

# **LEARNING DISABILITIES**

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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 by 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 - 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. Meaning, 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. And the worst part is that 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 wasn’t 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 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 in to 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 of the 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. Meaning, an average two-year-old can hold two pieces, a three-year-old three pieces etc. But the average for our society from 7 years on up to adult is 7. A short-term memory of 7 is average, but it is not great. You can test your own family at home by slowly (at one second intervals) and in a monotone. You 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 do successfully. That is 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 2. 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 has 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, you go to the file - which is all over the room - and you begin searching-frantically for the information. Maybe you find it, but probably you won't, and if you do it might be too late to use anyway.

This is one of the major components to not having established dominance - 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 they hold the phone up to; ask them to try and hear a conversation on the other side of a door and watch which ear they put to the wall; put a watch on the table at their midline and ask the child to see if they can hear it ticking. 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, do they tend to lean in with one ear closer than the other. The closer ear is usually doing the work of taking in 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. 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 on computer, or watching TV. 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 to explore. One of the most important things necessary for utilizing the information you do have, is to have a positive, relaxed environment in which to output the information. If a child gets upset or anxious (as is often the case with kids having learning problems) then they lose access to even the information which they do have. The reason for this is 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.

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