

## HOW SLP'S CAN BEST SERVE STUDENTS WITH SPECIFIC READING DISORDERS

JOYCE S. PICKERING  
SLP/CCC, AMS/EC, CALT, QI, HUM.D

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## THE SHELTON WAY



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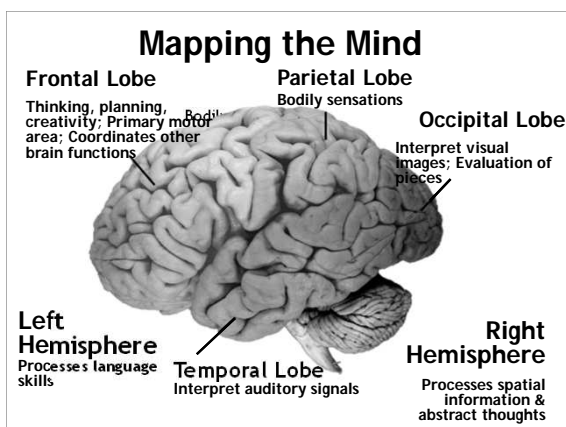
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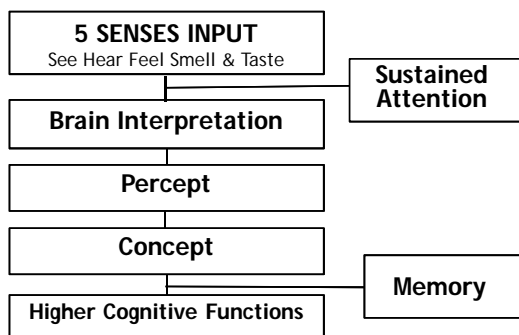
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## PROCESSING CHART




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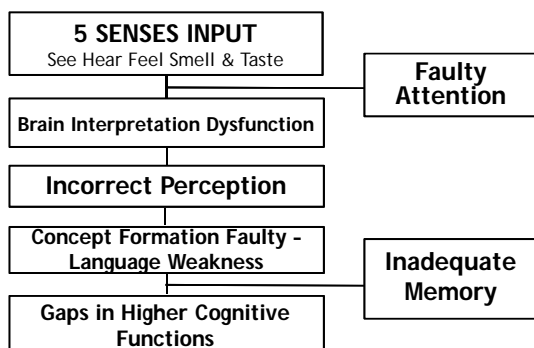
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## PROCESSING WITH DYSFUNCTIONS




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## TRAINING OF THE SPEECH LANGUAGE PATHOLOGISTS (SLP)

### ***SPEECH***

- ◆ Articulation
- ◆ Apraxia
- ◆ Stuttering

### ***LANGUAGE***

- ◆ Oral(spoken) Language  
Delays/Disorders  
(Receptive/Expressive/ Mixed)

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# **TRAINING OF ACADEMIC LANGUAGE THERAPIST (CALT)**

## ***DISORDERS OF WRITTEN LANGUAGE***

- ◆ Dyslexia (Specific Reading Disorder)
  - Reading Decoding
  - Spelling
  - Written Expression (Composition)
- ◆ Reading Comprehension Disorders
- ◆ Dysgraphia (Handwriting)

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## **DEVELOPMENT OF ORAL LANGUAGE**

- ◆ Birth To 3 Months - Crying/Cooing
- ◆ 3-6 Months - Babbling
- ◆ 6-9 Months - Echolalia
- ◆ 9-12 Months - First Word

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## **DEVELOPMENT OF ORAL LANGUAGE *SYNTACTIC DEVELOPMENT***

- |              |                 |
|--------------|-----------------|
| ◆ Nouns      | ◆ Conjunctions  |
| ◆ Verbs      | ◆ Prepositions  |
| ◆ Adjectives | ◆ Interjections |
| ◆ Adverbs    | ◆ Articles      |
| ◆ Pronouns   |                 |

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## DEVELOPMENT OF ORAL LANGUAGE

- ◆ 18 Months To 2 Years - Simple Sentences
- ◆ 6-7 Years - Has Command Of Every Sentence Structure

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## DEVELOPMENT OF ORAL LANGUAGE

- ◆ Syntax And Grammar - 5-8 Years
- ◆ Verbal And Non-verbal Communication Accomplished By 3 - 8 Years
- ◆ Average Vocabulary By 5 - 2500-5000 Words

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## DEVELOPMENT OF WRITTEN LANGUAGE

### *PRE-READING SKILLS*

- ◆ Speech And Oral Language WNL
- ◆ Auditory And Visual Perception WNL
- ◆ Rhyming - 3 Years
- ◆ Deletion Tasks - 4-5 Years
- ◆ Recognition And Naming Letters 3-5
- ◆ Letter Sounds 3-6
- ◆ Blending Sounds Into Words 3-6
- ◆ Beginning Reading 3-6

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**SOUND ANALYSIS**



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**PATTING OUT SOUNDS**



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**SOUND SYMBOL CORRESPONDENCE  
SANDPAPER LETTERS**



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## SOUND SYMBOL CORRESPONDENCE

[illegible]

## SOUND SYMBOL CORRESPONDENCE MIRROR

[illegible]

## WORD FAMILIES



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**WORD FAMILIES**



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**SEE LESSON**



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**MEMORY BOARD**



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## COMPREHENSION/ORAL LANGUAGE



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## DEVELOPMENT OF WRITTEN LANGUAGE

### *PRE-WRITING/WRITING*

- ◆ Gross Motor Coordination(Large Muscles)
- ◆ Fine Motor Coordination (Small Muscles Of Hand)
- ◆ Grasp And Pincer Tasks
- ◆ Pencil Grasp
- ◆ Writing Letters
- ◆ Writing Words
- ◆ Writing Sentences

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### PRE-WRITING/METAL INSETS



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### **DYSLEXIA DEFINITION ADOPTED BY NATIONAL INSTITUTES OF HEALTH**

- ◆ One of several distinct learning disabilities;
- ◆ Specific language-based disorder of constitutional origin characterized by single word decoding
- ◆ Reflects insufficient phonological processing abilities
- ◆ Difficulties in single word decoding - unexpected in relation to age & other cognitive & academic abilities.

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### **DYSLEXIA - NIH DEFINITION**

- ◆ Not the result of generalized developmental disability or sensory impairment
- ◆ Manifested by variable difficulty with different forms of language, including in addition to problems reading, conspicuous problem with acquiring proficiency in writing and spelling.

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**“While no two brains are alike,  
the brains of people with  
dyslexia are distinctively  
different compared to those  
without dyslexia.”**

**Dr. Gordon Sherman**

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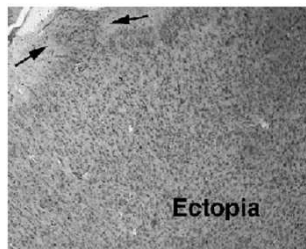
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## ECTOPIAS



Dr. Gordon Sherman

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## NEURAL MIGRATION

- Occurs before the 6<sup>th</sup> month of gestation
- A genetic code sends the signal to migrate
- In non-impaired learning brains the neurons do not reach the first layer of cerebral cortex-the language center of the brain

Dr. Gordon Sherman

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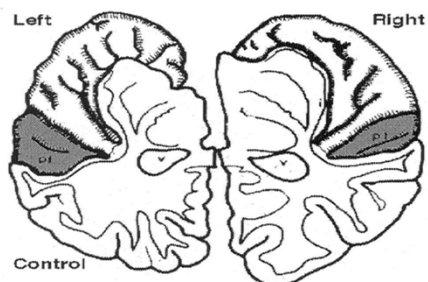
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## ADDITIONAL CORTEX DIFFERENCE SYMMETRY



Dr. Gordon Sherman

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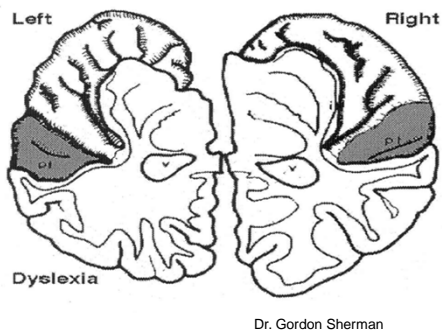
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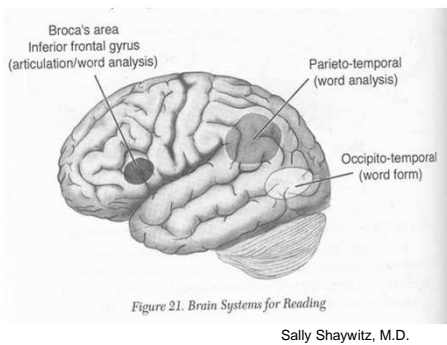
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## TWO NEURAL PATHWAYS



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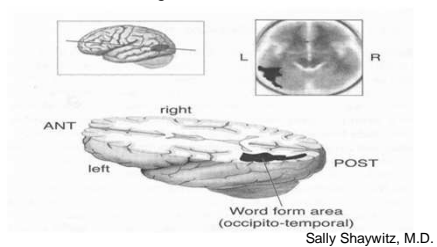
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## WORD FORM AREA OCCIPITO-TEMPORAL

- The more skilled the reader, the more they activate this region



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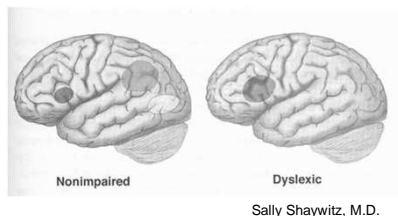
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## A NEURAL SIGNATURE FOR DYSLEXIA

- Under activation of Neural Systems in the Back of the Brain




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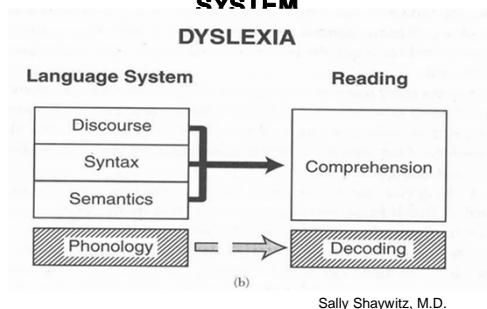
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## IN DYSLEXIC CHILDREN THERE IS A GLITCH WITHIN THE LANGUAGE SYSTEM




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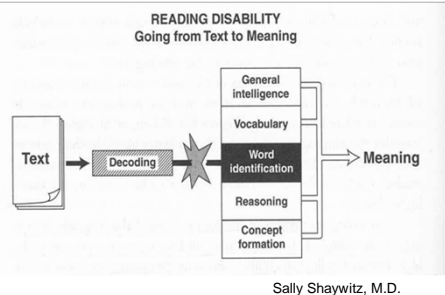
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## A PHONOLOGICAL WEAKNESS BLOCKS DECODING, WHICH IN TURN INTERFERES WITH WORD IDENTIFICATION.




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**ATTENTION DEFICIT / HYPERACTIVITY  
DISORDER (AD/HD)**

- ◆ ADHD refers to a family of chronic neurobiological disorders that interfere with people's capacity to attend to tasks, regulate activity, and inhibit behavior in ways appropriate to their age and circumstances.

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**IF YOU WOULD IDENTIFY CHILDREN  
WHO ARE HIGH RISK FOR ACADEMIC  
LEARNING TASKS, WITH THE GOAL OF  
PROVIDING EARLY INTERVENTION,  
EVALUATE:**

- ◆ Coordination
- ◆ Language
- ◆ Attention, and
- ◆ Perception

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**THERAPY FOR WRITTEN LANGUAGE  
DISORDERS**

- ◆ Multisensory Structured Language Education is an approach which was developed to instruct or remediate those individuals with dyslexia and related disorders. The original therapy was created by Dr. Samuel T. Orton, Anna Gillingham And Bessie Stillman in the 1930's.

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**THERAPY FOR WRITTEN  
LANGUAGE DISORDERS**  
***MSLE APPROACHES***

- ◆ Orton Gillingham
- ◆ Alphabetic Phonics - MTA  
Take Flight
- ◆ Spalding
- ◆ Slingerland
- ◆ Sequential English Education
- ◆ Wilson
- ◆ Dubard Association Method - Developed  
From The Work Of Mildred McGinnis

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**SAMUEL T. ORTON, M.D. & MARGARET BYRD RAWSON**



**ORTON GILLINGHAM APPROACH**

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**DR. CHARLES L. SHEDD & JOYCE S PICKERING**



**APSL / SEE**

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**MAUREEN MARTIN & ETOILLE DU BARD**



**DU BARD ASSOCIATION METHOD**

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**LUCIUS WAITE & AYLETT ROYALL COX**



**ALPHABETIC PHONICS**

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**THERAPY FOR WRITTEN  
LANGUAGE DISORDERS**

***MSLE CONTENT***

- ◆ Phonology And Phonological Awareness
- ◆ Sound Symbol Correspondence
- ◆ Syllables
- ◆ Syntax
- ◆ Morphology
- ◆ Semantics

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## SYLLABLE TYPES

- ◆ Closed
- ◆ Open
- ◆ Vowel-consonant E
- ◆ Consonant-le
- ◆ R Controlled
- ◆ Diphthong Or Vowel Pair

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## PHONOLOGICAL AWARENESS




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## THERAPY FOR WRITTEN LANGUAGE DISORDERS CONT'D

### *MSLE PRINCIPLES OF INSTRUCTION*

- ◆ Visual-auditory-kinesthetic/Tactile (VAKT)
- ◆ Direct Instruction
- ◆ Systematic And Cumulative
- ◆ Diagnostic Teaching To Automaticity
- ◆ Synthetic/Analytic Instruction

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## DYSLEXIA

"The differences are personal;  
The diagnosis is clinical;  
The treatment is educational;  
The understanding is scientific"

-Rawson/Sauders

## THERAPY FOR WRITTEN LANGUAGE DISORDERS (SEE)

*HIERARCHY OF WRITTEN LANGUAGE  
(SIMPLE TO COMPLEX PATTERNS)*

- ◆ Consonant vowel consonant pattern (CVC)  
HAT PET BIB COT JUT
- ◆ CVC Words with consonant digraph as a beginning  
sound  
CHAT CHET CHIP CHOP CHUM
- ◆ CVC Words with consonant blends as a beginning  
sound  
BLAB BLED BLIP BLOB BLUB

## THERAPY FOR WRITTEN LANGUAGE DISORDERS (SEE)

- ◆ C V C
- ◆ C A T
- ◆ CH A T
- ◆ FL A T

## THERAPY FOR WRITTEN LANGUAGE DISORDERS (SEE)

### DECODING PATTERN FOR CVC WORDS

- ◆ Sound By Sound
- ◆ Beginning Sound + Word Family = Word

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## THERAPY FOR WRITTEN LANGUAGE DISORDERS (SEE)

### INTRODUCTION OF LONG VOWEL PATTERNS

- ◆ CVC + E HAT HATE

### LONG VOWEL COMBINATIONS

- ◆ AI EE IE O
- ◆ AY EA IGH OA
- ◆ EIGH IE Y
- ◆ EY

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## THERAPY FOR WRITTEN LANGUAGE DISORDERS (SEE)

- ◆ Vowels With L And R - Palm/Arm
- ◆ Diphthongs - Au Aw Ew Oi Oy Ow
- ◆ Silent Letters- Comb
- ◆ Homonyms - Made/Maid
- ◆ Homographs - Bat (Multiple Meanings)

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## **THERAPY FOR WRITTEN LANGUAGE DISORDERS (SEE)**

### ***PROCEDURES***

- ◆ Decoding Words
- ◆ Defining
- ◆ Spelling
- ◆ Reading Sentences
- ◆ Paraphrasing Sentences
- ◆ Sentence Dictation
- ◆ Independent Sentences

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## **THERAPY FOR WRITTEN LANGUAGE DISORDERS (SEE)**

### ***ADDITIONAL CONTENT***

- ◆ Alphabetizing
- ◆ Word Studies
- ◆ Outlining
- ◆ Writing Paragraphs
- ◆ Essential Information
- ◆ Affixes (Prefixes/Suffixes)
- ◆ Use Of Technology

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## **OBSERVATIONS FROM EXPERIENCE**

- ◆ Children referred for articulation are exhibiting auditory discrimination difficulties which are seen in children with reading disorders
- ◆ Early intervention - help young children discriminate and produce all sounds between 4 ½ and 5 ½ (if they can't discriminate them in oral language it will affect their ability to learn to read)

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**OBSERVATIONS FROM EXPERIENCE**

- ◆ Children referred for delayed or disordered oral language development are at risk for reading comprehension problems
- ◆ Early intervention - help young children with direct therapy for oral language development beginning as early as possible and no later than 3

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**OBSERVATIONS FROM EXPERIENCE**

- ◆ Speech language pathologists have the ideal background to help children with reading disorders
- ◆ Speech language pathologists need specific training in multisensory structured language education by an accredited training course (IMSLEC/AOGPE)
- ◆ Speech language therapists should aspire to certification as a Certified Academic Language Therapist (CALT)

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**QUOTE BY LYDIA H. SOIFER**

"In depth knowledge of oral language development and language related to learning and reading comes from the discipline of speech-language pathology."

The following quote has been taken from:  
Judith R. Birsh, Ed.D., T 2005,  
*Multisensory Teaching of Basic Language Skills*,  
Paul H. Brookes Publishing Co.

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**QUOTE BY LYDIA H. SOIFER**

"An understanding of the many aspects of learning and flexibility in skill and strategy development emerges from the study of learning disabilities."

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**QUOTE BY LYDIA H. SOIFER**

"Reading research and instruction provide an intense consideration of all aspects of the enormous task of "breaking the code" and then encoding to complete the reading process."

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**QUOTE BY LYDIA H. SOIFER**

"Educational theory and practice offer a wide array of techniques for encouraging learning."

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**QUOTE BY LYDIA H. SOIFER**

“For teachers an awareness and integration of this information offers the opportunity for greater power in teaching.”

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**REFERENCES**

**INTERNATIONAL MULTISENSORY STRUCTURED  
LANGUAGE EDUCATION COUNCIL(IMSLEC)**

ACREDITATION OF TRAINING COURSES

**IMSLEC**

c/o Shelton School  
15720 Hillcrest  
Dallas, TX 75248  
972-774-1772 ext. 2227  
mcooley@shelton.org  
www.imslec.org

**ACADEMIC LANGUAGE THERAPY ASSOCIATION (ALTA)**

CERTIFICATION OF INDIVIDUALS FROM AN ACCREDITED TRAINING COURSE

**ALTA NATIONAL OFFICE**

14070 Proton Road, Suite 100, LB 9  
Dallas, Texas 75244  
Phone: 972-233-9107 x 208  
www.altaread.org  
office@altaread.org

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**REFERENCES**

**THE INTERNATIONAL DYSLEXIA SOCIETY  
(IDA)**

SOURCE OF INFORMATION ON DYSLEXIA AND RELATED DISORDERS

**IDA**

40 York Rd., 4th Floor  
Baltimore, MD 21204  
(410) 296-0232 Fax: (410) 321-5069  
www.interdys.org

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## REFERENCES

### CHILDREN / ADULTS WITH ATTENTION DEFICIT/HYPERACTIVITY DISORDER (CHADD)

#### CHADD National Office

8181 Professional Place - Suite 150  
Landover, MD 20785  
Tel: 301-306-7070 / Fax: 301-306-7090  
or call 617-777-5235 www.CHADD.org

#### EDWARD HALLOWELL, M.D.

Child And Adult Psychiatrist, Bestselling  
Author, Leading Authority In The Field Of ADHD.

www.drhallowell.com/meet-dr-hallowell/  
Email: HallowellEvents@drhallowell.com  
Or call 617-777-5235



### HOW SLP'S CAN BEST SERVE STUDENTS WITH SPECIFIC READING DISORDERS

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