



BRAINS THAT ARE READY TO READ

By Drina Madden, M. A., C.A.S.
Valerie Nowinski, Psy.D.

The human brain is hard-wired to verbally communicate. It is not hard-wired for reading and the writing of language. Some people learn to read with no direct training. Most people learn to read through a structured presentation of the sounds, symbols and sound/symbols connection involved with their language. Approximately 20% need specific training – brain rewiring – to help them become automatic readers and writers. This group has some form of dyslexia.

Dyslexia is a language disorder. It can be acquired, but most people with dyslexia have been born with brains that have difficulty with auditory, visual, auditory and visual, motor, visual and motor, and/or memory connections that make reading, spelling, written language, and/or math difficult for them to learn. It can be formally identified by the time the child is five years of age. Neuroscience advances allow us to identify precursor language/dyslexic symptoms in early childhood.

Children are expected to be automatic readers, able to spell and write and use their reading to learn by the third grade. Preschool and primary school environments must be rich in materials that foster communication skills – verbal and written. Children with dyslexia need to be taught differently in order to become automatic receivers and expressers of written language.

Recognition of the Precursor Symptoms can help us design preschool and primary grade environments that assist in wiring the brains of small children so most are able to perceive and respond as automatic readers by the time they complete second grade.

Preschool and Primary Grade environments must contain direct, visual presentation of clear, whole to part and part to whole experiences. Prewriting experiences with blocks, crayons, scissors and play-doh need to be included along with swinging, climbing, catching, throwing and bouncing activities. They need to be surrounded with books and sight words but also need DIRECT INSTRUCTION OF THE SYMBOLS used in the English language. Children who avoid any prewriting materials or cannot use them appropriately need to have purposeful instruction in all of the above skills since they are often the children who are most “at risk” for having dyslexia. They avoid or cannot accurately complete the work because these materials are difficult for their brains to connect with and learn from. Their brains must be synchronized to better attend to and perceive the symbols. Those with dyslexia need prescriptive synchronization. A mature person must be with them to monitor their perceptions and assure that appropriate brain connections are being made.

Their environments must contain many opportunities to communicate with the children and adults in their world. The children need awareness work with the environmental sounds in their world – pitch, volume, rhythm, recognition and memory. They need DIRECT INSTRUCTION OF THE SOUNDS used and heard in spoken English. Tapes/software with environmental sounds (Soundscapes, Soundtracks, Earobics, etc.), scientifically produced music (Music for Babies, The

Listening Program, etc.), the Silence Game, finger plays, rhythm bands, etc., can all assist in their immersion into sound/sound awareness. Their brains must be synchronized to better attend to and perceive the sounds. Those with dyslexic brains need prescriptive synchronization. A mature person must be there to monitor the sounds they are making and making appropriate brain connections.

The environment must contain sound/symbol connection activities that are presented on a regular basis to all of the children. They need DIRECT INSTRUCTION OF THE SOUND/SYMBOL CONNECTION experiences until their knowledge is automatic. Their brains need to have associations between the auditory and visual brain connected. Those with dyslexia need a deeper level of consistent, repetitive, structured sound/symbol teaching such as found in the Wilson, Barton or Torgeson programs.

They need visual motor connections made stronger. Careful assistance for hand, eye and eye-hand coordination must be included. The children with precursor difficulties need a prescriptive environment that helps their brain make the eye-hand connections with greater ease. Handwriting Without Tears and similar programs can assist this process and help pinpoint children who are in need of prescriptive work beyond the classroom (possible OT therapy).

Memory building activities are a must for rhymes and rhythms to finger plays, pictures, words and directions.

Dyslexia Precursors

YES

NO

Auditory/Verbal		
Late talking – 2=200 words, 3=900 4=some grammatical errors remain, 5=few grammatical errors and mature speech		
Difficulty with articulation		
Difficulty following and remembering directions		
Difficulty with word retrieval		
Difficulty learning letter names and sounds		
Difficulty blending sounds into words		
Visual		
Difficulty with and/or avoidance of puzzles		
Difficulties recognizing letters		
Difficulty with basic sight words		
Reversals and transpositions (more than usual)		
Difficulty with tracking		
Difficulty with blending sounds into words		
Right/left confusion		
Visual/Motor		
Difficulty holding a writing implement		

Difficulty coloring		
Difficulty cutting with scissors		
Improper shaping of letters or numbers		
Improper spacing of letters/words		
Memory		
Difficulty remembering personal information		
Difficulty remembering rhymes		
Difficulty following directions		
Difficulty remembering names of classmates		
Difficulty developing a vocabulary and using words		

Numerous symptoms must be apparent before a child is considered to be having a language-related problem. Awareness of precursors can assist in designing an environment that will create more synchronous brain connections.

People Who Have Dyslexia

Once youngsters reach third grade, they are no longer taught the rudiments of reading. They must use their reading to learn – reading directions, texts and writing papers. We can readily see the symptoms of dyslexia in spite of other apparent capabilities and/or gifts. Identifying the symptoms of dyslexia helps teachers to understand the classroom support necessary for classroom success in spite of dyslexia. Identifying the symptoms of dyslexia also helps to determine the prescriptive program necessary to help older children become automatic readers, spellers, writers and mathematicians.

Dyslexia Checklist

YES

NO

Multisensory Reading/Spelling Signs of Dyslexia		
Reads slowly and laboriously		
Reads in a monotone		
Shortens words when reads		
Puts stress on the wrong syllables		
Omits prefixes or suffixes		
Adds suffixes		
Poor comprehension due to low energy		
Remembers little of what was read		
Cannot write or match the appropriate letter when given the sound		
Often ignores punctuation		
Poor at copying from the board or book to paper		
Has trouble remembering the names of people or things		
Misreads, omits, or adds small words		

Auditory Deficits – Reading		
Substitutions of sounds		
Poor sounds blending to make words		
Knows names not sounds of letters		
Poor phonic attack		
When stuck on a word may not sound it out		
Substitutes words		
Uses synonyms – mommy/mother		
Auditory Deficits – Spelling		
Can memorize spelling lists – cannot regularly use		
Omits endings		
Uses synonyms		
Omits 2 nd letter in blends – ted for fle		
Confuses voiced and unvoiced pairs p/b f/v sh/ch		
Doesn't hear subtle differences – leaves out vowels		
Confuses vowels		
Wild guesses		
Visual Deficits – Reading		
May invert or reverse letters		
Rate of perception is low		
Adds words that are not there (can change meaning)		
May omit and read through punctuation		
May confuse order (place/palace)		

Visual Deficits – Spelling		
May visualize beginning/end of word but omit middle		
Spells phonetically (site/sight)		
Mixes capital and small letters		
Reverses letters		
Gives correct letters in wrong sequence		
Many erasures		
Math		
Problems with numbers and calculations		
May have difficulty with some of the terms < >		
May reverse or transpose numbers		
May have difficulty with mental arithmetic		
May have trouble telling time		
Reading of word problems may be a difficulty		
Showing work is often difficult in spite of idea grasp		
Handwriting		
May be illegible – irregular sizes, shapes and/or spacing		
Tight pencil grip		
Writing is slow, not automatic and exhausting		
May put their head on desk and watch pencil while writing		
Copying off the board is slow, painful and tedious		
Pages are organized poorly		
Written Expression		
Write everything as one long sentence		
Confused about what makes a complete sentence		
Many misspelled words		
Writing takes a long time (dysgraphia)		
Do not notice errors when proofreading		
Directionality		
Left – right confusion		
Up – down confusion		
Word/letter directionality confusion		
Sequencing in a Task		
Printing letters		
Long division steps		
Touch typing is a necessary skill but difficult to learn		

Rote Memory		
Multiplication tables are difficult to learn		
Science facts are difficult		
History facts are hard to hold		
Telling Time and time concepts		
Concepts such as before and after may be difficult		
Telling time with clock hands is a difficult spatial activity		

A person can be gifted and still have dyslexia

- Language talent
- Artistic skill
- Athletic ability
- Musical talent
- Mechanical skill
- Nonverbal/people skills
- Intuition
- Imagination
- Creativity
- Curiosity

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