child learn math computation but quickly forget what was learned? Does your child easily read words but not remember what was read or have to decode the same words the next day? These symptoms all relate to inadequate "long term" retention of visual information.

Does your child easily forget math facts? Does he easily forget what has been said to him or information that he has heard. Does he forget names and words? Does he stutter or stammer? Is he disorganized? Does he lack a sense of time? Is learning a foreign language difficult or impossible? These symptoms all relate to inadequate "long term" retention of auditory information.

Does your child become emotional when trying to learn certain subjects (like math or reading), over-react, or become easily frustrated?

These learning and emotional issues are not resolved by having your child labeled or medicated. The key to improvement lies in organizing your child's brain for better function.

When a child is well-organized neurodevelopmentally, information and learned academics are retained and accessible for further learning. Emotionality is under control and is expressed in reasonableness and settling down quickly after emotional events, such as tests or social situations.

Neurodevelopmentalists have found that the major factor in the long-term retention of information is neurological organization and something called cortical hemispheric dominance. That is, one hemisphere of the brain is organized to be dominant or controlling and the other to be sub-dominant. The dominant hemisphere deals with logic, cognitive thought and the long-term memory of information, including academics. The other hemisphere, the subdominant, specializes in emotionality and music.

Outwardly dominance is reflected in a dominant hand, eye, ear and foot all on that same side of the body. Therefore, the right-handed person should also be right eyed, eared and footed. The left-handed person should be left eyed, left eared, and left footed. The person with right sidedness has a dominant left hemisphere and the person with left sidedness has a dominant right hemisphere due to the structure of the nervous system.

Dominance is the result of a long process of brain organization called lateralization. Lateralization is seen in early cross patterns when a young child is learning to crawl and creep. Organization proceeds to higher levels of the brain and is reflected outwardly in cross pattern walking, marching, skipping, and running and the development of a dominant hand. When the process of lateralization is complete to this point it is possible to develop cortical hemispheric dominance.

Dominance can be developed and this is an important step in remediation of the learning and emotional difficulties that some children experience. Occasionally lower levels of development must be revisited so that they may be completed and dominance may be established.

To help your child move toward dominance, there are a few things you can do in your home school P.E. time. Have him creep on hands and knees and crawl on his tummy many minutes every day. Have him knee walk, carrying soup cans in his hands. Take him on fast walks, breaking into jogging. Have him march and skip.

If you have been doing these activities for several months and your child is still not retaining information as well as you would like, you may need professional help to address additional neurodevelopmental issues.

When a child has difficulties that relate to dominance issues they will not "grow out" of these difficulties. But, by treating the root causes, dominance can be corrected and the difficulties related to incorrect dominance will no longer hold a person back from his or her full potential.



Scholarships

Short on Funds?

Try Brain Coach Tips for Financial Aid

It is helpful to remember that God provides. Graham Cooke teaches that the word “provision” can be broken down:

- * Pro = For
- * Vision = Your ideas for the future within His will

This means that God is FOR your vision to help your child reach full potential. He can make a way where there seems to be no way. Often, the resources you need are near to you. All you may need is a **piece** of key information, **eyes** to envision a creative solution and the **courage** to ask for help. Families have found many sources of provision to enroll in our *at-home brain training programs* like Developmental Foundations or Individual Evaluations.

We have several families that have received financial assistance from the following areas:

Monthly Payment Plan: Most of our families are on a monthly payment plan. They pay for their evaluations before their appointment.

Home School Legal Defense: Several of our homeschooling families have received funds from HSLDA for our program. Go to www.hslda.org. You'll need to sign up for membership with them, \$25 a year, to receive funding. Then you can go to this website:

<http://www.homeschoolfoundation.org/funds/specialneeds.asp>

You can also print up an application and mail it in.

Flex Spending Account: Several of our families have been able to use their *flex spending account* to pay for our services. Check with your or your husband's employer to see if they offer a *flex spending account* which will automatically deduct an agreed upon amount from your paycheck and put it into a pre-tax “savings” account, which will then reimburse you for money you spend on prescriptions, doctor's visits, etc.

Insurance: There are times when families have gotten their evaluations paid for by insurance, when their doctor has prescribed and coded our services.

Grants: Other families have found grant money to pay for the services. Usually, these grants are found through the Mental Health or In Home Family Services departments of the county where they have their residence listed.

Missionary Support: Many families we have worked with, who are missionaries, have had the evaluation fees covered by those who are supporting them with their mission work. It is part of the support they need.

The Public School System: This is very difficult but a few of our families have received funding in the form of reimbursement for our services.

Scholarships: Several of our families have family members i.e. grandparents, aunts or uncles, friends, or churches that pay for their evaluations.

(Over for more details)

Little Giant Steps

P.O. Box 863624
Plano, TX 75086

Phone (972) 758-1260
Fax (972) 325-4119

Website: www.littlegiantsteps.com

Email: office@littlegiantsteps.com



Steps of Hope Scholarship Fund

**"It is easier to build strong children
than to repair broken men." - Frederick Douglass**

Steps of Hope is a non-profit organization created by **Linda Kane of Hope and a Future** and **Jan Bedell of Little Giant Steps**. One of their goals is to minister the life-changing Neurodevelopmental Approach to individuals who cannot financially access these services. Whether someone suffers from minor learning challenges or the near-devastating effects of brain trauma, **every** child, teen or adult can learn and function more efficiently.

Our Neuro-developmental Programs Increase

Families are encouraged to think about their circle of family and friends.

Who is a part of your Support Team? Encourage your spouse, extended family, church family, teachers, tutors and friends to watch "The Neurodevelopmental Approach" DVD. This will help the people closest to you understand more about Brain Training so they can support you and your family on a journey to wholeness.

Who can pray for you? Consider asking your family members, support team, a Sunday school class and/or a prayer group to pray for your family to raise the funds needed to enroll in Developmental Foundations or another *at-home program* including an Individual Evaluations.

Who can be a champion? Ask yourself, "Who can be a champion for my child?" You may be led to ask a grandparent, friend or a group to contribute to a scholarship fund to help you or your child discover true God-given potential. Testimonies, brochures, drafts for writing "letters of request" and posters are available to help you raise support.

How can a benefactor donate to Steps of Hope? A donation can be made online by typing this link into your browser: <http://store.littlegiantsteps.com/products/steps-of-hope-donation-page>

OR mail a check to:

Steps Of Hope
P.O. Box 863624, Plano, TX, 75086

How does a donation apply to my family? A donor can designate a tax-deductible contribution for the Steps of Hope Scholarship Fund. Donors receive a tax donation receipt for tax purposes and we assign 95% of all donations to the scholarship. The family is responsible for the other 5%.



Helping individuals reach their God-given potential!

www.StepsOfHope.com

Off: 972-758-1260

Fax: 972-325-4119

President: Alan Bias

AlanBias@AlanBias.com