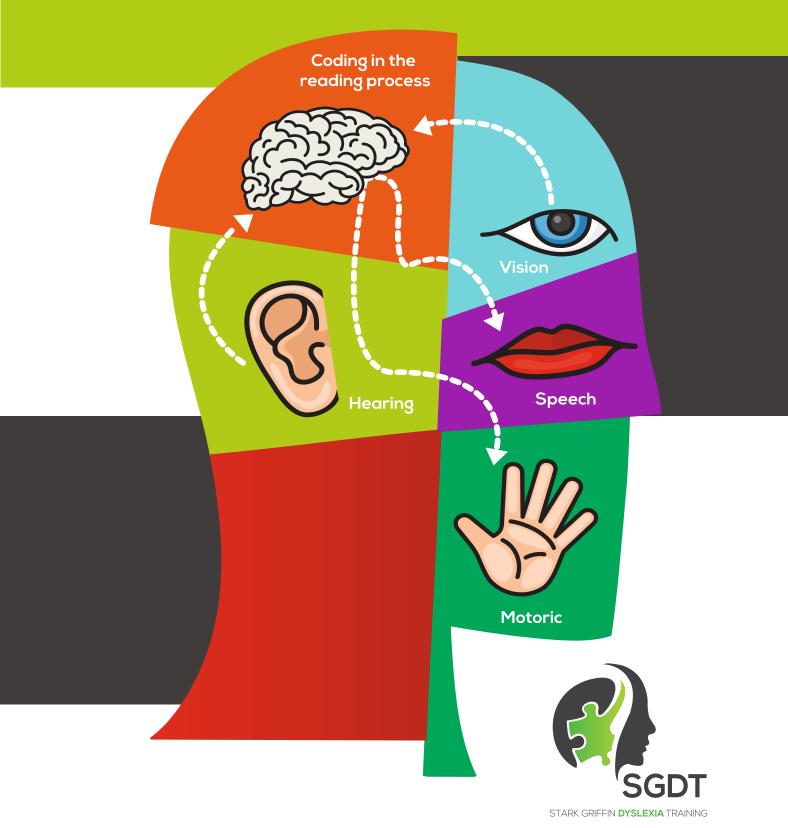
Dyslexia Therapy Training



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DYSLEXIA THERAPIST TRAINING

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INTRODUCTION



Dyslexia Therapy

SGDA

A learning disability with no diagnosis is a diagnosis of no learning disability!!



 The Stark-Griffin Dyslexia Academy (SGDA) is a registered company that provides professional development and capacity building to individuals who work with the dyslexic population.

 We incorporate the neuroscience of dyslexia to enable HPCSA registered psychologists, psychometrists, audiologists, speech therapists, occupational therapists and optometrists to specifically diagnose dyslexia in seven subcategories and six severity levels.

- Our main focus at SGDA is the direct diagnosis of learning disorders.
- We foster the best practices of inclusive education to construct learning enrichment curricula and teacher training programs to assist and accommodate the learner who experiences barriers to learning.
- Our mission is to reach all the undiagnosed dyslexics in our country.

- SGDA is the culmination of the diagnosis of Specific Learning Disorders in South Africa and since 2010 we have been working towards providing equal opportunities for every student especially the dyslexic learner.
- Our conviction is that the advantages of specific learning disabilities far outweigh its associated challenges.

 SGDA is a registered Professional Development Provider with the HPCSA and SACE.



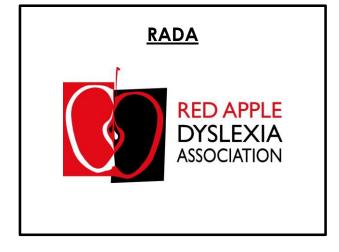




ENDORSED!!!!



SOUTH AFRICA'S
FIRST ASSOCIATION
DEDICATED TO
DYSLEXIA



...Inspired by passion

WE ARE ALSO MEMBERS OF:



https://www.myschool.co.za/ supporter/update/ RADA Ref: 12260 Scan to support us



http://sgda-app.com/



Stark-Griffin Spelling App



Available on the SGDA website: www.sgda.co.za

CONTACT US:

- www.sgda.co.za
- www.dyslexiasa.org

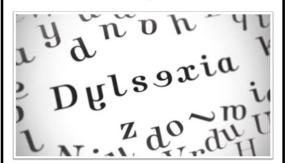
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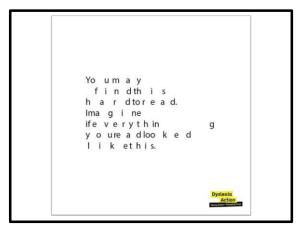
(Mon - Thurs: 07h30 - 16h30 Fri: 07h30 - 13h00)

Email: admin@sgda.co.za reports@sgda.co.za

WHAT IS DYSLEXIA?

What is Dyslexia?





CHINA AND MERCHANISTON

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WHAT IS DYSLEXIA?

The IDA defines dyslexia as a neurological based, often familial, disorder that interferes with the acquisition and processing of language. Varying in degrees of severity, it is manifested by difficulties in receptive and expressive language, including reading, writing, spelling, handwriting, and sometimes in arithmetic.

- IDA, November 2002

Dyslexia 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 experience that can impede growth of vocabulary and background knowledge.

- IDA, 2019

The National Institute of Health (NIH) defines dyslexia as 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.

THE NIH FOUND THAT DYSLEXIA:

- Affects 20% of children.
- Affects boys and girls equally.
- Is the leading cause of reading failure and school dropouts.
- Is the most common shared characteristic of juvenile offenders.
- Is not outgrown unless helped.

KEY FEATURES OF SOMEONE WITH DYSLEXIA:

- Average to above IQ
- Poor self-esteem
- Frustration and emotional
- Daydreaming

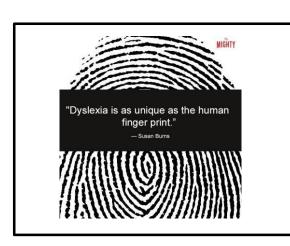
- Reads or writes with additions, omissions, substitutions, repetitions and reversals
- Confusion with laterality
- Difficulty with time management
- Mispronunciation
- · Poor working memory

Children with dyslexia have difficulty with:

- * reading
- * spelling
- * writing
- * related language skills

A LIFELONG CONDITION

- The impairments of dyslexia range from subtle to severe
- Dyslexia is a lifelong, intrinsic condition that is modified by instruction



- This disorder in older students often causes slow and inaccurate reading,
- · poor spelling,
- · disorganized writing
- and difficulty in learning <u>foreign</u> languages

THE PHONOLOGICAL DEFICIT

 When they are learning to read, most individuals with dyslexia have trouble identifying the separate speech sounds that make up words (phonemes) or the letters (graphemes) that represent those speech sounds

- For example, they may not recognize that wait has three sounds, /w/ /a/ /t/ and waste has four, /w/ /a/ /s/ /t/
- Because they have trouble pulling words apart into separate sounds and blending sounds together to make words, children with dyslexia almost always have prominent difficulty learning to match letter symbols with speech sounds (phonics)

 Limited knowledge of sound-letter correspondence interferes with the process of sounding out printed words accurately and fluently

WORD READING & COMPREHENSION

- As they begin to learn to read, individuals with dyslexia often guess at words and forget what they just read
- They have trouble understanding text if they cannot decipher words accurately or fluently
- Once they learn effective decoding strategies, their reading may remain slow and laborious
- If reading is slow, comprehension of the books or passage becomes more problematic.
- Comprehension requires attention devoted to meaning and if attention is used up on basic word recognition, too little will be left for using good comprehension strategies (The International Dyslexia Association)

Dyslexia is a Neurological issue not a character flaw!



SUMMARIZATION OF DIFFICULTIES

- Reading Difficulties:
- · Learning sounds of letters
- · Separating words into sounds
- · Slow and inaccurate reading
- · Poor reading comprehension

| • | Or | al | Di | iffi | CI | ulti | e | s: |
|---|----|----|----|------|----|------|---|----|
| | | | | | | | | |

- Delayed spoken language
- Misinterpretation of language that is heard
- Lack of awareness of different sounds in words and rhymes
- Organizing thoughts

• Writing Difficulties:

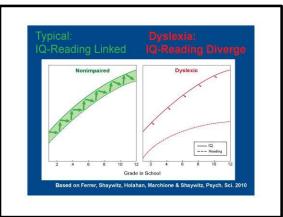
- · Organization of ideas
- Poor spelling
- Poor letter formation and spatial organization

• Mathematics Difficulties:

- Memorizing math facts
- Correct sequencing of steps when solving problems
- Transporting digits within numbers

Do IQ Scores indicate DYSLEXIA?

- The functional magnetic resonance images (fMRI) taken of children with dyslexia with low IQs had the same patterns of brain circuitry abnormalities as those of the children with dyslexia with normal IQs. Both groups had less activity in the two left hemisphere brain regions that are often less active in dyslexics.
- This means that the children's reading disability is not related to their IQ alone but to identifiable patterns of abnormal brain function.



UNDISCLOSED TALENTS?

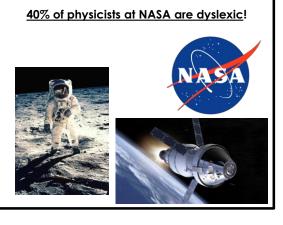
- Don't get me wrong, dyslexia is a disability that wreaks havoc in many people's lives
- It is a disability that never goes away
- People with dyslexia have to learn to overcome many struggles
- However, dyslexia may have some upsides to it as well

People with Dyslexia:

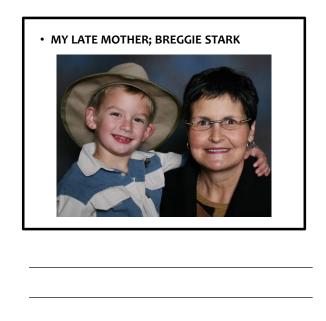
- have <u>sharper peripheral vision</u> than others
- can rapidly take in a <u>scene as a whole</u> ("visual gist")
- · have an aptitude for the arts
- thrive in fields intensive with visual components (branches of science)
- have superior perception skills
- are highly aware of the environment

- · have great intuition and insight
- think and perceive <u>multi-dimensionally</u> (using all the senses)
- are very <u>imaginative</u>
- are <u>holistic</u> (can see the big picture without getting lost in details)
- can easily spot <u>patterns</u>, connections, and similarities
- are capable of <u>seeing things differently</u> than others
- have extraordinary visual, spatial and lateral thinking





ACKNOWLEDGEMENTS LATE PROF. JOHN GRIFFIN (CALIFORNIA)



TYPES OF DYSLEXIA

Types of Dyslexia

NEUROANATOMICAL MODEL of DYSLEXIA

 Understanding the neuroanatomical model of dyslexia will eventually explain inner speech



THE ORAL DECODING PROCESS:

There are specific cortical locations in the Left hemisphere of the brain responsible for:

- 1. PHONETIC WORD ANALYSIS
- 2. <u>EIDETIC</u> (whole word) ANALYSIS (Rapid naming)

A visual configuration of letters received by the eyes, travels to the OCCIPITAL LOBE via nervous impulse and is transmitted to the ANGULAR GYRUS (AG) where a sight —sound match is made within 2 seconds

For unfamiliar words, WERNICKE'S AREA (WA) is called upon for phonetic analysis

In the MOTOR CORTEX (MC) motor engrams are developed, stored and called upon when writing words

Normal readers make use of the LEFT TE MPORAL HEMISPHERE of the brain

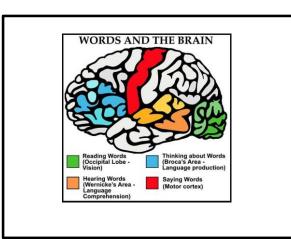
Dyslexics are prone to rely more on the functioning of the <u>RIGHT</u> <u>HEMISPHERE</u> of the brain

Typical Brain / Dyslexic Brain comparison Typical Dyslexic Broca's area, Inferior frontal gyrus [articulation/word analysis] Parieto-temporal [word analysis] Occipio-temporal [word form]

WORD DECODING:

- There are two basic ways to decode (recognize) the written word
- The use of phonetic skills is one way new words are decoded and then learned. School teachers refer to phonetic decoding as 'word attack'
- The other way to decode is by using eidetic skills, referred to by teachers as 'look and say' or 'rapid naming'

- Normally, when either or both of these decoding processes are <u>repeated</u> <u>sufficiently</u>, the newly learned words can be put into one's <u>mental lexicon</u>
- This can be thought of as the individual's "dictionary"



| PHYSIOLOGY OF READING Cortical vocalization is the decoding of written words internally in the cortex for corresponding sounds while reading (also known as inner speech) | Subcortical vocalization is the phonetic decoding of written words to produce internal sounds |
|--|---|
| | |
| When <u>reading orally</u> , vocalization still occurs but Broca's area, the motor strip, vocal cords, tongue etc. must be activated for <u>oral pronunciation</u> | If cortical or subcortical vocalization is not achieved, the individual is dyslexic. |
| | |
| | DYSLEXIA IS BEING: |
| CORTICAL VOCALIZATION | VISUALLY DEAF |
| is ' <u>INNER SPEECH</u> ' | and |
| | AUDITORY BLIND |
| | |
| | |

- 18 -



DYSLEXICS ARE PICTURE THINKERS

10 000 pictures per minute

VS

250 words per minute

The 7 subtypes of dyslexia are:

- Dyseidesia (Visual Dyslexia)
- Dysphonesia (Auditory Dyslexia)
- Dysnemkinesia (Motoric Dyslexia)
- Dysphoneidesia (Auditory & Visual Dyslexia)
- Dysnemkinphonesia (Motoric & Auditory Dyslexia)
- Dysnemkineidesia (Motoric & Visual Dyslexia)
- Dysnemkinphoneidesia (Motoric, Auditory & Visual Dyslexia)

DYSEIDESIA/VISUAL DYSLEXIA

- A dyseidetic pattern of dyslexia is thought to be due to a dysfunction in the angular gyrus of the left parietal lobe and possibly in the occipital lobe, which results in poor ability to decode words on an eidetic (look-say) basis
- Lack of AUTOMATICITY



- A dyseidetic individual can decode using <u>phonetic word attack</u>, but will necessarily be a slow reader because of reliance on the slower phonetic process
- Spelling will be poor and show reliance on phonetic equivalents

Spelling errors in dyseidesia showing reliance on phonetic encoding

- duz (does)
- shud (should)
- lisen (listen)
- pazishun (position)

<u>Characteristic encoding</u> (spelling) pattern in dyseidesia

- Poor eidetic encoding:
 - · shoued (should)
 - · lagh (laugh)
 - heve (heavy)
 - · belive (believe)
 - bisnis (business)

• Good phonetic encoding:

- fmilyour (familiar)
- glisen (glisten)
- · hit (height)
- pizishin (position)
- foran (foreign)

DYSPHONESIA/AUDITORY DYSLEXIA

- A dysphonetic pattern of dyslexia is thought to be due to a dysfunction in a portion of Wernicke's area of the left temporal and parietal lobes, which results in poor ability to decode unfamiliar words
- A dysphonetic individual may know many sight-words (eidetic decoding) but may have difficulty with phonetic decoding, even when words are phonetically regular, such as stop, blunt, and grand



- The dysphonetic individual will, of course, have difficulty with phonetically irregular words, such as mother, listen, and rough, unless these words can be recognized eidetically
- Spelling of a dysphonetic individual will indicate poor phonetic equivalents

Typical Spelling Errors in Dysphonesia

- · solw (slow)
- aks (ask)
- dretak (decorate)
- · shlud (should)
- · dose (does)

<u>Characteristic encoding</u> (spelling) pattern in dysphonesia

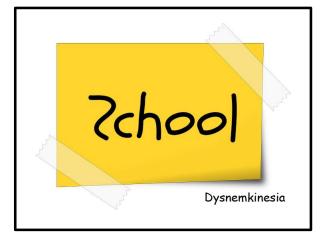
- · Good eidetic encoding:
 - should
 - laugh
 - believe
 - rolled
 - listen

• Poor phonetic encoding:

- famr (familiar)
- giten (glisten)
- conads (contagious)
- anbuc (ambush)
- foded (foreign)

DYSNEMKINESIA/MOTORIC DYSLEXIA

- Dysnemkinesia results from dysfunction of the portion of the motor cortex that controls formation of written symbols
- Dysnemkinesia means bad memory of movement in writing of linguistic symbols, i.e. numbers and letters



- dys = bad
- nem = memory
- kines = movement
- ia = condition
- = <u>Bad memory of movement in writing</u>

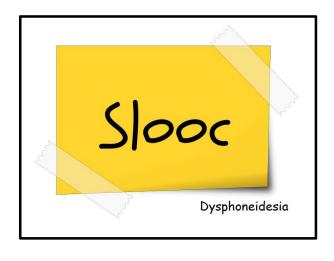
- Normally a student should have no reversals by the 4th grade
- Although writing is mostly affected, individuals with dysnemkinesia have reading dysfunction, but much milder than in dysphonesia and more so less severe than in dyseidesia



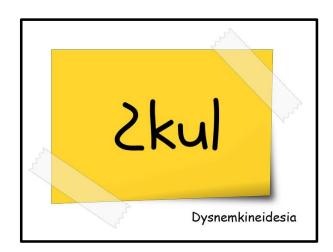
- Optometrists and occupational therapists who provide vision therapy often treat patients with dysnemkinesia
- This can be effectively done with laterality and directionality techniques
- The diagnosis of a specific type of dyslexia is known to be consistently repeatable on retesting (Griffin and Walton 1987)
- This is especially true of dyseidesia which has been demonstrated to be genetically inherited in an autosomal dominant mode of transmission (Fatt and Griffin 1983, Griffin 1992)

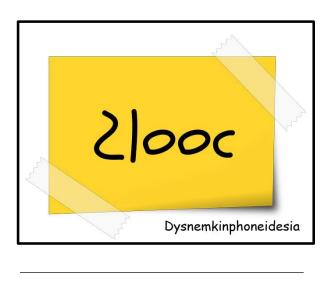
MIXED TYPES OF DYSLEXIA

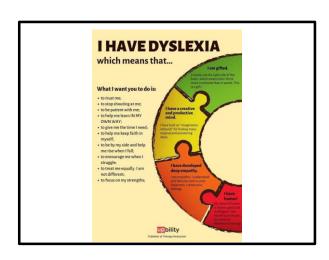
- The three basic isolated types of dyslexia are dysnemkinesia, dysphonesia, and dyseidesia
- Permutations of these three can result in seven distinct types of dyslexia
- Combinations of more than one of the three basic types result in more adverse effects on decoding than in dyslexia of a single type
- Suppose an individual has the combined type of mild dysphonesia and mild dyseidesia
- The effect is compounded as compared with either mild dysphonesia or mild dyseidesia
- Mild dysphoneidetic dyslexia would likely be equal to moderate dyseidesia











TEACHING A CHILD TO READ

Teaching a Child to READ

- All children need to learn how to decode.
- Reading is not a guessing game.
- Pictures may open a wonderous world of imagination BUT pictures don not help the reading process.
- Learning how to decode words is all about connecting our speech sounds to the letters on the page.

WHY IS LEARNING TO READ IMPORTANT?

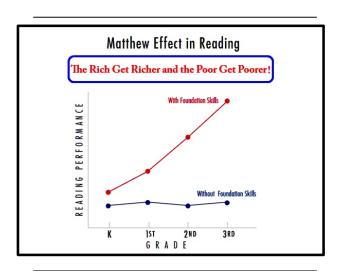
5 Reasons why learning to read is important

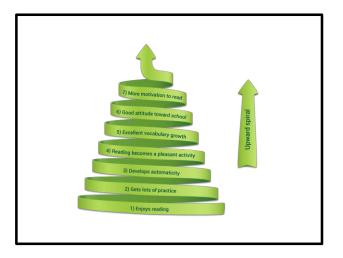
- 1. Reading develops important language skills
- Reading is especially necessary with today's technology
- 3. Reading opens up the world
- 4. Reading can enhance social skills
- 5. Reading is fun!

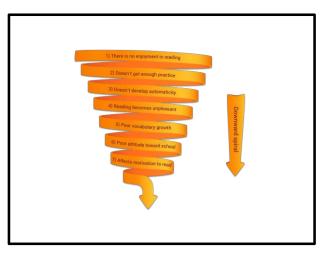
What is the Matthew Effect?

- Sociologist Richard C. Merton and his wife, Harriet Zuckerman are credited with creating the term "Matthew Effect" in the scientific community in 1948
- Later, Keith Stanovich, a psychologist who has done extensive research on reading and language disabilities, applied it to education and more specifically, reading.
- In the educational community, "Matthew Effect" refers to the idea that, in reading (as in other areas of life), the rich get richer and the poor get poorer.

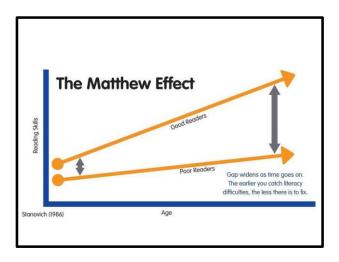
- When children fail at early reading and writing, they begin to dislike reading. They read less than their classmates who are stronger readers. When children with disabilities do not receive adequate remediation, they read less – and learn less from reading - than non-disabled children.
- As a consequence, they do not gain vocabulary, background knowledge, and information about how reading material is structured. In short, the word-rich get richer, while the word-poor get poorer. This is called "The Matthew Effect".

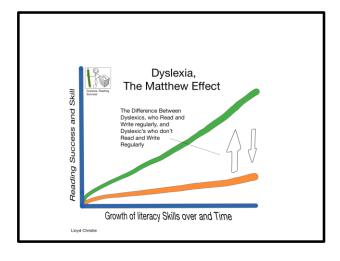


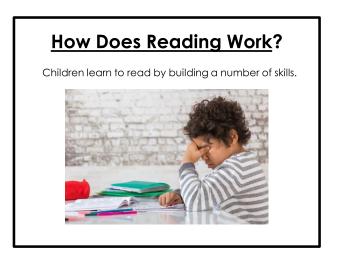




- Because some IQ subtests measure information learned from reading, poor readers will score lower on these subtests.
- Over years, the "gap" between poor readers and good readers grows.
- For children with disabilities in the primary grades, reading and writing failure is pervasive. Nearly all children who are identified as having a disability have reading and writing difficulties.







Words as Sounds, Sounds as Words PHONEMIC AWARENESS . The words we say are made up of smaller pieces of • Phonemic awareness is the ability to notice, think sound - called phonemes. about, and work with the individual sounds in • For example, the word "BAG" has three phonemes: spoken words. 1. "buh" • Before children learn to read print, they need to become aware of how the sounds in words work. 2. "ahh" and 3. "guh" • They must understand that words are made up of speech sounds, or phonemes. . Phonemic awareness - understanding phonemes and how they create words - is a key part of learning to read. • Phonemes are the smallest parts of sound in a Children can show us that they have phonemic awareness in several spoken word that make a difference in the ways, including: word's meaning. • recognizing which words in a set of words begin with the same sound • For example, changing the first phoneme in the ("Bell, bike, and boy all have /b/ at the beginning.); word **hat** from /h/ to /p/ changes the word from • isolating and saying the first or last sound in a word (The beginning hat to pat, and so changes the meaning. sound of **dog** is /d/. The ending sound of **sit** is /t/.); A letter between slash marks shows the phoneme, or sound, that the letter represents, • combining, or blending the separate sounds in a word to say the word and not the name of the letter. For example, (/m/, /a/, /p/-map.);the letter **h** represents the sound /h/. • breaking, or segmenting a word into its separate sounds (Up-/u/, /p/.). What does scientifically based research tell us about phonemic awareness instruction? Children who have phonemic awareness skills are likely to have 1. Phonemic awareness can be taught and learned. an easier time learning to read and Effective phonemic awareness instruction teaches children to notice, think about, and work with spell than children who have few or (manipulate) sounds in spoken language. none of these skills.

These instructions include:

- · Phoneme isolation
- · Phoneme identification
- · Phoneme categorization
- · Phoneme blending
- · Phoneme segmentation
- · Phoneme deletion
- · Phoneme addition
- · Phoneme substitution

Phonemic awareness instruction helps children learn to read.

- Phonemic awareness instruction improves children's ability to read words. It also improves their reading comprehension.
- Phonemic awareness instruction aids reading comprehension primarily through its influence on word reading. For children to understand what they read, they must be able to read words rapidly and accurately.
- Rapid and accurate word reading frees children to focus their attention on the meaning of what they read.
- Many other things, including the size of children's vocabulary and their world experiences, also contribute to reading comprehension.

| 3. | Phonemic | awareness | instruction | helps |
|----|-----------------|---------------|-------------|-------|
| | children le | arn to spell. | | |

- Teaching phonemic awareness, particularly how to segment words into phonemes, helps children learn to spell.
- The explanation for this may be that children who have phonemic awareness understand that sounds and letters are related in a predictable way.
- Thus, they are able to relate the sounds to letters as they spell words.

Phonemic awareness instruction is most effective when children are taught to manipulate phonemes by using the letters of the alphabet.

Phonemic awareness instruction makes a stronger contribution to the improvement of reading and spelling when children are taught to use letters as they manipulate phonemes than when instruction is limited to phonemes alone.

- Teaching sounds along with the letters of the alphabet is important because it helps children to see how phonemic awareness relates to their reading and writing.
- Learning to blend phonemes with letters helps children read words.
- Learning to segment sounds with letters helps them spell words.

If children do not know letter names and shapes, they need to be taught them along with phonemic awareness.

Relating sounds to letters is, of course, the heart of phonics instruction.

Phonemic awareness instruction is most effective when it focuses on only one or two types of phoneme manipulation, rather than several types.

Children who receive instruction that focuses on one or two types of phoneme manipulation make greater gains in reading and spelling than do children who are taught three or more types of manipulation.

- Children who are taught many different ways to manipulate phonemes may become confused about which type to apply.
- Teaching many types of manipulations does not leave enough time to teach any one type thoroughly.
- Instruction that includes several types of manipulations may result in teaching children more difficult manipulations before they acquire skills in the easier ones.

Misunderstandings of Phonemic Awareness

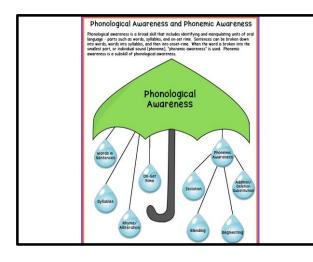
- 1. Phonemic awareness and phonics are the same thing.
- Phonemic awareness is **not** phonics.
- Phonemic awareness is the understanding that the sounds of spoken language work together to make words.
- Phonics is the understanding that there is a predictable relationship between phonemes and graphemes, the letters that represent those sounds in written language. If children are to benefit from phonics instruction, they need phonemic awareness.

| Copyright © Sandra Stark 202 |
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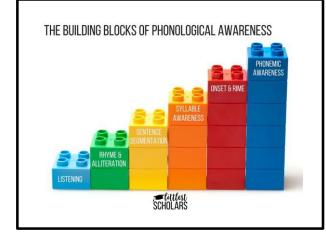
 The reason is obvious: children who cannot hear and work with the phonemes of spoken words will have a difficult time learning how to relate these phonemes to the graphemes when they see them in written words.

Phonemic awareness is that it means the same as phonological awareness.

- The two names are **not** interchangeable.
- Phonemic awareness is a subcategory of phonological awareness.



- The focus of phonemic awareness is narrow identifying and manipulating the individual sounds in words.
- The focus of phonological awareness is much broader. It includes identifying and manipulating larger parts of spoken language, such as words, syllables, and onsets and rimes - as well as phonemes.
- It also encompasses awareness of other aspects of sound, such as rhyming, alliteration, and intonation.



Phonemic awareness is only one type of phonological awareness.

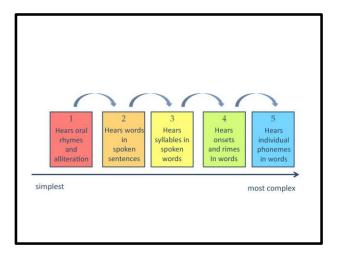
Broader phonological awareness

- Identifying and making oral rhymes
- Identifying and working with syllables in spoken words

Narrower phonological awareness

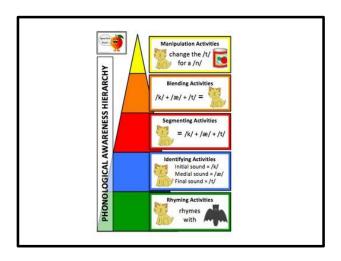
- Identifying and working with onsets and rimes in spoken syllables
- Identifying and working with individual phonemes in words spoken (phonemic awareness)
- E LANGUAGE OF LITERACY

- . A related skill is **phonological awareness**.
- It describes awareness of phonemes and of larger bits of words - like knowing that "BAG" rhymes with "WAG."
- Children develop phonemic and phonological awareness as they start to hear and understand spoken words in early childhood.



Children can show us that they have **phonological awareness** in several ways, including:

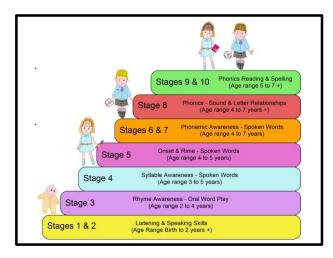
- · identifying and making oral rhymes
- identifying and working with syllables in spoken words
- identifying and working with onsets and rimes in spoken syllables or one-syllable words
- identifying and working with individual phonemes in spoken words



Words as Letters, Letters as Words

- As they build awareness of spoken sounds, patterns, and meanings, children also learn about the alphabet.
- They learn that letters of the alphabet, either by themselves or with other letters, can stand for phonemes and other sound patterns.
- This important step in learning to read is called the alphabetic principle.

- Building on their knowledge of the alphabetic principle—that letters stand for sounds or phonemes—children can sound out words that they see.
- . This process is called **phonics**



Words are Language

- . The words we know are called our vocabulary.
- Vocabulary development begins potentially as early as birth. Children begin speaking words as toddlers and learn more and more words as they grow.
- When children start sounding out words and reading, they will have heard many of the words before and will know what they mean.
- This is why having a good vocabulary is key to learning to read.

Words make Sentences

- As a child gets better with phonics, fluency another important reading skill - also gets better.
- . Fluency means:
 - Being able to read quickly and accurately
 - Making sentences sound right when reading out loud

Words have Meaning

- Understanding the messages that written words and sentences communicate - called comprehension is another important part of reading.
- Comprehension is the main goal of learning to read. We want to understand what we are reading.

- There are many ways to help readers get better at comprehension:
 - Build vocabulary by teaching more words.
 - Explain how text is organized in sentences, paragraphs, and pages.
 - Show students different types of texts such as a newspaper, a chapter book, a textbook, or a menu and how to understand these items.
 - Encourage children to ask and answer questions about what they are reading and tell you what a story is about.

Comprehension

- Phonics, Fluency, and Vocabulary all lead to COMPREHENSION.
- Reading aloud to children builds the foundation of literacy learning.
- Listening comprehension comes before reading comprehension.

HOW??

- For maximum academic gains, students need SYSTEMIC, EXPLICIT, ENGAGING and success oriented instruction.
- Systemic = Specific scope and sequence for introducing each skill
- Explicit = Clear and precise instruction activities
- Engaging = Increased active participation in the instructional
- Success oriented = providing immediate corrective feedback when errors occur

The Science of Reading



WHAT

1

Phonological Awareness

Phonics

Fluency

Vocabulary

Phonological awareness is the ability to notice the sound structure of spoken words.

Phonics is a system for approaching reading that focuses on the relationship between letters and sounds.

Fluency is the ability to read a text quickly, accurately, and with proper expression.

Vocabulary is the knowledge of words and word meanings.

Phonemic awareness is the ability to identify, isolate and manipulate language at the individual sound level. It is a part of phonological awareness

The teaching has to move from letter/sound correspondences to graphemes, syllables and morphemes.

Fluency is determined by the size of your sight vocabulary.

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Connecting meaning to spelling patterns of words can be critical to expanding a student's vocabulary.

Basic phonological awareness skills include phoneme blending and segmentation and are generally mastered by most students by the end of the first grade.

Orthographic mapping is the ability to quickly and efficiently add words to your sight vocabulary.

If a student is good at orthographic mapping, reading practice is helpful to increase fluency.

Morphology is the study of segmenting words into prefixes, suffixes, roots, or bases and the origins of words.

Advanced phonological awareness skills involve manipulating phonemes which include deleting, substituting, or reversing phonemes within words.

Sight vocabulary is all the words you instantly recognize.

20 If a student is not good at orthographic mapping, reading practice does not help to increase fluency.

Vocabulary knowledge is knowledge; the knowledge of a word not only implies a definition, but also implies how that word fits into the world.

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Phonological awareness difficulties represent the most common source of word-level reading difficulties.

By the end of first grade, students taught by a code-based approach perform, on average, the equivalent of 7 to 8 standard score points higher on tests of reading comprehension than students taught with a meaning-based approach.

Students who are fluent readers are better able to devote their attention to comprehending the text.

C9 Children's vocabulary skills are linked to their economic backgrounds. By 3 years of age, there is a 30 million word gap between children from the wealthiest and poorest families.

Phonological awareness is essential for skilled reading.

6

8

AHA

Guessing words from context is not as efficient as phonetic decoding. Skilled readers can identify unfamiliar words with a high degree of accuracy by sounding them out, even irregular words. By contrast, researchers have found that even proficient readers are not as skilled at correctly guessing words from context with an accuracy rate of only about 25%.

Fluency is the bridge between decoding words and understanding what has been read.

Vocabulary is the glue that holds stories, ideas, and content together making reading comprehension possible for children.

Phonemic awareness is needed for efficient sight-word learning.

When we see a word, the areas of the brain responsible for orthography (familiar spelling) and phonology (pronunciation) activate before the areas responsible for the semantic system (meaning).

A student needs to be able to read 130 correct words per minute on a sixth grade level to be successful in content reading.

There is a strong relationship between vocabulary and reading comprehension.

Early, explicit, and systematic instruction in phonics, along with direct instruction in phonological awareness, can prevent and also remediate reading difficulties.

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The combination of explicit phonics and phonological training for all students in kindergarten and first grade provides far greater results in word-level reading skills than any other teaching practice that has been studied.

As children become fluent readers, they are able to interact with text on a higher level.

Awareness of morphology is a strong indicator of and a positive influence upon reading comprehension.

Phonological awareness, phonics, fluency, and vocabulary all lead to

COMPREHENSION

Reading aloud to children builds the foundation of literacy learning. Listening comprehension comes before reading comprehension.

MOH

34

For maximum academic gains, students need systematic, explicit, engaging and success oriented instruction. Systematic means a teacher has a **specific scope and sequence** for introducing each skill. Explicit means that the teacher provides **clear and precise instruction**.

Engaging instruction that is success oriented involves increased active participation in the instructional activities while minimizing errors and providing immediate corrective feedback when errors occur.

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Words in sentences
Syllables
Rhyme / alliteration
On-set rhyme
Phonemic awareness

- Isolation
- Blending
- Segmenting
- Addition / Deletion / Substituation

PHONICS

Letters and sounds
Grapheme-phoneme integration
Blending sounds
Syllables and morphemes
Sight Words - through orthographic mapping

FLUENCY

Expanding sight word vocabulary Decoding words versus understanding words

VOCABULARY

Knowledge of words Word meanings Morphology Vocabulary knowledge

COMPREHENSION

Giving meaning to what you are reading

Gathering meaning from text

TEACHING A DYSLEXIC CHILD TO READ

TEACHING THE DYSLEXIC CHILD TO READ

- Children each learn and develop at their own pace, and reading is no different from other skill building.
- it is common for kids to find reading challenging at one point or another.
- Learning to read, however, becomes an ongoing struggle for the dyslexic child that leaves them falling behind their peers.

- Dr. Shaywitz notes that as soon as a gap between intelligence and reading skills is apparent — and evidence shows it can be seen in first grade — it is a good idea to get help.
- Schools sometimes encourage parents to wait until
 the third grade to see if their child truly needs an
 intervention, but Dr. Shaywitz argues that the earlier
 intervention is important not only to help kids catch
 up but to boost their fragile self-image, which is
 damaged by continuing struggle in school and
 comparisons with peers.
- Dyslexia is a difference in the way the brain processes language, ranging from mild to severe.
- Most children with dyslexia can learn to read with the right combination of school and home support.
- Explicit and systematic instruction, which develops sound-letter awareness and an understanding of how written language works, is a very effective way to help children with dyslexia learn to read.

- Kids with demonstrated dyslexia are eligible for accommodations in school.
- "Dyslexia robs a person of time," Dr. Shaywitz explains, "and accommodations give the time back to her."
- · Accommodations may include:
 - Extra time on tests
 - A quiet space to work
 - > The option to record lectures
 - The option to give verbal, rather than written, answers (when appropriate)
 - Elimination of oral reading in class
 - Exemption from foreign language learning

- A dyslexia diagnosis does not mean your child will never learn to read.
- Dr. Cruger says programs that can help, include these features:
 - > Multi-sensory instruction in decoding skills
 - > Repetition and review of skills
 - Intensity of intervention that is, more than being pulled out of class once a week for extra help
 - > Small group or **individual** instruction
 - > Teaching decoding skills
 - Drilling sight words
 - Teaching comprehension strategies, to help kids derive meaning from what they're reading

- Dr. Cruger points out that traditional tutoring may actually be counter-productive for a child with dyslexia, particularly if it is not a positive experience.
- "If the child hates the experience of reading help, it's not helpful," Dr. Cruger notes. "And it's not treating the source of the problem, the decoding weakness."
- Instead, Dr. Cruger emphasizes that one of the most important ways to help kids with dyslexia is to make them more comfortable reading.
- This can be done in part by celebrating even small victories and accomplishments, while focusing less on correcting their errors.

All Children Can Be Taught to Read

One of the most exciting things to happen to your child between the time he enters grade R and the time he leaves first grade is that he breaks the reading code.

To do so he must solve the two parts of the reading puzzle:

- 1. involving spoken language, and
- 2. involving written language.

- To solve the first part of the puzzle, each beginner reader must begin to understand that spoken words come apart and that they are made up of very small bits of language.
- Once a child appreciates that spoken words can be pulled apart into distinct sounds, he is well on his way to solving the spoken language part of the code.
- For example, the word "sat" is made up of a sequence of sounds, represented by the letters, "s," or the "ssss" sound, "a," or the "aaaa" sound, and "t," or the "t" sound.
- Although awareness of sounds and letters is necessary for learning to read, children need practise in reading stories.
- They need to apply their newly acquired skills to sounding out and decoding familiar and less familiar words, to reading words in sentences and in books, and to understanding the meaning of the word and the sentence.

PRACTISE

- New brain imaging technology shows the powerful positive effect of practise in creating neural circuits related to the development of what scientists call expertise of skill.
- Basically, the brain learns through practise.
- After an introduction to the specific letter-sound relationships, the next critical step is for a child to practise the words, both in isolation and then in reading simple sentences and books.
- Reading silently and, especially, aloud help to improve accuracy.
- Writing and learning to spell them also contribute to establishing accurate representations of those words in his neural circuitry.

SIGHT WORDS

- Sometimes called irregular words since they don't seem to follow a pattern and can't be sounded out, these are words such as a, is, are, one, two, said, again, been, could, the, and once.
- Because these words occur very often and frequently in books, they must be committed to memory so that they can be recognized on sight.



- They need to become a part of a child's reading vocabulary at a very early stage.
- Making flash cards and reviewing them regularly help a child learn these common words.
- Having him print his own card and say the word as he writes it often helps reinforce its pronunciation.

WRITING

- Once children can write letters, no matter how poorly, they can engage in a variety of writing exercises that further encourages awareness of the sounds that make up words and of how letters represent these sounds.
- Writing out his own name and then other common words such as cat, mom, and dad reinforces that awareness.

SPELLING

 Spelling is intimately linked to reading not only because sounds are being linked to letters but because words are being encoded-literally put into code instead of merely being deciphered or decoded.

- Invented spelling, or printing words based on the sounds children hear within the words, functions as a transitional step as R-graders try their hand at matching letters to sounds.
- So, house may be pelled hws or kt for cat.
- A child may have the sounds down, but he may not have quite mastered the link between sounds and letters.

LISTENING, PLAYING & IMAGINING

Whether at school or at home, being surrounded by books, listening to stories read aloud, talking about the characters and events in the story, and playing with blocks or puppets all help a child develop her thinking skills and her imagination, build her vocabulary, and become aware of the world around her.

| As a child encounters an unfamiliar printed word, he tries out different pronunciations: Is the i in ink pronounced like the i in ice or like the i in it? If he knows the meaning of the word ink, he is more likely to pronounce it correctly. | The larger a child's vocabulary, the more words he is going to be able to decipher and read. Consequently, it is never too early to introduce a child to new words and their meanings, which strengthen his neural model for each of the new words he encounters. Reading aloud to your child is a great way to enhance vocabulary, and has many other positive benefits for reading. |
|--|---|
| | |
| Self-confidence This is probably the most important ingredient in ensuring that a child is ready to read and is setting out on a good path. After all is said and done, the most significant development for your child as he leaves grade R is how he feels about himself. A critical role of the Grade R experience is to ensure that every child achieves some degree of success in what he does, that he receives positive comments from his teacher, and that he is encouraged. That will keep him motivated to read. | 1. Notice your child's strengths 2. Celebrate every success 3. Be honest with yourself: set realistic goals 4. Do not let poor spelling stop your child 5. Share your own difficulties with your kids |
| | |
| 6. Read aloud to your child. It is fun and helpful 7. Kids feel supported when they see parents and teachers working together to help them 8. Small steps can bring big improvements 9. It is okay to read slowly 10. Teach them how to help themselves | Emotional support Dyslexia can result in frustration, embarrassment, avoidance and low self-esteem as a result of difficulties performing tasks that seem to come naturally to others. Demystifying the learning disorder with your child can help him develop the tools — and resilience — necessary to manage it, both in school and in social circumstances. |
| | |

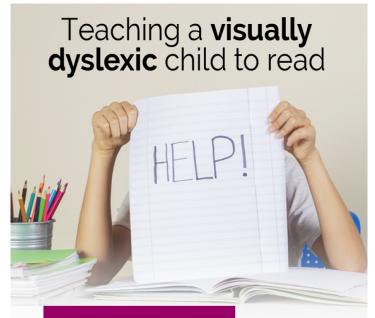
Some things you can do to help include:

Discuss the specific challenges that result from dyslexia: "You know how you have a hard time reading signs or copying notes from the board? That's dyslexia."

Acknowledge his effort and celebrate hard work, even if there are still mistakes: "I know how difficult that reading homework was. I am so proud of how hard you tried."

Bell p him recognize his strengths: "You showed such great sportsmanship and teamwork in the soccer game the other night, and that was a great goal you scored!"

Combat negative self-talk: If your child starts saying things like, "I'm just stupid," don't ignore it. Instead, check out these ideas for helping kids who are too hard on themselves.



PHONOLOGICAL AWARENESS

Words in sentences

Syllables

Rhyme / alliteration

On-set rhyme

Phonemic awareness

- Isolation
- Blending
- Segmenting
- Addition / Deletion / Substituation

PHONICS

Letters and sounds
Grapheme-phoneme integration
Blending sounds
Syllables and morphemes
Sight Words - through orthographic mapping

TRACKING

Gathering meaning from text

Looking at the words as the tutor reads aloud

SCANNING

Finding words in the text by quickly glancing at each line or paragraph

SILENT READING

Gathering meaning from text read aloud without inner speech processing

ORAL READING

Reading words out loud in a fluent manner

COMPREHENSION

Reading for meaning Meaning from reading

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BASIC SKILLS FOR DYSLEXIA THERAPY

Basic Skills for Dyslexia Therapy

There is <u>NO</u> quick-fix for dyslexia

DYSLEXIA IS A LIFE LONG CONDITION!



WHY Early Intervention?

"It takes four times as long to intervene in fourth grade as it does in late kindergarten because of brain development and because of the increase in content for students to learn as they grow older."

> NATIONAL INSTITUTE OF CHILD HEALTH AND HUMAN DEVELOPMENT

> > rsspeechie

- After dyslexia and all other exclusionary factors are completely assessed by educational resource specialists along with the multidisciplinary team, appropriate therapy can begin
- If an individual is dyseidetic, a phonics approach is emphasized initially

 The opposite is true in a case of dysphonesia; an eidetic (look-say) approach is used initially to prevent frustration and avoidance of phonetic word attack tasks

• By working around the problem, however, most dyslexic individuals, • Training should initially emphasize the even dyseidetics, can improve their individuals' strengths, not weaknesses performance in reading, writing, and · Little headway may be made in spelling eliminating dyseidesia This is important to remember in working on a severe case of dysphoneidesia, which is a very handicapping type of dyslexia • Dysnemkinesia, in most cases, is easily All auditory and visual treated problems should be This can be done by training laterality and directionality in various ways eliminated before through perceptual – motor therapy dyslexia therapy Most children naturally outgrow reversal problems in the normal commences. educational process • If not, special therapy usually treats dysnemkinesia easily and quickly Required visual skills:-* Binocularity It is estimated that * Visual Tracking * Focussing Skills 40% of all dyslexics * Visual Perception * Visual Motor Integration have subtle visual * Visual stress * Magnocellular Dorsal problems. **Pathway**

Binocularity

- A) Convergence
- B) Divergence
- C) Stereopsis



Visual Tracking

- A) Pursuits
- B) Saccades



Focusing Skills

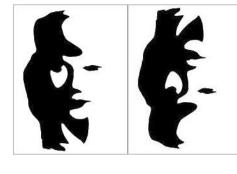
Accommodation



Visual Perception

Visual perception is the the appreciation of a physical situation through the sense of vision

Visual Discrimination



Visual Memory & Visual Sequential Memory



Spatial Relations



Form Constancy

- Visual Form Constancy is the ability to mentally manipulate forms and visualize the resulting outcomes.
- This skill also helps children recognize an object in different contexts regardless of changes in size, shape, and orientation.
- Children with poor form-constancy may struggle to recognize objects when turned a different direction or viewed from a different vantage point
- They can fail to recognize words they know that are presented in a different manner, i.e., written on paper, in a book, or on the board.

Visual Closure

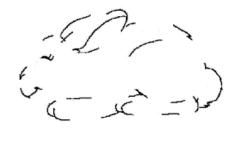
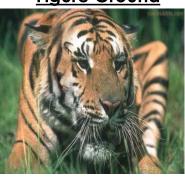


Figure Ground



VISUALIZATION



Visualization is applied visual imagery, or visual imagery put to use.

- >Listening to a radio show
- Putting comic strips in sequential order
- > Jigsaw puzzles

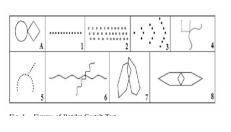




Visual Motor Integration

VMI-blocks
Gross and fine motor
movements
Bender Gestalt

The Bender Gestalt Test



Visual Stress



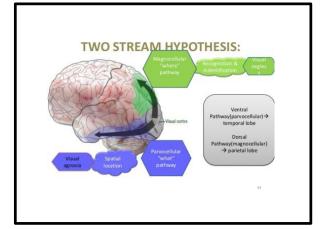
- This is a problem caused by difficulties in seeing high-contrast detail and is thought to result from an 'overloading' of the visual part of the brain.
- Symptoms:
- - eye strain
- - headaches
- Visual Perceptual Distortions:
- text appearing to change, move or swim on the page
- bright-coloured text or images 'flashing'
- seeing shapes or patterns on the page
- · white paper 'glaring'

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As any parvent, grand parvent, or holy-order known, some habits or enlegación, placid, and regular in the habits, while orders are difficult and suppredictable. Differences is henquesament jahors up from the trian day of life some infantos steepery lifeti, arthres sónego lot, some reastes and trians and trians and trians and trians.

Types of Visual Dyslexia PROMISES PROM

- Relieve near point strain by determining the script of the plus performance lenses
- Relieve asthenopia symptoms with reading spectacles and/or visual therapy



- Magnocellular impairment causes unstable visual & auditory attention -poor eye control & pronunciation.
- Visual magnocellular system directs attention and eye movements to identify letter order
- Auditory magno system tracks speech frequency and amplitude changes for distinguishing phonemes and their order
- Motor magno system –speaking, writing, coordination

AUDITION

Reading requires cortical and subcortical vocalization.

Visualization alone is insufficient.

INNER SPEECH

 We need to train dyslexics to develop "internal hearing" skills/abilities

TRIGGER WORDS

- There are more than 200 English words that cause problems for most dyslexics
- In other words, +/- 200 words with which he cannot think
- They are part of a dyslexics' speaking vocabulary, but dyslexics cannot form mental pictures of their meanings
- Trigger words...often most simple words...have abstract meanings and often a number of meanings

• The surfboard is blue

- 'The' and 'is' = trigger words
- When a dyslexic attempts to read a book or even a paragraph, all these trigger words are meaningless and disappear, since they are not part of the individuals' visual dictionary
- This leads to disorientation with increased tension. This results in strained reading without comprehension

INTERNAL SPEECH EXERCISES: GARY CHEVIN

- Step 1:
- Ask the student to say numbers 1 to 26 out loud
- 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26

 The second time he must go through the numbers again but say 1 out loud, two and three 2 3 internally, while clamping his tongue between his teeth when internalizing the numbers

 Make sure he does not move any part of his body and no counting on fingers or moving his head The correct sequence would be
 1, 4, 7, 10, 13, 16, 19, 22, 25

This exercise should take no longer than 25 seconds to complete

Monitor the time and also take note of the correctness of the answers

Now the student will say the first letter out loud and the next three will be

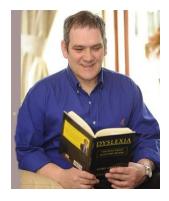
• <u>Step 2</u>:

- The student must now say the 26 letters of the alphabet out loud
- ABCDEFGHIJKLMNOPQRSTU VWXYZ

| • | Now the student will say the first letter |
|---|---|
| | out loud and the next three will be |
| | internalized with his tongue clamped |
| | between his teeth. |
| | |

- When internalizing the letters the correct sequence would be:
- Verbalize A, internalize B,C,D; verbalize E

• The correct sequence should be A.E.I.M.Q.U.Y



SENSORY-MOTORIC SKILLS

SENSORY-MOTORIC SKILLS

A. Sensory – Motor Skills

- Building neural pathways between right and left hemispheres of the brain.
- Occupational therapists are the experts in this field.
- It is **possible** to build these neural connections between hemispheres.

Building these new neural connections enhances a person's

- ability to perceive the world reliably,
- retrieve learned information,
- be able to solve problems,
- · hence enhancing reading.

How do we improve sensory – motor skills?

- By doing two to three minutes of simple physical **body midline crossing exercises** from right to left and left to right.
- Students need to be encouraged to do these exercises at any time that they feel stressed, anxious or battle to concentrate.
- Choose the kind of movement the student enjoys.

Examples of Sensory-Motor Activities:

- Cross hands and place fingers over opposite eyebrows, breathe deeply, relax
- Use padded practice swords to have a play sword fight, perhaps while reciting the alphabet or math facts.
- The jolt of the swords further enhances memory ability, while the sword hand crossing in front of the body helps encourage right/left brain connections.
- Dance with long coloured scarves to employ colour and motion while hands and legs cross the body midline.

- **Skip rope** while memorizing a math fact or spelling a word.
- "Cross-match" by touching opposite hand to knee while marching.
- Touch opposite toes.
- Tap opposite shoulders.
- Juggle stuffed animals or soft balls.

B. Cognitive Skills Games

- Games and puzzles that build the foundational thinking skills underlying all academic work: attention, working memory, processing speed, logic and reasoning, auditory and visual processing, and long term memory.
- Strengthening cognitive skills (learning to control and use one's own brain) will improve reading along with all other academic work by building the foundations of thinking.

• In the past **unstructured play in nature** (Louv 2005) developed these skills as well as family games such as jigsaw puzzles, playing cards and board games.

 While video games develop some of these skills, the lack of body motion while at the computer limits the positive effects on the brain.



How to build cognitive skills:

1.) Attention:

- Teach Chess!!
- Research shows that learning chess raises testable IQ by 15 points! (Dauvergne, 2000)

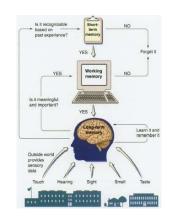


- Start teaching chess using just the pawns and queens.
- The object of pawns and queens is to get one pawn all the way **across the board** first.
- When the student has mastered this simple game, add the knights.
- After all the pieces have been taught one at a time it is time to add the king and teach about check and checkmate.

- When the student can play a full game it's time to encourage him/her to join the local chess club if the student shows an interest.
- While playing chess, help the student become aware of his or her own attention span and practice ways to increase it incrementally.
- Let the student know that the intense focus required for Chess can be practiced and used to learn other skills as well.

2.) Working Memory:

- Play concentration or other memory games with academic material the student is learning.
- Mental math and word games help expand the mind's ability to hold information and use it to problem solve.



3.) Processing Speed:

- Play games with academic material and praise the student as he or she gets faster on a task such as multiplication tables.
- It is important that the student is competing only with himself or herself rather than being compared to others.
- Games like Set which combine colour (right brain) with logic (left brain) are especially effective. Set is available from www.setgame.com.

4.) Logic and Reasoning:

- Teach Chess or other logic games.
- During academic work, ask questions: Why do you think that happened? What might happen next? Does that make sense? Does this remind you of anything else?
- Puzzles which involve <u>both colour and logic</u> such as *Logic Links* or *Set* <u>build neural connections</u> between brain hemispheres. *Logic Links* is available from <u>www.mindware.com</u>.

5.) Auditory and Visual Processing:

- Sit next to the student and have him or her look at text while you read it aloud (tracking), picking up speed as you go.
- This allows the student to practice auditory processing simultaneously with visual processing, so whichever is stronger supports the other, and the two become linked.
- For strong readers, coach silent reading for speed and comprehension of increasingly complex material of <u>high</u> <u>interest</u> to the student.
- Incorporate **art reproductions** to encourage careful observation.
- Have the student observe the art work, then remove it and have both of you try to draw it.
- See how many elements of the piece you can each remember.

| Be prepared for your dyslexic student to remember more than you do! Use Domino's to build math sense while strengthening visual processing. Make matching games out of any study material rather than having the student follow a worksheet. | Re-visit material briefly, but often to reinforce the neural pathways that are forming. Ask parents to do daily five-minute reviews or exercises with the student to re-activate what the student learned during the session. For older or more advanced students, teach how to transform complex material from short-term to long-term memory using kinaesthetic skills such as keyboarding and body motions, auditory and visual cues, olfactory cues, etc. |
|---|---|
| Some examples include setting the material to music and singing it, studying with a specific smell, like cinnamon, then taking that smell with you to the test, mentally painting a picture of the information, making up a story about the information, and acting out the information. Stress the relationship between happy emotions and long-term retention, discussing ways to "study happy". | When the student switches to a new neural strategy there is usually an initial dip in both speed and comprehension, then a huge leap forward – often 3-4 reading level years in only 3-4 months. • (Summarized from Frith, 1985) |
| | |

6.) Long Term Memory:

DYSNEMKINESIA THERAPY

DYSNEMKINESIA THERAPY

(MOTORIC DYSLEXIA)

DYSNEMKINESIA THERAPY

- 1. Laterality
- 2. Directionality
- 3. Memory of movement for numbers and letters
- 4. Visual perception of letters and numbers

LATERALITY

The nose bridge is the <u>visual</u> (eyes) reference point of the individual.

The centre of the chest is the <u>manual</u> (hands) reference point as to up, down, left and right.

<u>Modified Piaget Left – Right</u> Procedure

A. Instructions:

- Show me your **right hand**
- Show me your **left leg**
- Touch your left ear
- Raise you right hand
- Show me your right leg
- Show me your **left hand**
- Point to your **right eye**

B. Sit opposite the child:

- Show me my left hand
- Show me my right leg
- Show me my right hand
- Show me my left leg

C. <u>Place a coin on the table left of a pencil in relation to the child</u>:



- Is the pencil to the right or to the left of the coin?
- And the coin is it to the right or to the left of the pencil?
- <u>Have the child go around to the opposite side of the table.</u>
- Is the pencil to the right or to the left of the coin?
- And the coin is it to the right or to the left of the pencil?

Be aware that the examiner must be confident in determining Right from Left, especially with regards to mirror-images.

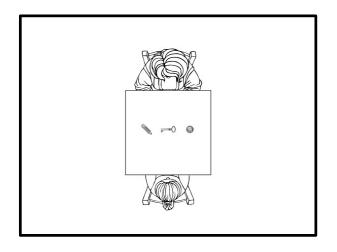
D. <u>Sit opposite the child with a coin in your right hand and a pencil in your left hand:</u>



- Have I got the coin in my right hand or in my left?
- And the pencil, is it in my right or my left hand?

E. <u>Place 3 objects in front of the child</u>:

- 1. a pencil to the left
- 2. a key in the middle
- 3. a coin to the right



- Is the pencil to the left or to the right of the key?
- Is the pencil to the left or to the right of the coin?
- Is the key to the left or to the right of the coin?
- Is the key to the left or to the right of the pencil?
- Is the coin to the left or to the right of the pencil?
- Is the coin to the left or to the right of the key?

Norms for the Piaget Right-Left awareness Test

Items Passed by 75% of Age

| 5 | Α |
|----|---------|
| 6 | Α |
| 7 | A,C |
| 8 | A,B,C,D |
| 9 | A,B,C,D |
| 10 | A,B,C,D |

A,B,C,D,E

<u>Age</u>

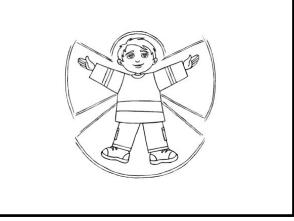
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DIRECTIONALITY

Belmont and Birch found that laterality and directionality dysfunctions were related to reading deficits.

'Angels in the Snow'

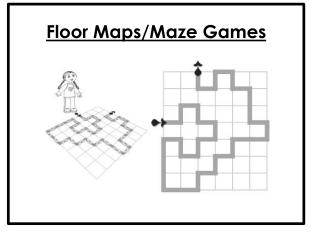
- The task of angels in the snow requires the ability of the individual to be aware of and to use the two sides of the body separately and simultaneously
- Testing is described as follows:
- The child is asked to lie on his/her back on the floor with arms at his/her side and feet together



- As a brief practise session, he/she is asked to move the arms along the floor from his/her sides to a position of shoulder height
- The arms should be fully extended after full arm movements have been executed
- The hands should then be brought back to their original positions
- The child is then asked to move his/her legs apart with heels on the floor
- He/she is then instructed to bring the legs back to the original position of being together

After the practise movements are completed, with the child lying on the floor, Touch the child's right leg and instruct him/her to move it outwardly testing begins: · Have him/her move the leg back to 1. Touch the child's right arm and instruct the original position him/her to move that arm. Have him/her · Again, this is a monolateral movement move the arm back to the side. This is a monolateral movement Repeat procedure number 3 similarly by touching his/her left leg 2. Repeat this above procedure but touch his/her left arm By touching, instruct the child to move both arms simultaneously to shoulder Have the child try to move his/her left arm and left leg simultaneously and then Now have him/her move them back to move them back (Touch them during the the original positions instruction) This is a <u>bilateral movement</u> By touching, instruct him/her to move This is an <u>ipsilateral movement</u> demand both legs simultaneously from a closed position to an open position Repeat the number 7 procedure similarly, but have the child move his/her right arm · This is a bilateral movement and right leg and move them back · Have him/her close the legs to the original position Assessment is determined in the following way: Have the child move his/her right arm · By age 4 bilateral movements can be and left leg as you touch them expected • This is a contralateral movement By age 5 monolateral, bilateral, and demand ipsilateral movements can be expected · Have him/her return the arm and leg but with motor overflow to their original positions By age 6 normal monolateral, bilateral, and ipsilateral movements are expected, • Repeat the number 9 procedure but contralateral movements produce similarly, but point to his/her left arm motor overflow and/or performance and right leg breakdown

- By age 7 competent contralateral movements are accomplished with minimal motor overflow
- However, there may be frequent segmentation with lack of simultaneous movement of the limbs
- By age 8, the child should be able to perform all patterns <u>without motor</u> <u>overflow</u>



Midline Crossing

Single Circle

- The child draws a single circle on the chalkboard
- The circle should be about 60cm in diameter
- If the child cannot draw a circle after 3 trials, then the examiner should demonstrate/showing how the circle is drawn
- The circle should be drawn directly in front of the child
- If he/she draws it off to one side, the child is instructed to erase it and try again

- If he/she still cannot do it properly, the examiner draws a dot representing the center of a circle
- The child is asked to draw a circle around the dot
- The child must not move his/her body to cross the midline while drawing the circle. If he/she does move to the left or right, the examiner places an "X" on the floor on which the child stands while he/she draws the circle
- When all else fails, the examiner holds the child stationary as the child draws the circle



- A child who cannot cross his/her midline will probably not be able to produce a round circle without distortions, such as flatness on part of it
- Even if he/she can draw a circle, but needs to move his/her body, a problem of crossing-the-midline is indicated

- If he/she shows confusion in direction by drawing in a clockwise motion or switches hands while drawing circles, a crossing-the-midline problem may be present
- Normally, a <u>counter clockwise</u> direction is expected by the age of 7 years, or the age of 8 if the child is left handed
- (Try cursive writing of the vowels, a, e, i, o and u and notice the mostly counterclockwise movement of your writing hand)

Counterclockwise movements are important for a good pencil grip



Bilateral Movement

- Bimanual Circles
- Two pieces of chalk are held by the child, one piece in each hand
- The child is instructed to draw two circles on the chalkboard so that neither circle touches the other
- The circles should be approximately 30 centimeters in diameter

Bimanual Circles:





Reciprocal circles





Symmetrical circles

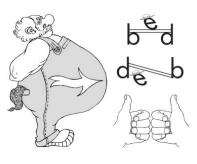
- One circle should not be higher than the other by more than 5 centimeters
- The child is asked to make symmetrical motions in drawing the circles
- The child is asked to make symmetrical motions in drawing the circles but in opposite directions this time
- The child is asked to make reciprocal motions in drawing the circles
- The circles should be relatively round without any flat portions
- Both circles should be approximately the same size

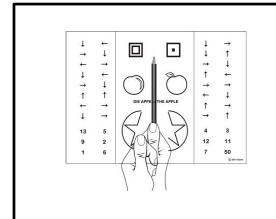
| 3 | The child is unable to use both arms together at the same time. |
|---|--|
| 4 | The child cannot perform symmetrical circles for five complete revolutions. |
| 5 | Symmetrical circles are smooth but he/she cannot draw reciprocal circles. |
| 6 | Two or three reciprocal circles can be drawn but with varying speeds for each. Some reverting to symmetrical circles may occur. |
| 7 | Same as for age 6 but five reciprocal circles can be drawn. He/she cannot, however, reverse the direction of the reciprocal circle drawing without reverting to symmetrical drawing. |
| | |

- <u>Training</u> of circle drawing should begin with the single circle and then proceed to double circles
- First the right-hand circle should be mastered, assuming the child is right handed
- Afterwards, the left-hand circle should be mastered

- When either circle can be drawn accurately and quickly, the child should be instructed to make bimanual circles on the chalkboard
- It may be helpful to have the child go through the correct movements by moving back from the chalkboard and making the appropriate bimanual movements by "tracing in the air"

B & D Confusion

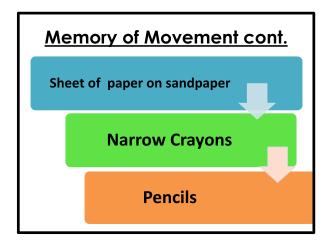




MEMORY OF MOVEMENT

Sand
Clay
Rough paper (large crayons)
Sheet of paper on sandpaper
Narrow crayons
Pencils

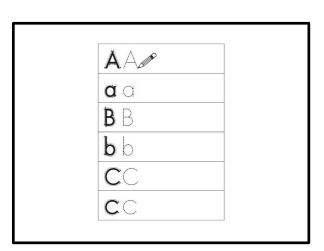




MEMORY OF MOVEMENT

Magnetic letters

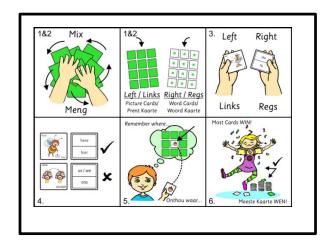
Alphabet writing exercises



VISUAL PERCEPTION OF LETTERS & NUMBERS

Visualization
'A New day for dyslexia' –
Memory game.





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DYSEIDESIA THERAPY

DYSEIDESIA THERAPY

(VISUAL DYSLEXIA)

DYSEIDESIA THERAPY

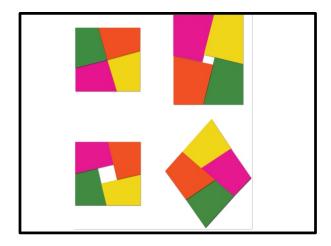
- 1. Dysnemkinesia therapy if necessary
- 2. Visual-motor integration skills
- 3. Phonetic approach:
 - i) letters, then
 - ii) syllables
- 4. Blending syllables and sounds of whole words
- 5. Structural analysis

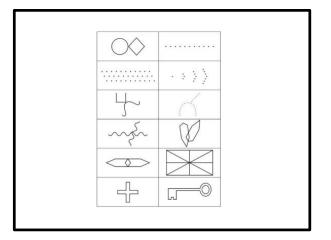
DYSEIDESIA THERAPY (cont.)

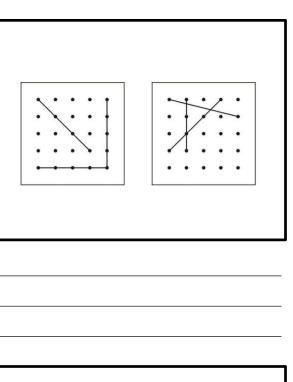
- 6. Phonetic word recognition
- 7. 'Look-say-write' approach
- 8. Blending whole word auditory gestalts with whole word visual gestalts
- 9. Timed word flashcards
- Flashcard at 1/10 second intervals ⇒ vocabulary

Visual Motor Integration

VMI-blocks
Gross and fine motor
movements
Bender Gestalt







PHONETIC APPROACH

- The strength area of the dyseidetic individual
- Emphasize phonics, phonological skills and the recognition of written letters and numbers
- Phonic programs include the principals of phonic rules

PHONICS

Phonics is the word used to describe the sounds the letters make.

Phonics require students to know and match letters or letter patterns with sounds, learn the rules of spelling, and use this information to decode (read) and encode (write) words

In simple terms, the word 'Cat' can be read from its three sounds: c - a - t

These are not the names of the letters as we say them in the alphabet, but the sounds of these letters

Likewise the word 'thick' is made up of three sounds:

th – i – ck, where pairs of letters combine to make a single sound

Written language is a <u>code</u>

Phonics is simply the \underline{key} to unlocking the code

When a child uses phonics to read he is 'actively' involved in the learning process

- This process of linking letters with sounds and then blending the sounds together to produce words, is very challenging for the dyslexic child
- However, <u>sound-letter knowledge</u> provides a logical, systematic approach that fosters insight, creativity and independence in learning

Learning Letters and Sounds

- Learning letters and their associated sounds is the beginning point for successful reading and spelling
- When a child does not recognize individual sounds in words, then learning printed symbols to represent those sounds, makes no sense at all

<u>Useful tips in teaching letters</u> and sounds

- »Match letters to pictures on the basis of initial sounds
- »Use more than one word/picture for each letter sound to teach that S is not just associated with sun but also goes with snake, sand, sausages, etc.
- »Use a multisensory approach so that students learn through sight, touch, and sound

- »Students can practice making their letter shapes by tracing the letter with their fingertip in wet sand, icing, shaving cream, or sugar sprinkled on a baking tray
- » It is important that the student is encouraged to simultaneously say the sound as the letter is being formed.

- »Do not teach letters that sound similar at the same time
- »Avoid introducing S with Z or m with n, as they are so easily confused
- »Do not teach letters that look similar to each other at the same time

- » Avoid introducing letters f and t, or the letters b and d at the same time as they are easily confused
- » Ask parents and classroom volunteers to use only sounds to avoid confusion between letter names and sounds
- »Teach letters and their sounds in stages

Phonetic Approach to Reading Instruction

Learning How to Read also Begins in Children's Ears



- Most people think children learn how to read only through their eyes
- But reading is actually learned through the ears as well
- Parents lay a foundation for success in reading by <u>talking to a child</u>, reading books to her, and playing auditory games such as rhyming
- The more books you read, the bigger her vocabulary becomes
- A bigger vocabulary allows her to recognize lots of words while she reads
- If you have read books to her about cheetahs and warthogs, it is more likely she can read those words when her teacher gives a homework assignment about the Serengeti Plains

Salient principles of phonic rules

- Principles of phonic Rules for Consonants
- There are 8 letters whose names begin with the sounds of the letters (B,D,J,K,P,T,V, and Z)
- There are 7 letters whose names end with the sounds of the letters (F,L,M,N,R,S,X)
- There are 2 letters whose names begin with the soft (but not hard) sounds (C,G)
- There are letters whose names do not have their sounds (H,Q,W,Y)

CONSONANT CLUSTERS

gl, gr, sp

DIGRAPHS

sh, ch, th



VOWELS

- · Short
- Long
- Diphtongs: OW; OI; AW; OO

PHONIC RULES

When two vowels go walking the first one does the talking!



SYLLABICATION

- Step 1 Assure that students have prerequisite phonics skills:
- Each syllable must contain a **sounded vowel**
- There are two kinds of syllables: **open** and closed
- Students must be familiar with **prefixes**, suffixes and root words.
- Digraphs, or two consonants that make a single sound (ch, sh, th, wh, nk, ng, ck.) cannot be divided e.g. noth•ing
- In some cases, blends are not divided e.g. se • cret, mi • grate

- <u>Step 2 Teach syllabication rules and apply in order:</u>
- Prefix/Root/Suffix:
- · VC/CV
- V/CV or VC/V

Blending of syllables and sounds of whole words

- FLASH CARDS
- PICTURE DICTIONAR





STRUCTURAL ANALYSIS

- · Understanding structural patterns of words improves reading
- · Students recognize meaningful units of words now
- Step 1: Teach students to identify **roots** of words as well as prefixes and suffixes
- Step 2: Teach or review common suffixes. Suffixes are added to the end of words to

MODIFY USAGE!

• Step 3: Teach **prefixes** that are added to the beginning of words to **CHANGE MEANING**

- STIGMA - TISM

 PRFFIX - ROOT

NON - POINT



- SUFFIX



PHONETIC WORD RECOGNITION

· Therapist reads words out loud ... student must find the appropriate flashcard amongst the mixed cards on the floor or table



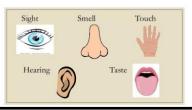
LOOK - SAY - WRITE APPROACH

- · This method is used to master phonetic word recognition, especially with newly learned word
- Using either flashcards or merely reading from an age-appropriate book, the child is asked to:

- LOOK at the word and take note of its configuration (shape), the consonants and vowel sounds
- SAY the word out loud
- · COVER the word and try to picture it
- WRITE the word while sounding it out aloud
- CHECK the word you have written against the original word
- Mark the errors in a different color so they stand out

BLENDING VISUAL AND AUDITORY GESTALTS

 The following <u>four senses</u> (VAKT) (or should we say 6?) should be used in conjunction with one another to aid in the learning and recalling of all newly read words



| V | = | visual | (<u>see</u> the word) |
|---|---|--------------------------|--|
| Α | = | auditory | (<u>hear</u> the word by its' sounds) |
| K | = | kinesthetic (dynamic) | (feeling the word by writing it, either on paper or in the air). In other words, you feel the movement, flow and direction of the letter |
| T | = | tactile | (feeling or touching the word by tracing the letters with your fingers). |

- The V.A.K.T. method is especially useful for learning sight words
- Sight words usually do not follow normal spelling rules and are difficult to sound out phonetically and logically, such as e.g.
 - anxious
 - laugh
 - iron
 - stomach

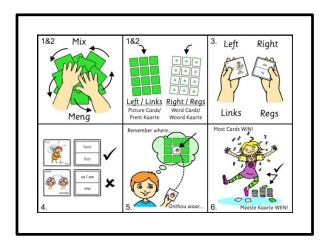
FERNALD METHOD

- The learner dictates or tells stories to the educator or teaching assistant, who writes it down
- · Words are taught as a whole
- Phonic skills are not taught at all
- The educator or assistant identifies words, which are unknown to the learner, and the learner copies these words to develop word recognition
- The complete method consists of <u>four</u> <u>steps</u>

Step: I

- The learner indicates which word he/she would like to learn and the educator or assistant uses crayon to write it in big letters
- The learner then traces the letters, by using the index and middle finger together, making contact with the paper (tactile-kinesthetic)
- The learner says each <u>part</u> of the word as it is traced (auditory)
- The learner also sees the letters as it is traced (visual) and hears the completed word as it is said when the tracing is completed (auditory)
- The learner must repeat this until the word can be written correctly without looking at the example written in crayon
- Should the learner make a mistake, the whole process must be repeated
- This is done because the learner must always experience the word as a unit, not simply single parts

| Step 2 The learner does not have to trace new words any longer, but only looks at the written copy of the word (done by the educator), says the word to him /herself and writes it Again the learner can write stories using the words known by now and file the newly learned words in the word bank These stories are now typed and printed again and the learner reads these | | |
|--|--|--|
| | | |
| Step 4 In this stage, the learner can recognize new words based on the similarity to other words or parts of other words already known (in his/her word bank) So at this stage, the learner starts to apply reading skills. | | |
| FLASH CARDS OF TRIGGER WORDS FLASH CARDS at 1/10 second intervals Enforcing time to enhance "sight word recognition." | | |
| | | |





DYSEPHONESIA THERAPY

DYSPHONESIA THERAPY

(AUDITORY DYSLEXIA)

DYSPHONESIA THERAPY

- Any problems in the 'exclusionary diagnosis' causing general reading problems, must be addressed
- Dysnemkinesia Therapy (if necessary)
- Eidetic Therapy (TSSO)
- Phonetic therapy

EIDETIC APPROACH

- The strength area of the dysphonetic individual
- When PHONICS isn't enough!!



"Phonics didn't work for me.

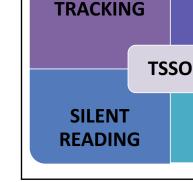
I just couldn't break the words down; I couldn't see the parts. Words were bricks to me.

I finally taught myself to read in shapes, not phonics or sounds."

- Katie

About 20 % of the population is dyslexic although another 10% of them are **resistant dyslexics** which means that they do not respond to standard programs emphasizing phonemic awareness and direct instruction in phonics-based reading.

- Everatt, 2007



SCANNING

ORAL READING

A. Tracking

- Tracking is when the student is looking at the words as the tutor reads aloud.
- Before entertainment overload, adults reading while children looked at the book, was a common way to pass the evening.
- In one-room schools, the students often followed along in the book or **read along** aloud, as a group, with the teacher

- Unfortunately for the dyslexic student, this has **fallen out of practice**.
- It is now uncommon to have extended reading at home.
- Reading at school tends to be done as an individual activity in which students read one at a time while others listen.
- However, readers with dyslexia need to see and hear the words simultaneously and in context - ina meaningful story - or sentence - to remember them!

| <u>H</u> | 0 | W | <u>to</u> | <u>do</u> | tra | <u>ck</u> i | <u>ing</u> : |
|----------|---|---|-----------|-----------|-----|-------------|--------------|
| _ | | | | | | | |

- Tell the student, "I am going to read aloud while you read silently.
- We will read this sentence. (Point to the first word).
- The words I say will go into your ears and your eyes at the same time.
- They will get hooked together in your brain.
- If you lose the place put your hand up and I will point to where we are.
- You can stop me as many times as you need.
- When you stop me it tells me you are really paying attention."

When the student switches to a new neural strategy there is usually an initial dip in both speed and comprehension, then a huge leap forward – often 3-4 reading level years in only 3-4 months.

• (Summarized from Frith, 1985)

- Start tracking **slowly**.
- **Repeat** the sentence until the student can keep up visually.
- Gradually increase speed.
- Use your finger or pointer to help the student track at first, then back off to only indicate a new line, then eventually only indicate paragraphs and new pages.
- Finally, <u>dispense with the pointer</u> entirely.

| • | Do not block out the text below |
|---|---------------------------------------|
| | which you are reading because the |
| | student needs to be able to preview |
| | what is ahead using peripheral |
| | vision |

 Blocking out text can simplify the reading task and help some beginning readers, but students with dyslexia are not linear thinkers.

one session - for some students, but could take several weeks for others. Blocking the coming text prevents Always go at the student's pace. them from using their natural strength • Enter student time; don't make the of seeing more than one word and student enter "frustrated adult time". line at a time. • This learner needs to see the whole page. • Practice tracking for **several sessions** and have the parent practice at home • When you are reading as fast as you until the student is good at it. can while still pronouncing the words clearly, you are reading at about 200 words per minute. • Five minutes a day for three weeks is often enough for the student to store · When you are finished say to the this new skill of tracking in <u>long-term</u> student: "Did you keep up with me? memory. Wow! We were reading at about 200 words per minute. This tells me that you can read at least this fast by yourself More than five minutes at a time may after you've had a little more practice." tire the student, especially at first. The student is learning both to <u>visually</u> <u>track</u> from left to right and that reading • If the parent cannot read with the student doesn't have to produce stress. in a happy and relaxed manner, someone else should be engaged to do the • The student may have negative reading. emotional memories linked to reading • By re-reading the same sentences several and this is the first step in undoing that times during tracking, the student is harm. starting to link visual images of words with meaningful sound chunks in context. Because of this, it is extremely important that the parent understands how to • This approach is different than syllables read while the child tracks without or phonics in that it is meaning-based inducing stress or unhappiness in the rather than sound-based. child.

• This process can happen quickly - in

• Phonics is a powerful tool for many readers, but other approaches exist. · By having the student read · After all, Chinese, Japanese and interesting material silently while we Arabic children learn to **read without** read it aloud, we ensure that he or phonics. she reaches the needed repetition level far sooner. Deaf children learn to read with no phonemic awareness at all. • Repeatedly encountering words in the context of **meaningful stories** is • Likewise, dyslexic children can learn to far more effective than **flashcards or** read, even if phonics never makes word drills. sense to them. • It is important at this point to be sure • We will track this sentence or that the student is actually tracking. paragraph again, but this time I will • Do this by using an **oral adaptation of** stop sometimes and you will say the a cloze (matching) procedure. next word. • Say to the student: "You are getting • If you don't know the next word, just very good at tracking. I am so point to it and I will say it for you. impressed with how well you are If you lose your place be sure to stop doing that I am going to add me." something new. **Homework** <u>Homework</u> The parent must work with the • This important research comes from student every day for five minutes the Yale Center for the Study of doing tracking. Learning and Attention. (Shaywitz, 2003) • Five minutes a day over several months is the time recommended to • Tell the student that the **stronger his** significantly raise reading ability. eyes get, the more he will want to track a few minutes longer each • Practising daily and correctly is far time. more important than practising for long periods of time.

B.) Scanning

- Scanning is finding words in the text by quickly glancing at each line or paragraph.
- After tracking has become embedded, add scanning.
- Have the student track, then ask them to find words in the text they have just read.
- When scanning pick both big and little words, at different places in the lines.

- Give the student all the time he or she needs to scan and find the words.
- If your student points to the wrong word, simply track through the passage again and give them another try.
- Passages should be short enough to ensure success.

- Ask for words in the order they appear in the text to help imprint a left to right, top to bottom reading pattern.
- The purpose of scanning is to imprint the proper eye motion and the image of the words as they appear within a meaningful context.
- It is <u>not the same as using flashcards</u>, which removes the words from context.

Homework

- When the reader is scanning successfully, it is time to add independent tracking practice at home.
- A fun way of doing this is by using wellknown movies with English subtitles turned on.
- The **better** the student knows the movie, the more helpful this exercise will be.
- This should be presented as a fun way to see the movie, not as a test.



- The student should be asked to glance at the subtitles but should not be quizzed about them.
- At first the sound and subtitles should both be on, but after a few viewings of the same movie, the sound can be turned off if the student still enjoys the movie.
- Let the student know that this is how deaf people watch movies.



C.) Silent Reading First

- After hearing a passage read aloud, the student practices looking at the same text and gathering meaning without saying the words in his or her head and without moving his or her mouth.
- After the student can track & scan reliably, add silent reading.
- First have the student silently **track** through a **sentence** or **paragraph**.
- Then have the student **silently read** the **same** sentence or paragraph.

Instructions

- "Read this again, silently. Look at each line of words <u>but don't say the words in</u> your head.
- Don't even look at every word. Just let your eyes <u>dance</u> along the line, touching down every 4 cm or so on important words. (Illustrate with your finger.)
- You can see about 5cm of words at once, so you don't have to look at every word individually.
- Tell me when you're done."

- You don't need to know whether the student is successfully gathering meaning at this point in time.
- The object is to practise the eye motion needed for silent reading, having already absorbed the meaning through tracking.
- Watch the student's eyes to determine if he or she is moving them along the lines of text.
- If the student is moving his or her head, hold it steady so he or she can practise moving the eyes only.

| • | If the text is no more than 5 cm wide (like |
|---|---|
| | a newspaper column) the reader can just |
| | go straight down the page, looking at the |
| | middle of each line. |

- This is, in fact, better than left to right movement when the text is narrow enough.
- Have the student experiment with the angle of the reading material while reading silently as this can alter perception dramatically.

Homework

 Ask the parent to add silent reading to the tracking the student is already doing, and to lengthen the practise session from 5 to 10 minutes if both the parent and the student can do it happily.

D.) Oral Reading, Maybe

- Oral reading is saying the words on the page out loud in a fluent manner.
- When the child has had significant success with tracking, scanning, and silent reading it may be time to add oral reading.
- Have the student track a passage, scan it for keywords, read it silently and then ask the student if he or she would like to read it back to you orally.
- Do not push the child to do this step if it causes **distress**.
- Silent reading and oral reading are different skills.
- Oral reading can <u>get in the way of</u> <u>comprehension</u> in many dyslexic readers, so err on the side of waiting.

- In some cases you will never add this step.
 After all, most adults rarely have to read aloud.
- Silent reading comprehension can be easily tested.
- It is a mistake to insist that all students have to read orally.

- If the student responds positively to oral reading, help them move away from a stilled word by word approach.
- Tell the student that he or she will now use the silent reading skill to do professional style oral reading.
- Explain to them that good oral readers actually read ahead silently and then they say what they just read.
- That is how they know what the sentences should sound like or what voices to use.

- An alternative to oral reading is tracking plus filling in words.
- The tutor reads aloud as the student tracks.
- Once in every sentence or two the tutor stops and the student says the next word.
- This is less troubling for some students than reading aloud by themselves and it still achieves silent reading fluency as well as the vocabulary building that is needed to advance in reading level.

E.) TSSO

- Using tracking, scanning, silent reading and oral reading together, one after another, on the same sentence or paragraph.
- Turning the research into practical tools and then finding a way to use them with students in a happy, productive manner, took 20 years of experimentation.

E.) <u>TSSO</u>

- This method has been <u>successfully</u> used to teach dyslexic students to read well.
- Feel free to **adjust it to fit the student** you are teaching.
- Some students will perhaps need more repetition, while others will want to go faster.

"Imagine your goal is helping colour-blind children. In order to determine what they're missing, you decide to study talented artists since they clearly have the right skills for perceiving colours. After discovering that they possess a wide array of colour perception skills, you return to the colour-blind children to start teaching them those skills. You are convinced this will overcome their problems. After all, once they have the colour perception skills of the talented artists, all will be well."

- Blank, 2000.

- Too often, educators have seen test results demonstrating that students with dyslexia have poor phonemic awareness (ability to hear the individual sounds that make up words).
- The educators then set out with the best of intentions to teach their dyslexic students phonemic awareness.
- With tremendous amounts of time and effort this approach will work for most students with dyslexia because they have some ability to perceive phonemes and direct instruction strengthens that ability.
- However, this approach doesn't build on the students' strengths and often produces <u>sub-average</u> <u>readers</u>.

F.) The Alternative Path

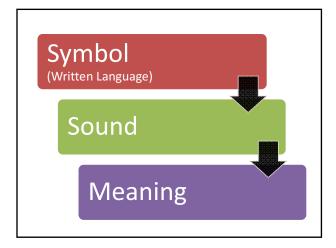
- This is **bypassing sound** as part of reading.
- Language allows people to **communicate specific ideas** with each other.
- Through the ages and across the world, language takes many forms but it can be divided into two categories:
- ★ Language that only allows communication between people who occupy the same time and location, and
- ★ language that can **transcend** such limitations.

- The advent of recording technology has blurred this distinction, but spoken language and written language are still helpful categories.
- Most children learn to speak and understand their mother tongue before they learn to read and write.
- They **connect sound to meaning**.

SOUND
(Spoken word or sentence)

MEANING
(Idea or concept)

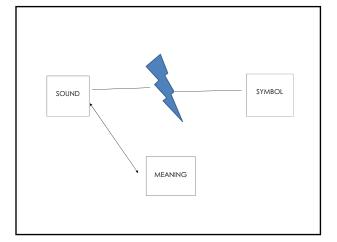
- Later on we teach children to read and write.
- This allows more lasting communication of specific concepts and ideas, because now we are taking a visual symbol and connecting it to a meaning, and a visual, physical symbol is far more durable than a sound.
- The child connects symbol to sound during standard reading instruction.



 Because most children already know how to speak when we teach them to read, we teach them to connect visual symbols with sounds, and then connect the sounds with meanings.



- Obviously this is not the most effective way to gain meaning from visual symbols, i.e. reading.
- Instead of converting our information once from symbol to meaning, we must convert it twice, from symbol to sound to meaning.
- Despite the inefficiency this works for most people.
- It lets them learn to read earlier and more quickly even if it means that ultimately they do not read as well or as fast as they might without that second conversion getting in the way.
- Dyslexic children, however, are not most people.
- They find the <u>sound-symbol conversion</u> <u>difficult</u> or even impossible.



How to use the alternative path:

So how can we teach dyslexic children to read?

By teaching them not just to read, but to read as efficiently as possible.

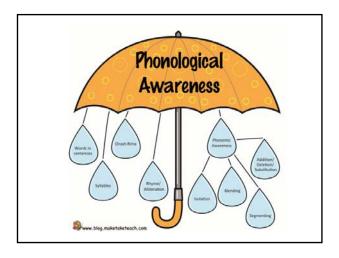
 The shortest path between two points is a straight line and the path to teaching dyslexic children to read is the one that goes directly from visual symbol to meaning, without taking a detour through sound. Taking this highly effective path requires the tutor to depart from standard practice by NOT requiring word-by-word oral reading, and by setting the student free to glean meaning from text in the way that works best for the student.

- It means assessing success based on silent reading followed by oral comprehension questions or discussion.
- It requires reading tutors to unlearn a great many things they have never before questioned.

 Once we've built on the stronger areas, we introduce PHONICS & Sound-Symbol Integration!

Phonological Awareness

- Phonological awareness refers to an individual's awareness of the phonological structure, or sound structure of spoken words
- It is the ability to recognize individual sounds and to recognize the number and position of these sounds



· Phonological awareness is a • Phonological awareness is critical for correct spelling, and involves the detection and metalinavistic skill requiring conscious manipulation of sounds at three levels of sound awareness and reflection on the structure structure: of language - syllables • Phonological awareness relates only to – onsets and rhymes; and speech sounds, not to alphabet letters or sound-spellings, so it is not necessary for phonemes students to have alphabet knowledge in order to develop a basic phonological awareness of language Vocabulary size, as well as other Phonological awareness appears in measures of receptive and expressive the 3rd year, with accelerating growth semantics, syntax, and morphology, through the 4th and 5th years are consistent, concurrent and longitudinal predictors of phonological awareness The development of phonological awareness is closely tied to overall Children with communication disorders language and speech development often have poor phonological awareness Phonological awareness is an auditory As mentioned before, phonological skill that is developed through a awareness is an important determiner variety of activities that expose of success in learning to read and students to the sound structure of the spell language and teach them to recognize, identify and manipulate it • Interventions to improve phonological awareness abilities lead to significantly improved reading abilities

| Concept of Spoken Word (Preschool) Tom ran home. (3) Terry loves to play soccer. (5) | Rhyme Recognition (Preschool) bed – fed (yes) run – soap (no) |
|--|---|
| | |
| Rhyme Production(Grade R) pain Candy | Syllable Blending (Grade R) rain – bow side – walk |
| | |
| Syllable Segmentation (Preschool – Grade1) fantastic (3) basket (2) | Syllable Deletion (Grade R) (down)town town for(get) for |
| | |

| Phoneme Isolation of Initial Sounds (Grade R) big /b/ ship /sh/ | Phoneme Isolation of Final Sounds (Grade 1) pick /k/ tooth /th/ |
|--|--|
| Phoneme Blending (Grade 1) /b//e//d/ = bed /sh//o//p/ = shop | Phoneme Segmentation (Grade 1) name (3) at (2) |
| | |
| Phoneme Deletion of Initial Sounds (Grade 1) (b)at = at (t)ape = ape | Phoneme Deletion of Final Sounds (Grade 1) ro/s/e = row trai/n/ = tray |
| | |

- Phoneme Deletion of First Sound in Consonant Blend (Grade 2)
- Say clap without /k/ = lap
- Say trust without /t/ = rust

- Phoneme Substitution (Grade 2)
- Replace the first sound in man with /k/
 = can
- Replace the first sound in well with /f/ = fell

Sequence in Phonetic Therapy

- 1. Consonants
- 2. Vowels
- 3. Diphthongs
- 4. Consonant-groups
- 5. Sounding simple syllables
- 6. Blending whole-word syllables
- 7. Structural analysis of words



The GILLINGHAM VAKT METHOD

- STEP 1: The educator shows a flash card with one letter on it
- The educator says the name of the letter and the learner repeats the name
- When the learner has mastered this, the educator says the sound of the letter and the learner repeats the sound
- When this has been mastered, the educator shows the flash card, asks what the letter says and the learner gives the sound of the letter



STEP 2

- Without showing the flash card, the educator now gives the sound of the letter and asks which letter makes that sound
- The learner then gives the name of the letter
- This helps the learner very much with spelling in future

- Once the first lot of letters has been mastered, learners learn to blend them into words by forming simple consonantvowel-consonant (CVC)words (mat, hit, dot)
- Once learners can blend, spelling is introduced

- The educator introduces non-phonetic words using lots of drill work
- Once the learner can read, write and spell the short 3 letter words with ease, consonant blends are introduced
- Syllabication, dictionary skills and more spelling rules are introduced afterwards

Step 3

- The educator now writes the letter and explains how it is written and in this manner teaches the learner how to form the letter properly – teach writing skills
- The learner then traces over the letter on the lines the educator wrote, copies it, writes it again from memory, or writes it in the air with eyes closed
- Lastly the educator then makes the sound of the letter and the learner has to write the letter, which makes that sound

- The educator says the word, the learner first repeats the word, then names the letters, writes them down and says the word once the whole word has been written down
- Once the learner can write any phonetically pure three-letter word, the learner can start writing stories using these three letter words (simple C-V-C words, i.e. cat, run)

- To be successful with the Gillingham approach, it has to be followed rigidly
- It does not include meaningful, interesting activities and puts <u>little</u> <u>emphasis on comprehension</u>, but it can be a successful method to use for learners who find it very difficult to learn to read

DYSPHONEIDESIA THERAPY

DYSPHONEIDESIA THERAPY

(AUDITORY & VISUAL DYSLEXIA)

DYSPHONEIDESIA THERAPY

The Stark-Griffin VAKT multisensory approach should be followed to ensure effective spelling

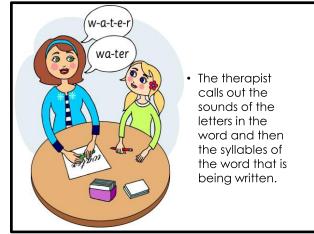
The Stark-Griffin VAKT Method:

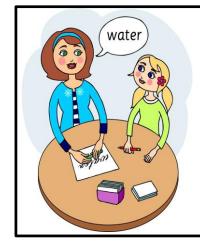


 The therapist pronounces the word to be learned.



- The therapist prints (or preferably writes in cursive) the word with a marking pen.
- Letters should be large.





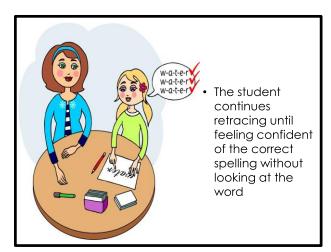
 The word is then pronounced as a unit.

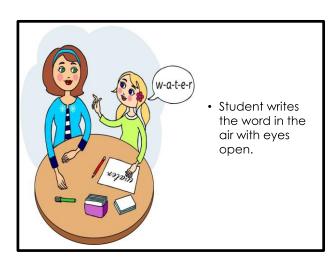


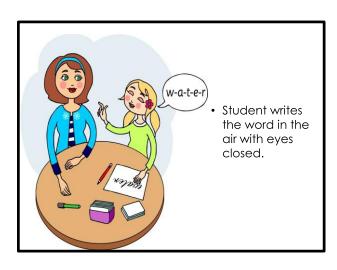
- The therapist then traces the letters with his/her finger and sounds out each letter in the word.
- (This involves memory and movement).



- The student repeats step 5 by tracing with his/her finger and sounds out each letter in the word.
- (This involves memory and movement).









Student now writes the word on a separate piece of paper without looking at the original word.



 If an error is made, steps 1-10 should be repeated.



 All words spelt correctly must be 'deposited' in the learner's word bank.



 All newly learnt words must be incorporated in sentences, paragraphs and short stories.



 The learner must be encouraged to visualize newly learnt words.



 Follow these 14 steps with new words from newspapers and magazines.



 Recall words once a week from the student's word bank to ensure that the student mastered & remembers the spelling of these words.

THREE MORE TYPES TO GO!

Three More Types To Go!

DYSNEMKINPHONESIA THERAPY:

Therapy Sequence:

- 1. Dysnemkinesia Therapy
- 2. Integration motoric and auditory modalities
- 3. Dysphonesia Therapy

DYSNEMKINEIDESIA THERAPY

Therapy Sequence:

- 1. Dysnemkinesia Therapy.
- 2. Dyseidesia Therapy.

DYSNEMKINPHONEIDESIA THERAPY:

Therapy Sequence:

- 1. Disnemkinesia Therapy
- 2. Dysphoneidesia Therapy

SUMMARY • PHONICS **DYSPHONEIDESIA** • TSSO & **PHONICS** • Orton-Gillingham Instruction Depending • Then: on which • TSSO • Oral type is • Then: more OG & serious.

Dyslexia IS A MULTI-DISCIPLINARY DISORDER:

- Anyone who is suspected to have dyslexia should have a comprehensive evaluation, including medical, psychological, behavioral, hearing, vision, occupational and intelligence testing.
- The test should include all areas of learning and learning processes.
- A child should be evaluated for dyslexia using an age-appropriate battery of decoding and encoding tests.

The following professions contribute to the diagnosis of dyslexia:

- Speech & Language Therapists and Pathologists
- Audiologists
- Optometrists
- Occupational Therapists
- Psychologists

<u>Audiologists & SPEECH and Language therapists?</u>

- These professionals have extensive training and knowledge about phonological skills which is imperative to integrate sounds and symbols (grapheme-phoneme integration).
- Phonics, phonological awareness and language learning are their forte and an imperative part of the reading process.
- The magnocellular auditory pathway is defective in a dyslexic individual.
- There is no better professional than the above to identify and diagnose auditory dyslexia.

Why optometrists?

- Learning is accomplished through complex and interrelated processes, one of which is vision.
- Determining the relationships between vision and learning involves more than evaluating eye health and visual acuity (clarity of sight).
- The magnocellular visual pathway of a dyslexic person is defective and causes visual problems.
- There is no better professional than an optometrist to identify and diagnose visual dyslexia.

Why occupational therapists?

- O.T.'s are able to identify characteristics of dyslexia which would benefit the child's overall scholastic performance.
- An occupational therapy assessment will focus on how the dyslexia affects a person's day to day life.
- O.T.'s provide handwriting and spelling support, postural management assessment and strategies as well as fatigue management.
- O.T.'s work with the school to develop strategies and appropriate adaptations.
- There is no better professional than an OT to identify and treat motoric dyslexia.

Why psychologists?

- Many of us take learning for granted. Going to school, college or university and being taught is something we just do. But, in fact, there are many conditions – biological and environmental – that contribute to learning.
- It is the job of the educational psychologist to explore these conditions in order to optimize the learning experience for children and young people, thereby helping them to achieve their full potential in life.
- Dyslexics need a psychological examination to assess cognitive abilities.

DYSLEXIA IS A MULTI-DISCIPLINARY DISORDER

- A multi- and interdisciplinary assessment is important to rule out all contributing barriers to learning.
- These may include an intellectual deficit, a hearing or visual impairment, brain injury (congenital or acquired), and also emotional losses arising from school failures.

We need more dedicated, passionate remedial teachers to make a difference in these children's lives!!!

The best teachers are those who show you where to look, but don't tell you what to see.

Alexandre E-Trepfer

GOALS AND EXPECTATIONS OF SUCCESS IN THERAPY

Goals and Expectations of Success in Therapy

| | Eventual Goal of Therapy | Predicted Success |
|---------------------------|---|----------------------|
| Dysnemkinesia, mild | Elimination of number and letter reversals by 5 th , grade | 90% |
| Dysnemkinesia, marked | Elimination by 7 th grade | 85% |
| Dysphonesia, mild | Improved eidetic skills enable reading almost to expected grade level; decoding of unfamiliar words improved but not completely normal | 80% |
| Dysphonesia, marked | Lower-division college reading level at best; otherwise, same as mild dysphonesia | 75% |
| Dyseidesia, mild | Develop normal phonetic decoding and encoding skills; reading level 12 th grade at best; minor spelling problems remain, with reliance on phonetic equivalents | 70% |
| Dyseidesia, marked | 10 th grade reading level at best; increased spelling errors remain with great reliance on phonetic equivalents | 65% |
| Dysphoneidesia, mild | 8 th garde reading level at best; major spelling errors remain, with poor eidelic and phonetic encoding; if dysphonetic component can be abated, the reading level may be higher | 60% |
| Dysphoneidesia, marked | 6 th grade reading level at best; major spelling problems | 55% |

DYSLEXIA IS A MULTI-DISCIPLINARY DISORDER

- A multi- and interdisciplinary assessment is important to rule out all contributing barriers to learning.
- These may include an intellectual deficit, a hearing or visual impairment, brain injury (congenital or acquired), and also emotional losses arising from school failures.
- Once the causes of the difficulties are identified, the team can provide an appropriate intervention plan for each specific case via an evaluation report.
- Understanding the underlying causes of the difficulties, the potential, and the characteristics of the individual, the professional who will service the case can design the therapy he or she deems appropriate.

We need more dedicated, passionate remedial teachers to make a difference in these children's lives!!!



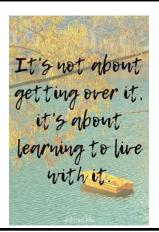
Secondary Problems:

- Dyslexia may cause secondary emotional problems
- Rosenthal reported that a group of dyslexic boys whose problems were not understood ('dyslexia mystery' group) had significantly lower selfesteem than a group of non-dyslexic boys
- On the other hand, a 'dyslexia no-mystery' group (in which the family and all members of the 'team' understood the dyslexic problems) had a higher level of self-esteem than the 'dyslexia mystery' group

- If the dyslexia of a child is understood and accepted by the child, parents, teachers and others, there is less likelihood of guilt and anxiety than if there is misunderstanding and lack of acceptance
- All members of the 'team' must understand dyslexia to prevent secondary emotional problems of dyslexic individuals
- This is an important reason why dyslexia screening and testing should be done as early as possible whenever reading, writing and spelling problems are suspected
- Involving the whole team will ensure your rate of success in treatment

Can you imagine a world where schools fought as hard FOR students with dyslexia as they do fighting AGAINST students with dyslexia?

> -Dr. Kelli Sandman-Hurley Dyslexia Training Institute



THE STARK GRIFFIN DYSLEXIA THERAPY CURRICULUM

The Stark Griffin Dyslexia
Therapy Curriculum



I. DYSNEMKINESIA

- ➤ MILD
 - ➤ -8 weeks
- ➤ MODERATE
 - >-16 weeks
- ➤ SEVERE
 - >-24 weeks

Sequence of Skills Training

- 1. Visual Perception
- 2. Auditory Perception
- 3. Laterality
- 4. Directionality
- 5. Memory of Movement of Letters and Numbers

II.DYSPHONESIA

- > BORDERLINE
 - > 8 weeks
- > MILD
 - > 16 weeks
- > MODERATE
 - > 24 weeks
- > SEVERE
 - > 32 weeks

Sequence of Skills Training

- 1. Visual Perception
- 2. Auditory Perception
- 3. TSSO
- 4. Phonological Awareness
- 5. Phonics
- 6. Orton Gillingham VAKT Method
- 7. Structural Analysis
- 8. Phonetic Word Recognition
- 9. Stark Griffin VAKT Method
- 10. A New Day for Dyslexia Memory Game

Sequence of Skills Training

- 1. Visual Perception
- 2. Auditory Perception
- 3. Phonetic Instruction/ Phonics
- 4. Gillingham VAKT method for Learning Letters
- 5. Grace Fernald VAKT Method
- 6. Look-Say-Write Method
- 7. Blending Visual & Auditory Gestalts
- 8. Stark Griffin VAKT Method
- 9. TSSO

- > 16 weeks
- > MILD DYSPHONESIA / MILD DYSEIDESIA
- > 24 weeks
 > MILD DYSPHONESIA / MODERATE DYSEIDESIA
 > 24 weeks

- > MODERATE DYSPHONESIA / MILD DYSEIDESIA
 - > 24 weeks
- > MODERATE DYSPHONESIA / MODERATE DYSEIDESIA
 - > 32 weeks
- > MODERATE DYSPHONESIA / SEVERE DYSEIDESIA
 - > 32 weeks
- > SEVERE DYSPHONESIA / MODERATE DYSEIDESIA
 - > 32 weeks
- > SEVERE DYSPHONESIA / SEVERE DYSEIDESIA
 - > 32 weeks

Sequence of Skills Training

BORDERLINE DYSPHONESIA / BORDERLINE DYSEIDESIA (16)

- 1. Visual Perception
- 2. Auditory Perception
- 3. TSSO
- 4. Phonological Awareness
- 5. Phonics
- 6. Orton Gillingham VAKT Method
- 7. Fernald VAKT Method
- 8. Stark Griffin VAKT Method

| BORDERLINE | DYSPHONESIA / | MILD | DYSEIDESIA (| (16) | ١ |
|------------|---------------|------|--------------|------|---|
| | | | | | |

- 1. Visual Perception
- 2. Auditory Perception
- 3. Phonological Awareness
- 4. Phonics
- 5. TSSO
- 6. Fernald VAKT Method
- 7. Stark Griffin VAKT Method

| MILD DYSPHONESIA / MILD DYSEIDESIA (24) 1. Visual Perception 2. Auditory Perception 3. TSSO 4. Phonological Awareness 5. Phonics 6. Orton Gillingham VAKT Method 7. Fernald VAKT Method 8. Stark Griffin VAKT Method |
|---|
| |
| MODERATE DYSPHONESIA / MILD DYSEIDESIA (24) 1. Visual Perception 2. Auditory Perception 3. TSSO 4. Phonological Awareness 5. Phonics 6. Orton Gillingham VAKT Method 7. Phonetic Word Recognition 8. Stark Griffin VAKT Method |
| |
| MODERATE DYSPHONESIA / SEVERE DYSEIDESIA (32) 1. Visual Perception 2. Auditory Perception 3. Phonological Awareness 4. Phonics 5. Gillingham VAKT Method 6. TSSO 7. Fernald VAKT Method 8. Look-Say-Write VAKT Method 9. Stark Griffin VAKT Method |
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SEVERE DYSPHONESIA / MODERATE DYSEIDESIA (32) SEVERE DYSPHONESIA / SEVERE DYSEIDESIA (32) 1. Visual Perception 1. Visual Perception 2. Auditory Perception 2. Auditory Perception 3. Phonological Awareness 3. TSSO 4. Phonological Awareness 4. Phonics 5. Phonics 5. Gillingham VAKT Method 6. Orton Gillingham VAKT Method 6. TSSO 7. Fernald VAKT Method 7. Fernald VAKT Method 8. Look-Say-Write VAKT Method 8. Look-Say-Write VAKT Method 9. Stark Griffin VAKT Method 9. Stark Griffin VAKT Method **Sequence of Skills Training** V. DYSNEMKINEIDESIA 1. Visual Perception > BORDERLINE DYSNEMKINEIDESIA Auditory Perception > - 12 weeks 3. Laterality > MILD DYSNEMKINEIDESIA Directionality 5. Memory of Movement of Letters and Numbers > - 16 weeks Phonetic Instruction & Gillingham > MODERATE DYSNEMKINEIDESIA 7. Fernald VAKT Method Look-Say-Write VAKT Method > - 24 weeks Structural Analysis > SEVERE DYSNEMKINEIDESIA 10. Blending Visual & Auditory Gestalts > - 32 weeks 11. Stark Griffin VAKT Method 12. TSSO VI. DYSNEMKINPHONESIA **Sequence of Skills Training** 1. Visual Perception > BORDERLINE DYSNEMKINPHONESIA 2. Auditory Perception > - 12 weeks 3. Laterality 4. Directionality > MILD DYSNEMKINPHONESIA 5. Memory of Movement of Letters and Numbers > - 16 weeks 6. TSSO 7. Phonological Awareness > MODERATE DYSNEMKINPHONESIA 8. Phonics & Gillingham VAKT Method > - 24 weeks 9. Structural Analysis 10. Phonetic Word Recognition > SEVERE DYSNEMKINPHONESIA 11. Stark Griffin VAKT Method > - 32 weeks

VII. DYSNEMKINPHONEIDESIA

- > MILD DYSNEMKINPHONEIDESIA
 - > 16 weeks
- > MODERATE DYSNEMKINPHONEIDESIA
 - > 24 weeks
- > SEVERE DYSNEMKINPHONEIDESIA
 - > 32 weeks

Sequence of Skills Training

- 1. Visual Perception
- 2. Auditory Perception
- 3. Laterality
- 4. Directionality
- 5. Memory of Movement of Letters and Numbers
- 6. TSSO
- 7. Phonological Awareness
- 8. Phonics
- 9. Gillingham VAKT Method
- 10. Fernald VAKT Method
- 11. Stark Griffin VAKT Method

| A NEW DAY - GRADUATION |
|------------------------|
| |

HOW A TEACHER CAN HELP A DYSLEXIC STUDENT LEARN EFFECTIVELY IN THE CLASSROOM

| How a Teacher can Help a Dyslexic Student Learn Effectively in the Classroom | Preschool teachers set the stage for a child to learn to read with critical early skills. 1st, 2nd, and 3rd grade teachers then are responsible for the task of building the skills that children will use every day for the rest of their lives. |
|--|--|
| | |
| There are many strategies a teacher can implement in the classroom to help a Dyslexic student do well and understand the different skill sets such as spelling, reading, writing, arithmetic and time. Most of these suggestions are beneficial for any student but especially important for Dyslexics. | Help right-brain learners (Dyslexics) understand their thinking and the learning differences from left brain thinkers (big picture and concrete images versus abstracts such numbers, letters and words). They will understand they can be taught how to use their processing style to their advantage for success in school. |
| | |
| Help Dyslexic students discover their personal learning style (auditory, visual or kinaesthetic) and teach them how to use their strongest sense to process information and perform new skills with greater understanding. | These students think in wholes: spelling whole words, thinking in whole words, whole chapters and stories, whole lessons, whole assignments and whole concepts. Their school work should reflect this focus on wholes. Breaking a word into individual letters and sounds is not the best way for these students to learn how to spell them. |
| | |

Skills or information taught with steps over a series of days, without a preliminary overview or "Big Picture", can be very difficult for Dyslexic students to follow and comprehend.
The constant memory loss of information covered over several days is one way a Dyslexic can be labelled as having "short term memory loss".

| | LONG DIVISION |
|-----------------------|------------------|
| DANGEROUS (DIVIDE) | 6 432 |
| (MULTIPLY) | 6 432 |
| (SUBTRACT) | 6 432 |
| (BRING DOWN) | 6 432 -42 |
| REPEAT | 12 |

Example:

- An example is teaching the process of long division using brackets, often taught in steps over a number of days.
- Without an overview explanation of what long division is or what it is used for the sequence or set of steps of a long division problem becomes very abstract.
- The average student is taught to follow them and they will have a correct answer.
- A Dyslexic student needs to understand what is happening in these steps and why the answer is right otherwise they won't understand why they need to do long division.
- Dyslexics and right-brained thinkers need to see the whole process and its meaning at the beginning of the lessons.

- Try to complete a lesson at one sitting.
- An incomplete lesson is entirely lost on them.
- If this is not possible, then provide a written summary, extra time during the same day to answer the student's questions or find ways to teach the complete lesson in one sitting, or give them the start and ending first and then fill in the middle.
- Dyslexic students can be identified as early as 6 years of age.
- Their struggles with school work are noticeable when compared to the rest of the class along with their above average intelligence.
- It is very important to identify them early.
- If this is delayed and they are being taught with methodologies that work well with left-brain learners they can lose a lot of ground, get behind in class and have difficulty catching up.

- Studies have shown that Dyslexics tend to be **above** average to genius level in intelligence.
- It is not uncommon for gifted children to have Dyslexic issues.
- Often this can make it difficult to identify them and they can be regarded as "lazy and not living up to their potential".
- These students think and reason starting with a fact or conclusion and analyze the parts that prove or disprove the conclusion.
- They need to see the "forest before the trees" with everything they are learning and processing.
- Just as many essays are based on analyzing a stated conclusion.

Always design your questions and assignments around a given conclusion or fact.

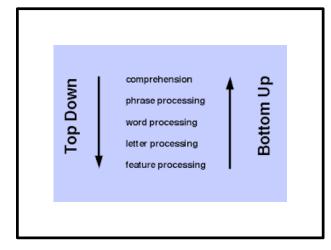
- Dyslexic students think in concrete wholes, that is, they work backwards from a conclusion or fact to fill in all the parts.
- This is called: Top/down processing.

Top-Down Processing

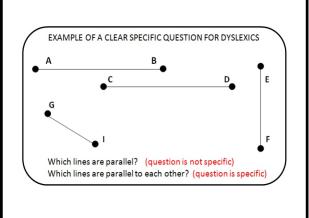
- Top-Down Processing is also known as "large chunk" processing and states that we form perceptions (or focus our attention) by starting with the larger concept or idea (it can even be the concept or idea of an object) and then working our way down to the finer details of that concept or idea.
- If you're the type of person who learns new ideas and concepts (or forms impressions) by starting first with the high-level aspects and then working your way down to the fine details, then you're a top-down processor."
 - ~ quoted from AlleyDog.com

TOP-DOWN • reading process is a reverse of the bottom-up model • reading is conceptually driven • Readers use their background knowledge to make predictions as they read the text

Most Non-Dyslexics read according to the bottom-up model of reading The bottom-up model acknowledges that ... Readers proceed from the written text to meaning. Readers are passive recipients of meaning. Meaning resides in texts. Meaning is driven by the text. Reading proceeds from part to whole.



• **Do not give them open-ended questions** that involve abstract or incomplete instructions.



- Do not base the student's marks on spelling, punctuation or grammatical errors.
- Errors in assignments should be corrected for them.
- Spelling, punctuation and grammar are very abstract concepts for them that the right brain does not easily process and cannot visualize them as concrete images.
- If these errors must be corrected before a student hands in an assignment then permit someone else to edit the mistakes in spelling, grammar and punctuation.
- Parents are often helpful in this.

- Look for ideas, not clerical errors.
- Getting ideas down on paper is much more important than fretting over spelling, grammar and punctuation.
- If they do not achieve what they are capable of they soon become depressed and give up.
- Using recording devices to get their ideas down are a great tool.

 Their ability to use the correct grammar, punctuation and spelling forms may or may not improve with age, depending on their ability to understand these concepts and the type of teaching methods the Dyslexic student receives.

They ask a lot of questions and they need them answered. Without these answers they can be paralyzed in the classroom and can't proceed with their school work. Answer the student's questions as often as possible, but keep your answers very short, clear and specific. Be precise. Do not repeat your answers unless the student asks you to do so. Then answer only what the student asks.

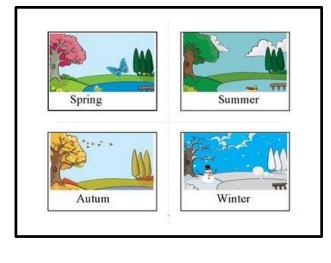
• **Do not criticize your students** for not paying attention or being lazy.

- If they look like they are daydreaming, they may be learning by listening or they can no longer understand the lesson and are trying to cope with the situation.
- They are actually working hard to understand what you are saying.

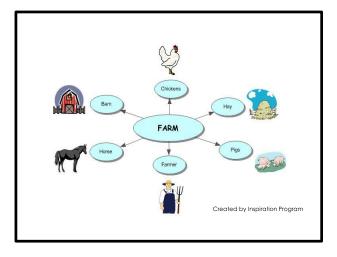
| Then answer only what the student asks. Long explanations, different approaches, wordy definitions, or abstract thinking are all very tiring and difficult for these students who are looking for a concrete answer. | Sometimes the student has already solved the problem and is thinking about other solutions or aspects of the problem. |
|---|--|
| | |
| Instead of long, written assignments, turn these tasks into projects that involve all the senses. These could be done on any large piece of colored paper they could add real objects, pictures, drawing, sketches, photos, words of explanation and an oral report. The Dyslexic student learns best doing projects that involve seeing, listening, discussing and using their hands. | Help facilitate a Dyslexic student who has been assessed for their best color for dealing with reading issues caused by reading black text on white paper. This can be accomplished by using colored plastic overlays over printed text, a similar color on their computer background and colored paper for their worksheets and other school materials. Many times we have seen great changes in a students reading speed and comprehension just by changing the color of the paper they are working on or by placing a colored transparent acetate over a worksheet or page of a book. |
| | |
| Encourage these students to expand and use their natural right-brain traits and talents such as: artistic abilities in different mediums, researching topics for projects. Some are proficient and exceptional at arithmetic and mathematics and yet other Dyslexics can have great difficulty with arithmetic and math. Most Dyslexic individuals show good leadership abilities, problem solving skills, have wonderful imagination and terrific story-telling skills. Many have natural mechanical abilities, are talented athletes, possess photographic memories and show a strong logical sensibility. They can be assessed to discover their natural talents, interests and hobbies. | Teach the students how to put individual parts in a sequential order. The right-brained student needs to be trained in sequencing skills by using concrete materials and visual procedures such as the order of letters in words. This can be accomplished by using mind maps to show them how to find the parts and their order in the "big picture". |
| | |

Example

- The seasons of the year could be printed in big simple letters on a large cardboard sheet with pictures of what the weather is like during those seasons, special holidays and day-to-day life such as school and summer activities.
- The mind map concept can be taken further and add the months of the year that fall in each season.
 This type of visual can help a Dyslexic anchor what "seasons of the year" means, what order they come in and how they are spelled.



- Mind maps should be used for all subjects.
- Dyslexics understand many concepts more completely when presented in mind maps and diagrams.
- The computer program, "Inspirations" is ideal for this
- https://www.inspiration-at.com/



 Writing notes from the board can be very difficult so placing a Dyslexic child close to the front of the classroom or giving them pre-printed notes can be very helpful.

- Many Dyslexics need to read the beginning, then
 the end, and then the middle of chapter stories and
 best followed up with a movie of the book.
- Presenting the end of the story after the beginning gives the Dyslexic the "big picture" and their comprehension of the story increases.
- Some Dyslexics do not like this approach and prefer beginning, middle and end.
- The teacher needs to know which approach the student prefers.

- Arithmetic, math, the concept of time, money, clock faces and measurement are very abstract and difficult ideas for Dyslexics.
- Using concrete images and physical demonstrations to explain it to them, will make them catch on quickly.
- They should not be discouraged to count with their fingers or use other aids such as an abacus.
- The Dyslexic student may never be able to work arithmetic or math problems without these aids.
- These students also do better with drawing out a word problem rather than trying to work the details of the math equation from the text of the problem.

They will always want to know the schedule for the day and will point it out if it changes.



- They can become obsessed about one subject so if this can be used in any school work at all it will help them learn the new skill sets.
- Case Study: One boy loved volcanoes. He could tell you all about them and spell difficult words like; magma, mantle, eruption. But he could not spell; then, would, other, into.



- Some Dyslexic children who are displaying ADHD behaviors are possibly suffering from frustration, confusion and fear.
- They don't understand what is going on in the class, they want to desperately and they are humiliated by their peers.
- Their inability to sit still and focus can be due to exasperation.
- More than one mother has told me her child was suicidal and they have been as young as third grade. This is very concerning.
- I am not saying a child does not have ADHD, I am suggesting medical testing should be done along with examining the school background and emotional state of the child for other factors.

- And speaking of being wiggly and talking out in class; Dyslexic children tend to be very connected to experiencing the world through their senses and don't sit well to focus quietly on their schoolwork.
- They want to feel it, see it, touch it, smell it and hear everything.
- They experience life in the present the past and the future belongs to the left brain.

 If you can integrate movement and other sensory experiences consistently into the classroom, they will be a suit learner. avid learners.
- Sitting, listening and writing for long periods of time can be almost impossible for them.
- More schools are starting to introduce accommodations in the classroom such as chewing gum, squeeze balls, plastic straws to tap instead of pencils and getting up and moving often.
- If you have a Dyslexic class clown try letting them have 5 minutes of stand-up comedy if they agree not to disturb the class for the rest of the day.
- Dyslexics are often very quick mentally and verbally and will use humour to deflect attention away from their learning problems and negative attention from their fellow class mates (Jim Carrey, Robin Williams, Jay Leno, Whoopi Goldberg to name a few).

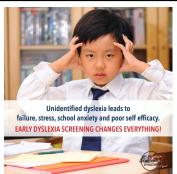
| Dyslexics need a reason for everything. If you want them to stop a certain behavior, don't just say "no" or "stop". Tell them why it is inappropriate. They respond well to a logical explanation. | Many Dyslexics have a terrible time with being on time and completion dates. They live in the present and do not comprehend a schedule easily. Team up with their parents to work out a schedule for their schoolwork. They could have a white board at home with homework dates that the parent could help them remember. They respond well to color. Give them an agenda done in colors. (Red could mean hand in "tomorrow", blue could be the "end of the week"). This could be written on their white board at home. The colors could be updated daily on their calendar for consideration of their homework due dates. |
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| The other side of the spectrum are Dyslexics who are obsessed about schedules. This is what we have found to be typical, nothing in the middle. Either they can be on time and sometimes obsessively or not at all. We have found working with a Dyslexic student on schedules can help them build a lifelong skill. | These students are reality based because they think in whole concrete images they can see, hear, touch, smell and taste. All abstract materials should be related to something they can see, feel, touch, hear or smell. We have parents tell us that the teachers their children had that were focused on multi-sensory teaching methods, lots of movement and projects were usually their Dyslexic child's most successful and happy years. |
| | |
| Dyslexics have great difficulty with letters and phonemes without the presence of the whole image of the word and an image or picture that relates to the word when learning to copy and memorize words. Most Dyslexics have difficulty understanding what letters are individually. C – A – T are three sounds that don't mean anything when sounded out separately. CAT, however brings up the image of a cat. | Help these students understand how to ask for guidance to verify the direction of instructions. Dyslexics are spacial thinkers and very aware of the concept of three dimensionality. Mentally they can be anywhere in the world in their minds at any time – this creates directionality problems. They have difficulty understanding right and left or tying their shoes. |
| | |

| | | Example |
|---|---|---|
| | An illustration would be to ask them to point to the "back of a chair". They will wonder if you mean the back of the chair where they lean their backs on or the "back" behind the chair. This problem occurs for them with many instructions they receive during the day in a classroom. | Back |
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| | Try to assist them in focusing ideas and organizing a large body of work. Know they need special training in writing procedures and gathering tools such as notetaking, note making, outlining, clustering or mind map information, using pictures, diagrams, drawings and composition procedures. | Recognize their abilities to think emotionally, intuitively, creatively and "big picture" and incorporate into class work. Be sympathetic with their fears of being ridiculed when reading out loud, oral discussion and being able to follow written directions. One way to help with reading out loud is to give them a passage to practise reading at home and then reading it aloud in the classroom when they are comfortable. |
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| | | |
| | Recognize they may excel in oral discussions and group projects. Recognize they may be a good organizer and excel in leadership skills if they are not suffering from a loss of self-esteem. | Dyslexics should be allowed and encouraged to use laptop computers in the classroom. Printing or writing is usually agonizing for a Dyslexic student. They often also have Dysgraphia to some degree so writing can affect their comprehension, their ability to write notes from the board, and complete an exercise or test on time. Another option is using a scribe (a teaching assistant who writes a student's words or answers down for them in the classroom). |
| | | |

| Dyslexic students should be allowed to use assistive technologies such as computer programs like Dragon Naturally Speaking, Kurzweil, TextHelp Inspirations. | Dyslexics should be given more time to complete class work and tests or do them orally. The purpose of their completed schoolwork is to be sure they understand it and having to write their answers can affect their ability to convey their knowledge of the subject. Written formats can make it impossible for them to print their thoughts and answers adequately when they are usually very articulate speakers. Recording machines can also help with getting their ideas and answers saved and then typed or hand written. |
|---|---|
| Dyslexia changes from a Learning Difference to a Learning Disability when a child cannot learn in school due to inappropriate teaching methods and having become frustrated, exhausted, humiliated and despondent. When a child loses their self-esteem and begins to believe they are "stupid" they are filled with "self-limiting beliefs". They shut down and can no longer learn many new skills in school in a normal and timely manner – if at all. | |
| | |

ACCOMMODATIONS FOR THE DYSLEXIC CHILD IN THE CLASSROOM

<u>Accommodations for the</u> Dyslexic child in the Classroom



WHAT SHOULD BE DONE?

- The first step is to make an accurate diagnosis
- As a dyslexic child's difficulty is not visible – compared, say to a child in a wheelchair – it often goes unrecognized by teachers
- The result can be that the child is incorrectly labeled as "lazy", "slow" etc. – at school



- Dyslexia cannot be cured.
- It is a type of mind, like any other with its' own particular strengths and weaknesses
- However, through therapy the dyslexic individual may achieve his/her full potential

Choosing a dyslexia-friendly school

- There are a number of issues about the choice of school
- In some cases parents may not have any choice, but if there is a choice, parents should find out how the school deals with dyslexia and make a decision based on that information
- Does the school have any teachers who hold a recognized qualification for teaching children with dyslexia?
- Does the school have any special provision for dyslexic children?
- Does the school have any obvious dyslexiafriendly policies and practices?

| This can make a difference Children with dyslexia may become 'lost' if classes are too large and their needs may be inadvertently ignored because they appear to be coping In a small class they cannot 'hide' to the same extent | helps children to utilize their own individual learning styles recognizes that many apparent learning difficulties can often be explained as learning differences and that these will respond to changes in methods, materials and approaches |
|--|--|
| | |
| is particularly aware of the needs of the growing numbers of non-traditional learners who do not function well in some learning environments encourages children to explore ideas, concepts and strategies within the framework of their preferred learning styles is very successful in terms of results, but it values success less than it values the confident and independent learners it is developing | seeks to empower all pupils to be the best they can be sees parents as partners enjoys the trust of parents is not only dyslexia-friendly but also learning friendly |
| | |
| BALANCE An effective education for your child with dyslexia is a balance between social inclusion, which ensures that he/she is part of a positive friendship grouping, and educational outcomes, which can ensure that your child reaches his or her full potential | How do teachers identify dyslexia in the classroom? 1. Phonological awareness This is the ability to recognize individual sounds (phonemes) and work with phonemes to create new words. Typical problems are: Confusing vowel sounds, e.g. writing 'i' for 'e'. Difficulty rhyming. Chunking words into syllables. Blending sounds into a whole word. |
| | |

A dyslexia friendly school:

• recognizes that all children learn in different

• What is the average class size?

2. Typical spelling mistakes

- Spelling words as they sound e.g. wont instead of want
- Mixing up the sequence of letters e.g. hlep instead of help
- Reversing the sequence of letters e.g. was instead of saw
- . Missing out a letter e.g. wich instead of which

- . Missing out a letter e.g. wich instead of which
- . Using the wrong letter e.g. **showt** instead of **shout**
- . Adding an extra letter e.g. whent instead of went
- Using a 't' instead of 'ed' e.g. lookt instead of looked
- Can't remember when to use 'ck' or 'ke' at the end e.g. lick instead of like

| 3. | Unable to remem | ber times | tables | and | num | bei |
|----|-----------------|-----------|--------|-----|-----|-----|
| | sequences | | | | | |

- A multiplication fact may seem to be learned and then a few days later has been forgotten again.
- The same goes for phone and pin numbers.
- Difficulty remembering a sequence of numbers is a sure sign of dyslexia.

4. Writing

- Someone with dyslexia is likely to have lots of ideas but have difficulty putting them into writing.
- Although they may have lots of ideas they often do not know where to start.
- They will take much longer to write and produce less than other students.
- Many people with dyslexia write long sentences with no punctuation.

5. Reading

- Immediately forgetting what has just been read.
- . Slower reading speed.
- Missing out words or skipping lines as they read.
- Have you ever read a page, got to the bottom and realized you've just forgotten everything you read?
- This happens all the time to those with dyslexia. Words and their meanings don't stick very well.

| Reading becomes slow when you have to work out every word. So much mental energy is used on the process that no memory capacity is left to comprehend. | Dyslexia means you may read a word and then further down the page not recognize it again. There is no visual memory of the word. Their eyes can seem to jump over words, missing them out, skip out whole lines, sometimes they just skip part of a word. |
|--|--|
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| 6. Homophones: there — their A homophone sounds the same as another word but is spelled differently. They are extremely difficult for those with dyslexia because they usually struggle to recognize words when looking at them. They therefore quickly learn to rely upon the strategy of learning to spell a word by building it phonetically. This doesn't work for homophones. | 7. Difficulty knowing the Alphabet? Backwards? Many people with dyslexia have difficulty recalling sequences accurately so it is very likely that learning the alphabet will be problematic. Using songs and rhyme often helps but the real giveaway is whether they can say it backwards – a nearly impossible task for those with dyslexia! Dyslexia also causes problems learning the names and sounds of letters. |
| | |
| 8. Mixing up left and right It has become a cliché but it is true that many with dyslexia cannot learn to automatically remember left and right. They have to stop and think about it. | 9. Can't remember what they've been told A sure sign is difficulty carrying out a sequence of directions. "Get out your book. Turn to page 23. Read three pages." Someone with dyslexia might only remember one of these things and have to ask again. Having to ask again can make them feel stupid. |
| | |

10. Reversing numbers

- . Someone with dyslexia might see **57** but remember it as **75**.
- . Or write the answer to 6×7 as **24** instead of **42**.
- . The output of the information becomes muddled.

10 Teaching Tips for Dyslexia

- 1. Praise Gives Power Criticism Kills
 - A person with dyslexia needs a boost to their selfconfidence before they can learn to overcome their difficulties. They have already experienced failure and deep down they often don't believe they are capable of learning.
 - To re-establish self-confidence provide the opportunity to succeed and give praise for small achievements.

- 2. Don't ask person with dyslexia to read aloud
- Words are likely to be misread or skipped, causing embarrassment.
- Don't give a punishment for forgetting books or sports kit
- Offer positive strategies such as having one place to put things away.

4. Don't use the word 'lazy'

- People with dyslexia have to work harder to produce a smaller amount.
- They will have difficulty staying focused when reading, writing or listening.

5. Expect less written work

- A person with dyslexia may be verbally bright but struggle to put ideas into writing.
- Allow more time for reading, listening and understanding.

- 114 -

| 6. Prepare a printout of homework and stick it in their book Provide numbered steps, e.g. 1. Do this. 2. Do that etc. | 7. Do not ask them to copy text from a board or book Give a printout. Suggest they highlight key areas and draw thumbnail pictures in the margin to represent the most important points. |
|---|---|
| | |
| 8. Accept homework created on a computer Physical handwriting is torture for most people with dyslexia. Word processors make life much easier. Allow them to use the Spell Checker and help with grammar and punctuation so that you can see the quality of the content. | 9. Discuss an activity to make sure it is understood • Visualizing the activity or linking it to a funny action may help someone with dyslexia remember. |
| | |
| | |
| | Teaching Strategies for Students with Dyslexia |
| 10. Give the opportunity to answer | Using a Structured Literacy Approach Togghing principles that follows a structured literacy |
| questions orally Often people with dyslexia can demonstrate their understanding with a spoken answer but are unable to put those ideas in writing. | Teaching principles that follow a structured literacy approach are recommended for all lessons. Teachers who utilize a structured literacy approach ensure all teaching is systematic and cumulative, which means dyslexic students can depend on the materials being presented in a logical order from the most basic concepts to more difficult ideas. |
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| 2. Multisensory Learning • Multisensory activities help dyslexic children absorb and process information in a retainable manner and involve using senses like touch and movement alongside sight and hearing. | 3. Creating an Inclusive Classroom Creating an inclusive classroom promotes a healthier, safer learning environment for all students. Sticking to reliable routines and following clear schedules, are helpful for all students. Giving dyslexic students time to process information at their own pace is one of the most helpful elements of an inclusive classroom |
|---|---|
| | |
| 4. Additional Accommodations in the Classroom • simplifying written directions • highlighting essential information • providing additional practice activities • blocking out unnecessary stimuli • using applicable assistive technology • use of colours | repeating directions maintaining consistent daily routines using step-by-step instructions combining verbal and visual information placing students close to the teacher so they can easily ask questions offering assignment substitutions or adjustments, and slightly adapting the learning environment can help promote positive learning experiences for students. |





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6 SEVERN DRIVE, THREE RIVERS, VEREENIGING 1929