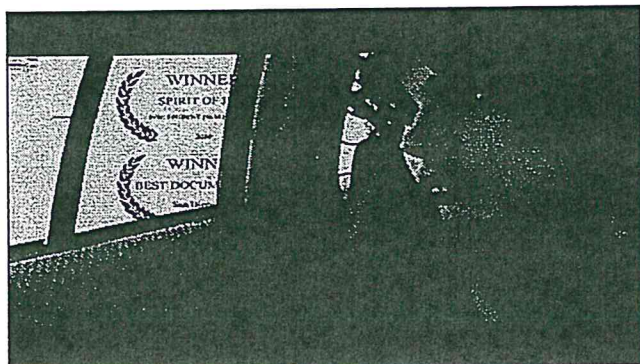


DYSLEXIA: SYMPTOMS AND CAUSE

Ann C. Roarty, Ed.M.
Learning Disability Teacher
Consultant



THREE MOST COMMON MYTHS

1. See things backwards
2. Can't read at all
3. It's rare

Dyslexia is NOT:

- RARE
- ASSOCIATED WITH LOW INTELLIGENCE OR COGNITIVE ABILITY
- A VISION PROBLEM
- A DEVELOPMENT LAG WHICH CAN BE OVERTAKEN
- THE RESULT OF LAZINESS
- READING OR WRITING BACKWARDS

Expanding Dyslexia Awareness

What is Dyslexia?

1 in 5 students have a learning difference called dyslexia.

Strengths You May See

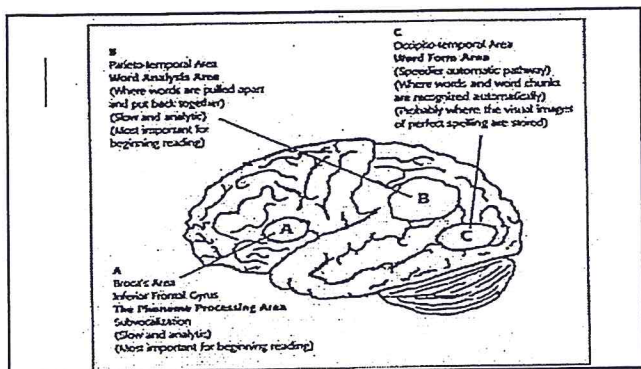
- Creativity and Imagination
- People Skills
- Outside the Box Problem Solving
- Building and Designing Talents
- Strong 3D Visual Skills
- Never Gives Up

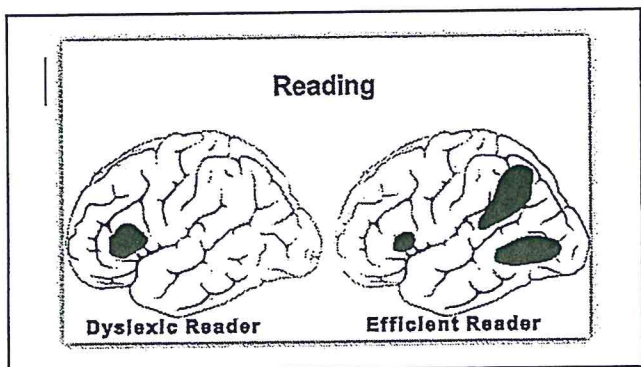
Weaknesses You May Notice

- Reading and Rhyming
- Writing and Note Taking
- Left/Right Confusion
- Organization and Time Management
- Following Directions
- Memorization (as in Math Facts and Spelling)

WHAT IS DYSLLEXIA CONTINUED

- INHERITED
- PROCESS LANGUAGE DIFFERENTLY
- DIRECTIONALITY
- MEMORY
- NOT RARE - 1 IN 5 - 20% - Some mild - some severe
- BRAIN DIFFERENCE





DYLSEXIA

❖Dys = difficulty with
❖Lexia = language

- ❖Difficulty with Language
 - ✓Oral speech
 - ✓Auditory Processing
 - ✓Reading
- ✓Written Expression and Spelling

ORAL SPEECH

- Speech delay
- Mixing up sounds when saying long words
- Stuttering – early in life – not all dyslexics do this
- Word Retrieval
- Articulation difficulties
 - M-N, R-L and sometimes S-SH-CH (slight lisp)

AUDITORY PROCESSING

1. Auditory Memory Size
2. Processes Auditory a bit more slowly
3. Auditory discrimination
4. Phonemic Awareness

DIFFICULTY MEMORIZING

- ❖ Spelling of their last name
- ❖ Address
- ❖ Phone number
- ❖ The alphabet – sequence, names of the letters and sounds they make
- ❖ Days of the week
- ❖ Months of the year
- ❖ Multiplication tables

READING

- Can read a word on one page – won't recognize it on another
- Won't try to sound out an unknown word
- Typical Reading Mistakes:
 - house-horse, girl-grill, form-form, could-cold
 - who-how, stop-spot, felt-left, was-saw
 - big-dig, may-way
 - leaves out function words – horse-pony, speed-fast



PHONEMIC AWARENESS

Phonemic awareness is the core and casual factor that separates normal readers from disabled readers.

- o The ability to hear and manipulate sounds within a one syllable word in your head – no print
- o Essential pre-reading skill
- o Phonics won't work – if you don't have phonemic awareness

HOW IMPORTANT IS PHONEMIC AWARENESS?

PHONEMIC AWARENESS IS MORE HIGHLY RELATED TO LEARNING TO READ THAN INTELLIGENCE, READING READINESS, AND LISTENING COMPREHENSION

KEITH STANOVICH

Handwriting practice lines consisting of seven horizontal lines.

7 ESSENTIAL PHONEMIC AWARENESS TASKS

1. Count or say each word
2. Add a sound
3. Delete a sound
4. Change a sound
5. Compare two words
6. Blend sound into words
7. Create words that rhyme

Handwriting practice lines consisting of seven horizontal lines.

SHAPE OR SEQUENCE

- | | |
|----------------|------------------|
| >form-from | >who-how |
| >trail-trial | >does-dose |
| >house-horse | >lots-lost |
| >lock-look | >on-no |
| >come-came | >was-saw |
| >beach-bench | >left-felt |
| >bucket-basket | >reserve-reverse |
| >timid-timed | >untied-united |

Handwriting practice lines consisting of seven horizontal lines.

OMIT-INSERT, SILENT E, SIGHT WORDS

- >star-stair
- >place-palace
- >could-cold
- >black-back
- >ounce-once
- >steam-stream
- >house-hose
- >her-here
- >quite-quiet
- >rid-ride
- >where-were
- >want-what
- >through, thought, though

SUFFIXES, DIRECTION, FUNCTION, GUESS

- >needed-need
- >shoulder-should
- >every-very
- >b-d
- >b-p
- >m-w
- >n-u
- >g-j
- >a the at
- >to on in
- >for
- >horse-pony
- >journey-trip
- >Guess: same first and last letter
- >abandon-ambition

DEVELOPMENT OF PHONOLOGICAL AWARENESS

- By Age 3 to 4:**
- >Produces rhymes spontaneously without knowing they rhyme (vocal play).
- By Age 4 to 5:**
- >Can identify the number of syllables in a word by tapping or clapping.
 - >Can blend syllables into a whole word when presented with the syllables.
 - >Can delete a syllable from a word and state what remains.
 - >Can recognize that two words end the same or rhyme (rhyme identification).
- By the End of Kindergarten:**
- >Can produce rhymes (rhyme production).
 - >Can identify the initial sounds in words.
 - >Can blend two phonemes.

By the End of First Grades:

- > Given a group of words, can identify words that rhyme and those that do not.
- > Can group words together or categorize words by rhyming characteristics.
- > Can break apart and identify all of the sounds in words with four to five phonemes (segmentation).
- > Can put together four or five phonemes to pronounce a word (blending).

By the End of Second Grades:

- > Can perform all phonemic awareness and manipulation tasks: rhyming, blending, segmenting, deleting, substituting, and reversing phonemes.

DYSGRAPHIA AND DYSLEXIA

- > Odd pencil grip
- > Can't make letters sit on the line
- > Inconsistent slat of tall letters
- > Odd beginning and ending points
- > Inconsistent letter sizes and difficulty with descenders
- > Odd use of spacing between words
- > Can't copy from the board
- > Extreme difficulty learning cursive

MATH

- ✓ Trouble telling time on a circular clock
- ✓ Often the student can do the math in their head and come up with the correct answer
- ✓ Issues with:
 - ✓ Word problems
 - ✓ Memorizing facts
 - ✓ Directionality confusion
 - ✓ Multi-step problems
 - ✓ Showing work
 - ✓ Copying answer

Reflection

- Students with dyslexia find taking notes in lectures difficult because of a similar list of problems:
 - problems listening and writing at the same time
 - difficulties spelling
 - especially unfamiliar words that often crop up in academic lectures

MY SCREENING

1. Woodcock Johnson Test of Achievement – look specifically at Letter-Word Identification, Passage Comprehension vs. Oral Comprehension, Word Attack, and Writing Samples
2. If there is a reason to do further screening –
 1. Writing down sounds
 2. Long term memory retrieval
 3. Sound to symbol
 4. CTOPP 2 – Comprehensive Test of Phonological Processing
 5. Graded Word Lists
 6. Reading Sight Words
 7. Reading Nonsense Words
 8. Reading Fluency
 9. TOWRE 2 -Test of Word Reading Efficiency
 10. Student Screening for best approach

RESEARCH BASED DEFINITION OF DYSLEXIA

Dyslexia is a specific learning disability that is neurological in origin. It is characterized by difficulties with accurate and/or fluent word recognition, and by poor spelling and decoding abilities.

These difficulties typically result from a deficit in the phonological component of language that is often unexpected in relation to other cognitive abilities and the provision of effective classroom instruction.

Secondary consequences may include problems in reading comprehension and reduced reading experiences that can impede growth of vocabulary and background knowledge.


STRENGTH BASED DEFINITION OF DYSLEXIA

Dyslexia, a specific learning ability, neuro-biological in origin, typically characterized by strengths, including creative expression, athletic performance and scientific discovery.

The individual with dyslexia often exhibits strength in thinking outside the box, making unexpected connections, and will form an intuitive sense about the world.

Secondary strengths include a different learning style that may be auditory or kinesthetic, the ability to demonstrate knowledge in ways other than the written word, and an uncanny sense of entrepreneurialism that may lead to great innovations and financial success.

DYSLEXIC STRENGTHS

- 
- Creative
 - Intuitive
 - Persistent
 - Empathetic
 - Critical thinkers
 - Big picture thinkers
 - Strong reasoning skills
 - Excellent at solving puzzles
 - Excelled oral comprehension



Thank
A
Dyslexic



