I Think My Child is Dyslexic. Does It Matter?

A Presentation by Don McCabe www.spelling.org

What is Dyslexia?

Or is testing for dyslexia really necessary?

Official Definition #1.

According to the World Federation of Neurology, dyslexia is: "a disorder manifested by difficulty in learning to read despite conventional instruction, adequate intelligence and sociocultural opportunity." (sic)

Official Definition #2.

According to the International Dyslexia Association's Committee of Members in November, 1994, "Dyslexia is a neurologically-based, often familial, disorder which interferes with the acquisition and processing of language. Varying in degrees of severity, it is manifested by difficulties in receptive and expressive language, including phonological processing, in reading, writing, spelling, handwriting, and sometimes in arithmetic. Dyslexia is not a result of lack of motivation, sensory impairment, inadequate instructional or environmental opportunities, or other limiting conditions, but may occur together with these conditions. Although dyslexia is life-long, individuals with dyslexia frequently respond successfully to timely and appropriate intervention."

Translated into plain English, this means that if a student isn't dumb and he isn't surrounded by people who hate schools and if he goes to school and if he gets the "conventional instruction (Look-see or whole language) and if he still has problems reading, it must be that he is a dyslexic.

Translated into plain English, this means that dyslexia has to do with how the brain organizes what the eyes see and the ears hear. The condition is such that traditional methods of teaching reading will not work with a person with dyslexia. However, dyslexics may be taught to read and write with proper instruction. This usually involves multi-sensory approaches as used by AVKO, Orton-Gillingham, Slingerland, Spalding tutors, etc.

Official Definition #3.

According to the International Dyslexia Association's Research Committee in November 1994, "Dyslexia is one of several distinct learning disabilities. It is a specific language-based disorder of constitutional origin characterized by difficulties in single word decoding, usually reflecting insufficient phonological processing abilities. These difficulties in single word decoding are often unexpected in relation to age and other cognitive and academic abilities; they are not the result of generalized developmental disability or sensory impairment. Dyslexia is manifested by variable difficulty with different forms of language, often including, in addition to problems reading, a conspicuous problem with acquiring proficiency in writing and spelling."

Translated into plain English, this means that if someone has normal intelligence but has severe problems learning to read and write despite "conventional" instruction, that person is dyslexic.

Official Definition #4.

According to the U.S. Department of Health and Human Services, "Developmental dyslexia is a specific learning disability characterized by difficulty in learning to read. Some dyslexics also may have difficulty learning to write, to spell, and, sometimes, to speak or to work with numbers. We do not know for sure what causes dyslexia, but we do know that it affects children who are physically and emotionally healthy, academically capable, and who come from good home environments. In fact, many dyslexics have the advantages of excellent schools, high mental ability, and parents who are well-educated and value learning

Translated into plain English, this means that when you can't find a reason for a child not being able to read, it must be he is dyslexic.

Official Definition #5.

Dyslexia is a term that has been loosely applied to reading disabilities. Specific definitions for dyslexia vary with disciplines. Those in medicine define dyslexia as a condition resulting from neurological, maturational, and genetic causes, while those in psychology relate dyslexia on the basis of the specific reading problems evidenced and give no reference to causation. All disciplines would probably agree that dyslexia is evidenced by persons of otherwise normal intellectual capacity who have not learned to read despite exposure to adequate instruction.

Translated into plain English, this means that when you can't find a reason for a child not being able to read, it must be he is dyslexic.

How Is Dyslexia Diagnosed? Are there tests for dyslexia?

The diagnosis of dyslexia usually begins with an awareness by parents or teachers that a problem in reading exists. A physician is often the first diagnostician to explore the nature of the difficulty. The medical practitioner should investigate the cause of the reading problem by conducting a complete physical examination and obtaining a comprehensive health history. If indicated, the child should be referred for a neurological examination. If dyslexia is suspected, the physician should refer the child for further evaluation and treatment by a specialist in psycho-educational diagnosis. The major purpose of the diagnostic process is to isolate the specific difficulties associated with dyslexia and to suggest appropriate educational intervention. Usually the diagnostician will employ a battery of assessment instruments that explore the relationship of specific reading problems to the intellectual, achievement, perceptual, motoric, linguistic, and adaptive capabilities of the individual. Based on the results, an intervention plan can be implemented by a special educator or remedial reading teacher trained in specialized reading techniques. (sic)

Translated into plain English, this means that you must get an "expert" to test your child to rule out all other possible explanations for his learning disability so he can then **tell you what you already know**--that your child has problems learning to read with conventional methods, in other words your child is dyslexic.

Editors note: Why waste your money testing for dyslexia when you already know what you need to know and that is, your child needs help in learning to read and learning to spell.

Standard explanation of what works for dyslexics: No one remedial reading method works for all reading disabled students. Therefore it is important that the teacher have mastery of many different techniques.

Translated into plain English, this means that the experts don't really know how to teach dyslexics but they hope a teacher will use many different approaches until one that works is found. AVKO's methods (note the plural) have been successful with all the dyslexics who have come to our clinic for help

What Are Some Of The Characteristics Of Dyslexia?

An individual is identified as dyslexic when a significant discrepancy exists between intellectual ability and reading performance without an apparent physical, emotional, or cultural cause.

Translated into plain English, this means a person may be called a dyslexic when we know that he is smart enough to be able to learn to read but we **"can't"** figure out **why** he doesn't read.

Common characteristics include, but are not limited to:

- (1) family history of reading problems;
- (2) a predominant occurrence in males (males to females 8:1);
- (3) an average or above average IQ and, not uncommonly, a proficiency in math:
- (4) no enjoyment of reading as a leisure activity;
- (5) problems of letter and word reversal;
- (6) developmental history of problems in coordination and left/right dominance;
- (7) poor visual memory for language symbols;
- (8) auditory language difficulties in word finding, fluency, meaning, or sequence;
- (9) difficulty transferring information from what is heard to what is seen and vice versa. Specific reading problems associated with dyslexia include difficulty in pronouncing new words, difficulty distinguishing similarities and differences in words (no for on), and difficulty discriminating differences in letter sound (pin, pen). Other problems may include reversal of words and letters, disorganization of word order, poor reading comprehension, and difficulty applying what has been read to social or learning situations.

What Factors Contribute To Dyslexia?

Ocular Problems

Several reliable studies (Helveston 1969; Blika 1982; Keys 1982; Hiatt 1984) have found that dyslexic individuals have no greater incidence of eye problems than do individuals with normal reading ability. Such parameters as visual acuity, stereo acuity, ocular alignment and motility, fusion status (break point amplitude), and refractive error have not been shown to be significantly different in poor versus normal readers. Individuals with reading problems should, however, have a careful eye examination as part of an overall medical examination. There is no scientific evidence that visual training (including eye muscle exercises, ocular tracking or pursuit exercises, or glasses with bifocals or prisms) leads to significant improvement in the performance of dyslexic individuals.

Translated into plain English, this means a dyslexic should have his eyes checked, but improved vision doesn't help that much in learning to read.

Language Problems

According to Mattis (1978), the primary contributing factor to dyslexia is an auditory language deficit. Approximately 86% of the individuals identified as dyslexic evidence an auditory language disorder that prevents the individual from linking the spoken form of a word with its written equivalent. In light of this, any individual with reading problems should have a careful evaluation of his or her language capabilities and where indicated, appropriate speech and language intervention should be provided.

Translated into plain English, this means hearing and speaking are related to reading.

Visuo-Spatial-Motor Problems

In contrast to language problems, visuo-spatial-motor factors of dyslexia appear less frequently (Robinson and Schwartz 1973). Approximately 5% of the individuals identified as dyslexic have a visuo-spatial-motor problem that interferes with sequential organization, scanning, and the perception of temporal and spatial cues. Although visuo-spatial-motor confusion is common in young children who are just learning to read, these problems do not tend to account for severe and persistent reading difficulties unless the child has missed so much basic reading instruction that he cannot get caught up. Assessment of visual, spatial, and motor capacities should be included in the diagnosis of any coordination or orientation disorder; however, there is no scientific evidence that interventions such as neurological and sensory organizational training, laterality training, dominance training, balance beam, or reflex inhibition will significantly accelerate reading performance.

Translated into plain English, this means that some dyslexics have problems visualizing things, problems with hand-eye coordination, muscle control, sense of time and space. This should be assessed but treatment of any of these problems won't be of much help.

Other Factors

The importance of general intelligence in learning to read has been examined and shown to be a critical factor in both reading and language abilities. Investigations of the role of dominance in handedness, eyedness, and mixed laterality have produced no consistent conclusions. Studies investigating low birth weight, EEG abnormalities, temperamental attributes, attention deficit disorders, birth order, food additives, and chemical allergies have yielded mixed results. What is clear is that a wide range of factors can be associated with reading difficulties but that these factors work differently in different children.

Translated into plain English, this means that the experts don't really know or agree about what causes dyslexia or how to treat it.

There is no simple formula for diagnosing and treating a dyslexic child. Each one requires his or her own individual program.

If you would like to find out how Don McCabe, a dyslexic himself, was enabled to read and what it was that enabled him to discover how to teach other dyslexics to

read and write, see **To Teach a Dyslexic**.

However, the western culture has perpetuated the idea that we must read and write from left to right in a "Z" pattern, and that this is the only way to decode or encode symbols. Yet other cultures go from right to left, top to bottom, etc, and the pattern is clearly relative to that society.

Perceptual Rules

Allow me to show you that you are dyslexic in your decoding and encoding of English linguistic symbols. By *encoding*, I mean writing and by *decoding* I mean reading. Have someone dictate a passage to you and write down what you hear. But, rather than process your writing in the left-to-right prejudice, continue writing on the next line backwards from right-to-left in an inverted "s" style. At this point, you should become dyslexic in a confusion of rules. (Note, you must do the exercise to grasp the point. To clear things up, I have a sample of each form:

lih ent qu tnew lliL bna habe (thgis-ot-thgis) to fetch a pale of water

(See AVKO's note at the end.)

Reversal and Genius

Mozart conversed in reverse and played music upside down, if the movie is correct. Leonardo wrote in reverse.

Teacher Fluency

Teachers must become fluent or comfortable in the right-to-left phonemic-graphemic process and begin to see it as an *a priori* component of perception. In this way, a social stigma is not transferred onto the child. We deal with reversals everyday yet we do not believe ourselves dyslexic. Think of it like this: ancient Arab mapmakers represented their world *opposite* that of Western mapmakers. To interpret their maps, westerners must turn them over because of our habitual orientation of viewing the world with north on top. Westerners would be considered dyslexic cartographers in their culture

email: scancode@wireweb.net

Editor's note: Did you notice the misspelling of "pail" as pale when you read: (Left-to-Right) Jack and Jill went up the hill

(the states of the states of the states) to fetch a pale of water

Even experts in dyslexia can misspell!

August 2, 2002 Children's Reading Disability Attributed To Brain Impairment

Children who are poor readers appear to have a disruption in the part of their brain involved in reading phonetically, according to a sophisticated brain imaging study funded by the National Institute of Child Health and Human Development

(NICHD). The study also found that children who read poorly but who do not receive any extra help or training eventually compensate for their disability by using other parts of the brain as backup systems for the impaired brain regions. Although most of these children eventually do learn to read, they never do so with the same fluency as do good readers. This is probably because the "backup" brain systems they use when reading apparently cannot process printed information as easily as can the brain systems primarily involved in reading...: http://www.nichd.nih.gov/new/releases/dyslexianews.cfm.] "The study shows some very important findings,"

FOR IMMEDIATE RELEASE Monday, April 19, 2004 Imaging Study Reveals Brain Function of Poor Readers Can Improve

A brain imaging study has shown that, after they overcome their reading disability, the brains of formerly poor readers begin to function like the brains of good readers, showing increased activity in a part of the brain that recognizes words...

In the current study, the researchers discovered that, as the 37 poor readers progressed through their instruction program, their brains began to function more like the brains of good readers. Specifically, the brains of these children showed increased activation in the automatic recognition center....

"This study represents the fruition of decades of NICHD-supported reading research," said G. Reid Lyon, Ph.D, Chief of NICHD's Child Development and Behavior Branch.

AVKO Editorial Comment: Should anyone be surprised that there are changes in the brain as the result of learning?

A Standard Recommended Method of Testing for Dyslexia

(AVKO considers this expensive and really non-productive but we have this here so that you can see what it entails)

A rather extensive testing battery is completed. The cognitive portion is usually done by a psychologist. It is necessary to establish the approximate IQ to rule out mental retardation among other things. Two common tests that are used are the *Benet* and *WISC* to determine IQ. Then some type of achievement test is completed. The *Woodcock-Johnson Achievement Battery* is often used. This permits comparison of standard scores. The usual criteria are a standard deviation (15 points) between IQ and achievement or sometimes irregularities in subscores. If evidence warrants, language processing tests, figure ground discrimination type testing, and visual-motor type testing. In addition, for public school placement in a L.D. program, the place where dyslexic students are served in public schools, a social history, a medical history, a psychological eval, and an educational eval are required.

The psychological and educational evaluations are basically covered in the above testing that may be completed within the school system or by outside sources. A psychologist usually does the cognitive testing. The educational testing may be done by an educational specialist or guidance counselor. There also has to be a classroom observation and a review of all other educational data. A school social worker should do the social history. A medical doctor should do the medical examination. Then all the results are reviewed by a team that includes the parents,

the school administration, the evaluators, the classroom teacher, the social worker, and a medical representative. The goal is to prove that the problem is not emotional, mental, social, or medical before educational placement can be completed.

A word of caution: Dyslexia is more complex than reading numbers backwards or reversing letters in words. We now believe that it is caused by an underlying language problem that extends throughout the area of language arts. For some, it extends into mathematics. Orton-Gillingham type reading programs are usually the most successful in working with reading problems for dyslexics.

Hope that this is helpful.

The above was a posting by Julia Reynolds on the International Reading Association's Listserve: RTEACHER@BOOKMARK.READING.ORG

Note: "The goal is to prove that the problem is not emotional, mental, social, or medical before educational placement can be completed"

AVKO's concern: Supposing a person spends the thousands of dollars on all these tests and gets the "proof" that the "problem" is not emotional, mental, social, or medical, what next? Will the "educational placement" help? We suggest that BEFORE a child is subjected to hours of testing torture and before the parents' bank account is depleted, that the parents demand to know the percentage of students put into the targeted public school educational placement for dyslexics who are brought to grade level and who graduate from high school reading at grade level. If their success rate is truthfully admitted to, it probably will be zero.

For more information about how the AVKO Educational Research Foundation can help you help your children become better readers and spellers, visit www.avko.org to contact Don McCabe

e-mail: info@avko.org Phone: Toll Free 1-866-285-6612