Symptoms of Dyslexia

DISCLAIMER: No two people with dyslexia are exactly alike. No one will have every symptom, and the symptoms they do have can range from mild to severe. Dyslexics will have a "constellation" or cluster of symptoms in the following areas.

**** IF TWO OR MORE OF THESE WARNING SIGNS EXIST, ESPECIALLY IF THERE IS DYSLEXIA OR ADHD IN THE CHILD'S FAMILY TREE, THE CHILD SHOULD BE ASSESSED FOR DYSLEXIA AT THE AGE OF 5 ½ . ALSO, PHONEMIC AWARENESS GAMES AND TRAINING SHOULD BE IMPLEMENTED AS A PREVENTIVE MEASURE.**

Pre-School and Kindergarten Warning Signs

- delayed speech (not speaking any words by the child's first birthday)
- mixing up sounds in multi-syllabic words (ex. Aminal for animal, mawn lower for lawn lower, bisghetti for spaghetti, flustrated for frustrated)
- inability to rhyme by age 4
- lots of allergies or stronger and more severe reactions to childhood illnesses than most other kids
- can't master tying shoes
- confusion of right versus left, over versus under, before and after, and other directionality words and concepts.
- Lack of dominant handedness (switches from right hand to left hand between tasks or even while doing the same task)
- Inability to correctly complete phonemic awareness tasks.
- Difficulty learning the names of the letters or sounds in the alphabet; difficulty writing the alphabet in order.

Reading and Spelling

Reading:

- Slow, labored, inaccurate reading of single words in isolation (when there is no story or picture to provide clues).
- When reading aloud, reads in a slow, choppy cadence (not in smooth phrases), and often ignores punctuation.
- Becomes visibly tired after reading for only a short time.
- Reading comprehension may be low due to spending so much energy trying to read the words. Listening comprehension is usually significantly higher than reading comprehension.
- When reading, frequently:

1. Reverses, inverts, or transposes letters. Reverses means flipping a letter horizontally along a vertical axis, such as reading ded for bed, or bog of dog. Inverts means flipping a letter upside down, such as may for way, or we for me. Transposes means switching the order of two adjacent letters, such as on for no, gril for girl, own for won.
2. Substitutes similar looking words, even if it changes the meaning of the sentence, such as sunrise for surprise, house for horse, while for white, wanting for walking.
3. When reading a story or a sentence, substitutes a word that means the same thing but doesn't look at all similar, such as travel for journey, fast for speed, and cry for weep.
4. Misreads, omits, or even adds small function words, such as an, a, from, the, to, were, are, of.
5. Omits or changes suffixes, such as need for needed, talks for talking, late for lately.

Spelling

1. Spelling errors consist of reversals, inversions, or transpositions (just as reading errors)
2. Continually misspells sight words (nonphonetic but very common words) such as they, when, ball, despite extensive practice.
3. Misspells even when copying something from the board or from a book.
4. Written work shows signs of spelling uncertainty numerous erasures, cross outs, etc.

Handwriting (Dysgraphia)

Also known as a visual-motor integration problem, people with dyslexia often have poor, clearly illegible handwriting. Signs of dysgraphia include:

- Unusual pencil grip. Often with the thumb on top of the fingers. (a fist grip)
- May hold onto the pencil lower than normal (just above the lead), or higher than normal (an inch or two above the start of the paint)
- If pencil grip is lower than normal, the child will often put his/her head down on the desk to watch the tip of the pencil as he/she writes,
- The pencil is gripped so tightly that the child's hand cramps. The child will frequently put the pencil down and shake out his/her hand.
- Writing letters is slow, labored, non-fluent chore.
- Child writes letters with unusual starting and ending points.
- Child has great difficulty getting letters to "sit" on the horizontal lines.
- Unusual spatial organization of the page. Words may be widely spaced or tightly pushed together. Margins are often ignored.
- Child has an unusually difficult time learning cursive writing, and shows chronic confusion about similarly formed cursive letters such as f and b, m, and n, w and u. They will also have difficulty remembering how to form capital cursive letters.

Quality of Written Work

People with dyslexia usually have an "impoverished written product." That means that their intelligence and abilities are not apparent when looking at something they wrote. Their intelligence is obvious when you speak to them, but it is not obvious when they write. They tend to:

- Write extremely short sentences
- Take an unusually long time to write, due to dysgraphia
- Display very poor mastery of punctuation as well as grammar, syntax and suffixes.
- Misspell many words
- Have nearly illegible handwriting, due to dsygraphia
- Use space poorly on the page; odd spacing between words, may ignore margins, sentences tightly packed into one section of the page instead of being evenly spread out
- Miss many errors in written work even when proofreading has been attempted.

Directionality

Most dyslexic children and adults have chronic difficulty with many aspects of directionality.

- Geographic directionality: confusion about north, south, east and west; difficulty reading or following maps; chronically get lost when going to new places (and sometimes even to familiar places).
- Directionality words: difficulty learning (or remembering the meaning of words such as left-right, over-under, up-down, before-after, ahead-behind, forward-backward, east-west).
- Left-Right confusion: this shows up in handwriting and in math.

  Handwriting: trouble remembering where a letter starts and which way it goes. Does the circle on the b go this way or this way? Which way does the tail on a q go? Does an s start here and go to the right or here and go to the left? Which way is left, anyway?

  Math: trouble remembering which way to work a math problem. Reading goes from left to right, but adding, subtracting and multiplying goes the other way. However, long division goes the same way as reading (except when you're multiplying or subtracting within a division problem). When carrying a number, do I carry it to the left or to the right?

Sequencing Steps in a Task

Learning any task that has a series of steps which must be completed in a specific order can be difficult. These tasks are usually challenging for people with dyslexia:

- Tying shoelaces: this task not only has a series of steps, but many steps have directionality as part of them. Many children do not master this task until they're teenagers.
- Writing capital cursive letters: most Upper-case cursive letters require many steps, and most of the steps have directionality as part of them.
- Doing long division: to successfully complete a long division problem, you must do a series of five steps, in exactly the right order, over and over again.
- Touch typing: learning to touch type is an essential skill for people with dysgraphia. But it is usually more difficult (and requires much more effort) for a dyslexic child to learn to type. Not only are the keys on the keyboard laid out in a random order (which requires rote memorization), but typing a capital letter requires directionality and sequencing. For example, to type a capital J, you must figure out which hand you use to type a J (the right hand). Then before typing it, use your other hand to press and hold down the Shift key. While it is down, use your other hand to type and release the J key, then release the Shift key with the other hand.
- Most dyslexic children cannot learn to type on their own, even with a good typing program. They must be directly and explicitly taught, and they must practice frequently.

Rote Memory of non-meaningful facts

Memorizing non-meaningful facts (facts that are not personally interesting and personally relevant) is extremely difficult for most dyslexic children and adults. In school, this leads to difficulty learning:

- Multiplication facts
- Science facts: water boils at 212 degrees Fahrenheit. The speed of light is 186,000 miles per second, etc.
- History facts: dates, names and places. Dyslexic students do well in history classes that emphasize why some event happened, and the consequences of that event, rather than rote memorization of dates and names.

Time concepts and time management

People with dyslexia often have difficulty with time management and time concepts. They often have difficulty:

- Telling time using an analog clock (a clock with hands): Directionality issues add to this difficulty (which way do the hands go?) as does math. To understand "be home at quarter to six", you must know fractions (quarter means ¼. ¼ of an hour is 15 minutes), and you must realize that "to six" means before six, and "before" has directionality issues (is that when the long hand is on the 9 or on the 3?)
- Knowing the months of the year in sequence. If you haven't mastered this then you may misinterpret a due date written as 5/15/98.
- Estimating the time a task requires. People with dyslexia are often chronically late to appointments and late turning in homework because they don't accurately estimate the time required to drive to a destination or to complete an assignment.
- Remembering the starting times and the sequence of classes in high school, both on regular school days and days with shortened schedules due to rallies or in-service days.
- Using appointment calendars. People with dyslexia will often show up for appointments on the wrong day or the wrong week.

Spatial Organization

People with dyslexia have an extremely difficult time organizing physical space. They tend to prefer to pile things rather than to organize them and put them away. It is almost as thought if they can't see an item (if it is behind a door or in a drawer) they won't know where it is.

- This disorganization invades all of their personal space: their rooms, their lockers, their backpacks, their offices, and their cars.
- They often have extreme difficulty organizing their offices or their study space.
- Also, perhaps due to their organization, they tend to lose many personal items: clothing, watches, cell phones, keys, shoes and purses or wallets.
- They also have trouble bringing all necessary items to a meeting or to their house to do homework.

Math Difficulties

People with dyslexia are often gifted in math. Their three-dimensional visualization skills help them "see" math concepts more quickly and clearly than non-dyslexic people. Unfortunately, difficulties in directionality, rote memorization, and sequencing can make the following math tasks so difficult that their math gifts are never discovered.

- Memorizing addition and subtraction facts
- Memorizing multiplication tables
- Performing long division
- Understanding fractions

Co-existing Conditions

Attention Deficit Disorder (with or without hyperactivity)
Attention Deficit Disorder is a completely separate condition than dyslexia. However, research has shown that at least 50% of people with dyslexia also have ADHD.

Light Sensitivity (Scotopic Sensitivity)

Small percentages (3% to 8 %) of people with dyslexia also have light sensitivity. These people have a hard time seeing small black print on white paper. Copying work on to colored paper and using colored overlays helps with this problem.

Anxiety Disorders

Many people with dyslexia also have a family history of anxiety disorders. Depression, OCD, Tourettes, Panic attacks, and Bi-polar syndrome.

Significant Strengths of People with Dyslexia

Although their unique brain architecture and "unusual wiring" make reading, writing, and spelling difficult, most people with dyslexia have gifts in areas controlled by the right hemisphere of the brain. The right side controls:

- Artistic skill
- Musical ability
- 3-D visual-spatial skills
- Athletic ability
- Math conceptualization skills
- Mechanical ability
- Vivid imagination
- Creative, global thinking
- Curiosity and tenacity
- Intuition

Good Careers for People with Dyslexia

- Architecture
- Interior design
- Psychology
- Teaching
- Marketing and sales
- Culinary arts
- Woodworking

- Carpentry
- Performing arts
- Athletics
- Music
- Scientific research
- Computers
- Electronics
- Mechanics
- Graphic arts
- Photography