



# HBIDA RESOURCE

HOUSTON BRANCH OF THE INTERNATIONAL DYSLEXIA ASSOCIATION

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- **Self-esteem: The Cause and Effect of Success for the Child with Learning Differences**  
by Richard D. Lavoie, M.A., M.ED.
- **Teaching Writing to Learn Content**  
by Joan Sedita
- **Handwriting in a Modern World: Why it Matters & What to Do About it**  
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- **Gifted and Dyslexic**
- **The Dyslexia-Stress-Anxiety Connection**
- **Understanding Dysgraphia**
- **Attention Deficit/Hyperactivity Disorder (AD/HD) and Dyslexia**
- **Dyslexia and the Brain**

2018

## ABOUT IDA

*The International Dyslexia Association (IDA) is a non-profit organization dedicated to helping individuals with dyslexia, their families and the communities that support them. IDA is the oldest learning disabilities organization in the nation—founded in 1949 in memory of Dr. Samuel T. Orton, a distinguished neurologist. IDA membership consists of a variety of professionals in partnership with individuals with dyslexia and their families. IDA actively promotes effective teaching approaches and intervention strategies for the educational management of dyslexia. The organization and its branches do not recommend or endorse any specific speaker, school, instructional program or remedial method. Throughout IDA's rich history, our goal has been to provide the most comprehensive forum for parents, educators, and researchers to share their experiences, methods, and knowledge.*

## ABOUT HBIDA

THE HOUSTON BRANCH OF THE INTERNATIONAL DYSLEXIA ASSOCIATION (HBIDA) was founded in 1978 at a meeting among parents and teachers. They were concerned for the education of children with language learning problems and wanted to create an organization to promote efforts to help those children.

HBIDA's predecessor, The Houston Branch of The Orton Society, was born. During the first two years of this group's existence, the Houston Branch grew from a membership of 28 to 140 individuals under the expert and devoted guidance of the first board. The officers included the late W. Oscar Neuhaus (President), Lenox Hutcheson Reed (Vice President), Fredda Parker (Recording Secretary), Elizabeth Wareing (Corresponding Secretary), and Marilyn Beckwith (Treasurer). The successful ABC Ball in 1986, co-chaired by Barbara Hurwitz and Judy Weiss, provided much needed operating capital for the Branch. The proceeds from the ball helped the Branch further its mission of disseminating information about dyslexia and provided scholarships for Houston-area teachers to attend a five-day workshop on dyslexia awareness. In 1995, the Houston Branch was host to the 46th Annual IDA National Conference, "Explore, Discover, Challenge," with 2,400 in attendance. Other endeavors of this Branch have included publication of "Dealing with Dyslexia," an annual Resource Directory, annual fall and spring conferences with nationally acclaimed speakers, and annual panel of college students with learning differences.

HBIDA welcomes your participation in all of the many activities we sponsor. We encourage you to join The International Dyslexia Association (IDA) and participate with us in HBIDA as we work together to increase awareness and support for individuals with learning differences in the Gulf Coast area. We are a 501(c)(3) non-profit organization. The members of the HBIDA Board are all volunteers who bring a diversity of skills to the organization.

## HBIDA OBJECTIVES

- Increase community awareness of dyslexia
- Encourage the use of scientifically-based reading instruction for individuals identified with dyslexia
- Support educational and medical research on dyslexia

## HBIDA Programs & Services

Spring Conference

Fall Symposium

College Panel

Parent Networking Group

Regional Group Events

Website

SCHOLARSHIP FUND for teachers and parents to attend our conference and symposium in memory of John Lopez, D.D.S.

SCHOLARSHIP FUND for educational diagnostic testing for children in memory of Nancy LaFevers Ambrose

NEWSLETTER published two times a year

RESOURCE DIRECTORY of articles, helpful local and national organizations and websites, and local service providers

HELPLINE for information and referral services:  
832.282.7154

SPEAKERS BUREAU OF PROFESSIONALS is available to present to your group about dyslexia.

Texas law (19 TAC §74.28) now requires that districts and charter schools must provide a parent education program for the parents/guardians of students with dyslexia and related disorders.

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P.O. Box 540504  
Houston, Texas 77254-0504  
[www.houstonida.org](http://www.houstonida.org)

## HBIDA PRESIDENT'S LETTER



*The whole world opened to me when I learned to read.* —MARY MCLEOD BETHUNE



IMAGINE NOT BEING ABLE TO READ and the impact it would have on your world. One of my responsibilities in my job at Neuhaus Education Center is overseeing an adult literacy program. It is one of the most rewarding positions I have ever held. It would be easy to fill this page with inspiring stories and quotes from our students. One student, after a year of attending classes, expressed his joy that he could now read the menu and choose what

he wanted to eat. He no longer had to rely on “the special” or whatever was pictured on the menu. Reading is freedom, even a freedom as simple as choosing your meal. Too many students require an adult literacy program after graduating from high school with a first or second grade reading level, while many are not even aware that help exists. Why is this still happening? We have the knowledge and tools to identify and teach struggling readers early, but there is still much work to be done.

In first grade, my daughter was diagnosed with dyslexia and began working with a wonderful dyslexia therapist. Her work was nothing short of miraculous. My daughter soon overcame her frustration with reading and regained her happiness. (*Thank you, Miss Tammy!*) Soon afterwards, I began my new path. I, too, wanted to give this gift of reading to children who were struggling. I learned about the Orton-Gillingham based program called Basic Language Skills and about the founders of Neuhaus Education Center. I learned about the Texas Dyslexia Law. I learned about the International Dyslexia Association and its very active Houston Branch. I learned about this awesome history of people who devoted so much of their lives to ensure that my daughter could read Dr. Seuss, that she could read a menu and choose what she wanted to eat for dinner, and that she would graduate from college.

An incredible foundation has been laid, yet there is still so much work to do. Depending upon the researcher you follow, 10-20% of the population has dyslexia! What can we do to help?

- *Talk about dyslexia.* There are useful Fact Sheets on the IDA website.
- *Advocate.* Stay abreast of political issues involving education and dyslexia. Let your congressional representative know your opinion. You may want to attach a letter to an IDA Fact Sheet or an HBIDA Resource Directory.
- *Support educators.* They want to help but do not always have the resources they need. They may not know about dyslexia or how to help your child.

- *Support the HBIDA John Lopez Fund.* It provides conference and symposium scholarships for teachers and parents.
- *Support the Nancy LaFavers Ambroze scholarship fund.* It assists with expenses for diagnostic testing for those in need.

The International Dyslexia Association’s mission is to create a future for all individuals who struggle with dyslexia and other related reading differences so that they may have richer, more robust lives and access to the tools and resources they need. Education is key. All teachers should know about reading and dyslexia. After all, a student has dyslexia 24 hours a day, 7 days a week; not just during reading intervention. When a child is struggling with reading and spelling, families need to know that help is available. It is never too late to improve reading and spelling and adults need to know that resources are available. Employers need to understand that staff members who misspell words or are reticent to read are still valuable members of the workforce. Legislators who are making decisions about schools and program funding must understand the importance of early and on-going reading intervention. These decisions impact our workforce, economy, and well-being.

We are all responsible for making a difference.

HBIDA welcomes your help. Call our helpline at 832-282-7154 or visit our website at [www.houstonida.org](http://www.houstonida.org) for more information. There are many opportunities to get involved and provide support. You can help by volunteering, donating, and/or by providing your voice. Become a member of IDA/HBIDA. Join the HBIDA Parent Networking Group. If you know someone who needs literacy help, refer them to HBIDA. Contact our helpline if you are interested in bringing a speaker or the HBIDA film panel to your school or organization.

This Resource Directory is a valuable tool, filled with information from experts in the field of dyslexia. If you need copies for your school or business, we can provide them. Visit our website at [www.houstonida.org](http://www.houstonida.org) to be informed about upcoming events. Attend our Spring Conference on March 3 and Fall Symposium on October 13, 2018. Other events will be posted on our website. Be sure to like us on Facebook!

We look forward to seeing you soon.

MARY YARUS, M.ED., LDT, CALT  
President

HOUSTON BRANCH  
INTERNATIONAL DYSLEXIA ASSOCIATION

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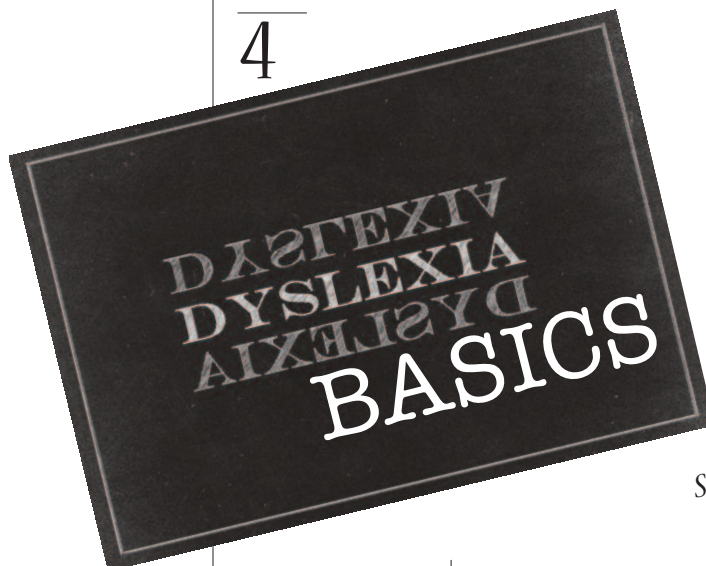
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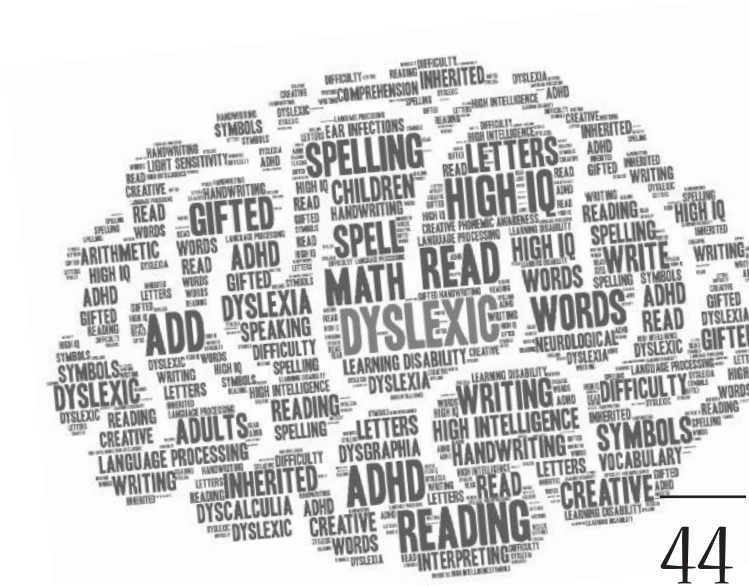
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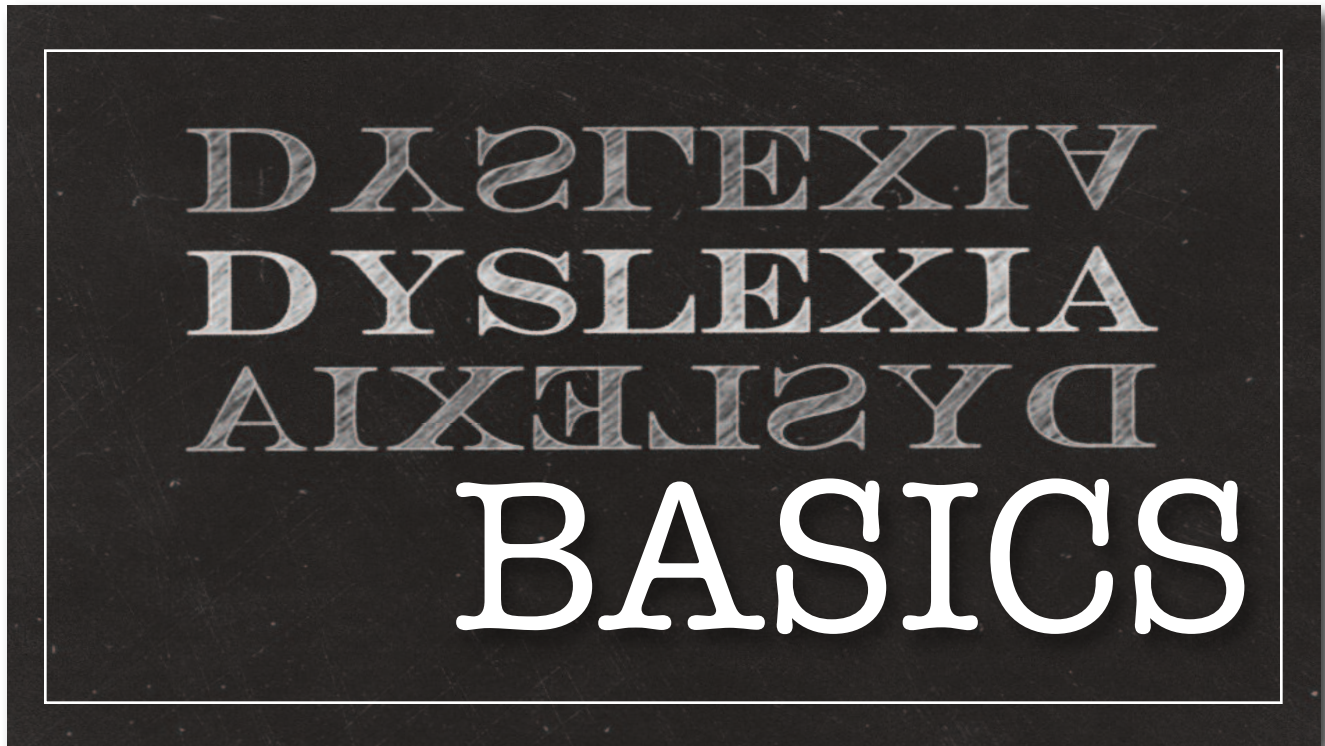
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Keys to  
**Content Literacy:**  
 Causes of Reading Comprehension  
 Difficulty and Instruction Solutions

2018 ANNUAL HBIDA  
 CONFERENCE  
 SATURDAY, MARCH 3, 2018



## What is dyslexia?

Dyslexia is a language-based learning disability. Dyslexia refers to a cluster of symptoms which result in people having difficulties with specific language skills, particularly reading. Students with dyslexia usually experience difficulties with other language skills such as spelling, writing, and pronouncing words. Dyslexia affects individuals throughout their lives; however, its impact can change at different stages in a person's life. It is referred to as a learning disability because dyslexia can make it very difficult for a student to succeed academically in the typical instructional environment, and in its more severe forms, will qualify a student for special education, special accommodations, or extra support services.

### What causes dyslexia?

The exact causes of dyslexia are still not completely clear, but anatomical and brain imagery studies show differences in the way the brain of a dyslexic person develops and functions. Moreover, most people with dyslexia have been found to have problems with identifying the separate speech sounds within a word and/or learning how letters represent those sounds, a key factor in their reading difficulties. Dyslexia is not due to either lack of intelligence or desire to learn; with appropriate teaching methods, dyslexics can learn successfully.

### How widespread is dyslexia?

About 13–14% of the school population nationwide has a handicapping condition that qualifies them for special education. Current studies indicate that one-half of all the students who qualify for special education are classified as having a learning disability (LD) (6–7%). About 85% of those LD students have a primary learning disability in reading and language processing. Nevertheless, many more people—perhaps as many as 15–20% of the population as a whole—have some of the symptoms of dyslexia, including

slow or inaccurate reading, poor spelling, poor writing, or mixing up similar words. Not all of these will qualify for special education, but they are likely to struggle with many aspects of academic learning and are likely to benefit from systematic, explicit, instruction in reading, writing, and language.

Dyslexia occurs in people of all backgrounds and intellectual levels. People who are very bright can be dyslexic. They are often capable or even gifted in areas that do not require strong language skills, such as art, computer science, design, drama, electronics, math, mechanics, music, physics, sales, and sports.

In addition, dyslexia runs in families; dyslexic parents are very likely to have children who are dyslexic. Some people are identified as dyslexic early in their lives, but for others, their dyslexia goes unidentified until they get older.

### What are the effects of dyslexia?

The impact that dyslexia has is different for each person and depends on the severity of the condition and the effectiveness of instruction or remediation. The core difficulty is with word recognition and reading fluency, spelling, and writing. Some dyslexics manage to learn early reading and spelling tasks, especially with excellent instruction, but later experience their most debilitating problems when more complex language skills are required, such as grammar, understanding textbook material, and writing essays.

People with dyslexia can also have problems with spoken language, even after they have been exposed to good language models in their homes and good language instruction in school. They may find it difficult to express themselves clearly, or to

fully comprehend what others mean when they speak. Such language problems are often difficult to recognize, but they can lead to major problems in school, in the workplace, and in relating to other people. The effects of dyslexia reach well beyond the classroom.

Dyslexia can also affect a person's self-image. Students with dyslexia often end up feeling "dumb" and less capable than they actually are. After experiencing a great deal of stress due to academic problems, a student may become discouraged about continuing in school.

### How is dyslexia diagnosed?

Schools may use a new process called Response to Intervention (RTI) to identify children with learning disabilities. Under an RTI model, schools provide those children not readily progressing with the acquisition of critical early literacy skills with intensive and individualized supplemental reading instruction. If a student's learning does not accelerate enough with supplemental instruction to reach the established grade-level benchmarks, and other kinds of developmental disorders are ruled out, he or she may

be identified as learning disabled in reading. The majority of students thus identified are likely dyslexic and they will probably qualify for special education services. Schools are encouraged to begin screening children in kindergarten to identify any child who exhibits the early signs of potential reading difficulties. In Texas, schools are required by law to do this.

For children and adults who do not go through this RTI process, an evaluation to formally diagnose dyslexia is needed. Such an evaluation traditionally has included intellectual and academic

## Early identification and treatment is the key to helping dyslexics achieve in school and in life.

achievement testing, as well as an assessment of the critical underlying language skills that are closely linked to dyslexia. These include receptive (listening) and expressive language skills, phonological skills including phonemic awareness, and also a student's ability to rapidly name letters and names. A student's ability to read lists of words in isolation, as well as words in context, should also be assessed. If a profile emerges that is characteristic of dyslexic readers, an individualized intervention plan should be developed, which should include appropriate accommodations, such as extended time. The testing can be conducted by trained school or outside specialists. (See the Testing for Dyslexia Fact Sheet for more information.)

### What are the signs of dyslexia?

The problems displayed by individuals with dyslexia involve difficulties in acquiring and using written language. It is a myth that dyslexic individuals "read backwards," although spelling can look quite jumbled at times because students have trouble remembering letter symbols for sounds and forming memories for words. Other problems experienced by dyslexics include the following:

- Learning to speak
- Learning letters and their sounds
- Organizing written and spoken language
- Memorizing number facts
- Reading quickly enough to comprehend
- Persisting with and comprehending longer reading assignments
- Spelling
- Learning a foreign language
- Correctly doing math operations

Not all students who have difficulties with these skills are dyslexic. Formal testing of reading, language, and writing skills is the only way to confirm a diagnosis of suspected dyslexia.

### How is dyslexia treated?

Dyslexia is a life-long condition. With proper help, many people with dyslexia can learn to read and write well. Early identification and treatment is the key to helping dyslexics achieve in school and in life. Most people with dyslexia need help from a

teacher, tutor, or therapist specially trained in using a multisensory, structured language approach. It is important for these individuals to be taught by a systematic and explicit method that involves several senses (hearing, seeing, touching) at the same time. Many individuals with dyslexia need one-on-one help so that they can move forward at their own pace. In addition, students with dyslexia often need a great deal of structured practice and immediate, corrective feedback to develop automatic word recognition skills. When students with dyslexia receive academic therapy outside of school, the therapist should work closely with classroom teachers, special education providers, and other school personnel.

Schools can implement academic accommodations and modifications to help dyslexic students succeed. For example, a student with dyslexia can be given extra time to complete tasks, help with taking notes, and work assignments that are modified appropriately. Teachers can give taped tests or allow dyslexic students to use alternative means of assessment. Students can benefit from listening to books on tape and using the computer for text reading programs and for writing.

Students may also need help with emotional issues that sometimes arise as a consequence of difficulties in school. Mental health specialists can help students cope with their struggles.

### What are the rights of a dyslexic person?

The Individuals with Disabilities Education Act 2004 (IDEA), Section 504 of the Rehabilitation Act of 1973, and the Americans with Disabilities Act (ADA) define the rights of students with dyslexia and other specific learning disabilities. These individuals are legally entitled to special services to help them overcome and accommodate their learning problems. Such services include education programs designed to meet the needs of these students. The Acts also protect people with dyslexia against unfair and illegal discrimination.✕

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# Understanding the Special Education Process

## HOW THE PROCESS WORKS

1. Parents, school personnel, students or others may make a request for evaluation. If you request an evaluation to determine whether your child has a disability and needs special education, the school district must complete a full and individual evaluation. If the school district refuses to conduct the evaluation, it must give you appropriate notice, and let you know your rights.

You must give permission in writing for an initial (first-time) evaluation, and for any tests that are completed as part of a re-evaluation.

2. A team of qualified professionals and you will review the results of the evaluation, and determine if your child is eligible for special education services.

If your child is not eligible, you will be appropriately notified and the process stops. However, you have a right to disagree with the results of the evaluation or the eligibility decision.

3. If you disagree with the results of an evaluation, you have a right to an Independent Educational Evaluation (IEE). Someone who does not work for the school district completes the IEE. The school district must pay for the IEE or show an impartial due process hearing (see definitions below) that its evaluation is appropriate.

4. If you and the school district agree that your child is eligible for services, you and the school staff will plan your child's Individualized Education Program (IEP) at an IEP team meeting. You are an equal member of this team. Some states may have a different name for the IEP team meeting.

5. The IEP lists any special services your child needs, including goals your child is expected to achieve in one year, and objectives or benchmarks to note progress. The team determines what services are in

the IEP as well as the location of those services and modifications. At times, the IEP and placement decisions will take place at one meeting. At other times, placement may be made at a separate meeting (usually called a placement meeting).

Placement for your child must be in the Least Restrictive Environment (LRE) appropriate to your child's needs. He or she will be placed in the regular classroom to receive services unless the IEP team determines that, even with special additional aids and services, the child cannot be successful there. You are part of any group that decides what services your child will receive and where they will be provided.

6. If you disagree with the IEP and/or the proposed placement, you should first try to work out an agreement with your child's IEP team. If you still disagree, you can use your due process rights.
7. If you agree with the IEP and placement, your child will receive the services that are written into the IEP. You will receive reports on your child's progress at least as often as parents are given reports on their children who do not have disabilities. You can request that the IEP team meet if reports show that changes need to be made in the IEP.
8. The IEP team meets at least once per year to discuss progress and write any new goals or services into the IEP. As a parent, you can agree or disagree with the proposed changes. If you disagree, you should do so in writing.
9. If you disagree with any changes in the IEP, your child will continue to receive the services listed in the previous IEP until you and school staff reach agreement. You should discuss your concerns with the other members of the IEP team. If you continue to disagree with the IEP, there are several things you can do, including asking for additional testing or an Independent Educational Evaluation (IEE), or resolving the disagreement using due process.
10. Your child will continue to receive special education services if the team agrees that the services are needed. A re-evaluation is completed at least once every three years to see if your child continues to be eligible for special education services, and what services he or she needs. ✕

## Key Terms

**DUE PROCESS** protects the right of parents to have input into their child's educational program and to take steps to resolve disagreements. When parents and school districts disagree with one another, they may ask for an impartial hearing to resolve issues. Mediation must also be available.

**MEDIATION** is a meeting between parents and the school district with an impartial person, called a mediator, who helps both sides come to an agreement that each finds acceptable.

An **IMPARTIAL DUE PROCESS** hearing is a meeting between parents and the school district where each side presents his position, and a hearing officer makes the decision about what is the appropriate educational program, based on requirements in law.

School districts must give parents a written copy of special education procedural safeguards. This document outlines the steps for due process hearings and mediation. A copy of their procedural safeguards must be given to parents once each year except that a copy also shall be given to them:

- a. upon initial referral or parental request for evaluation;
- b. upon the first occurrence of the filing of a complaint under subsection (b)(6); and
- c. upon their request.

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FROM THE INTERNATIONAL DYSLEXIA ASSOCIATION.

# IS MY CHILD DYSLEXIC?

Individuals with dyslexia have trouble with reading, writing, spelling and/or math even though they have the ability and have had opportunities to learn. Individuals with dyslexia can learn, but they often need specialized instruction to overcome the problem. Often these individuals, who have talented and productive minds, are said to have a language learning difference.

# COMMON CHARACTERISTICS OF DYSLEXIA

Most of us have one or two of these characteristics. That does not mean that everyone has dyslexia. *A person with dyslexia usually has several of these characteristics that persist over time and interfere with his or her learning.*

## ORAL LANGUAGE

- Late learning to talk
- Difficulty pronouncing words
- Difficulty acquiring vocabulary or using age appropriate grammar
- Difficulty following directions
- Confusion with before/after, right/left, and so on
- Difficulty learning the alphabet, nursery rhymes, or songs
- Difficulty understanding concepts and relationships
- Difficulty with word retrieval or naming problems

## READING

- Difficulty learning to read
- Difficulty identifying or generating rhyming words, or counting syllables in words (phonological awareness)
- Difficulty with hearing and manipulating sounds in words (phonemic awareness)
- Difficulty distinguishing different sounds in words (phonological processing)
- Difficulty in learning the sounds of letters (phonics)
- Difficulty remembering names and shapes of letters, or naming letters rapidly
- Transposing the order of letters when reading or spelling

- Misreading or omitting common short words
- “Stumbles” through longer words
- Poor reading comprehension during oral or silent reading, often because words are not accurately read
- Slow, laborious oral reading

## WRITTEN LANGUAGE

- Difficulty putting ideas on paper
- Many spelling mistakes
- May do well on weekly spelling tests, but may have many spelling mistakes in daily work
- Difficulty proofreading

## OTHER COMMON SYMPTOMS THAT OCCUR WITH DYSLEXIA

- Difficulty naming colors, objects, and letters rapidly, in a sequence (RAN: rapid automatized naming)
- Weak memory for lists, directions, or facts
- Needs to see or hear concepts many times to learn them
- Distracted by visual or auditory stimuli
- Downward trend in achievement test scores or school performance
- Inconsistent school work
- Teacher says, “If only she would try harder,” or “He’s lazy.”
- Relatives may have similar problems

# COMMON CHARACTERISTICS OF OTHER RELATED LEARNING DISORDERS

## DYSGRAPHIA (HANDWRITING)

- Unsure of handedness
- Poor or slow handwriting
- Messy and unorganized papers
- Difficulty copying
- Poor fine motor skills
- Difficulty remembering the kinesthetic movements to form letters correctly

## DYSPRAXIA (MOTOR SKILLS)

- Difficulty planning and coordinating body movements
- Difficulty coordinating facial muscles to produce sounds

## EXECUTIVE FUNCTION/ ORGANIZATION

## DYSCALCULIA (MATH)

- Difficulty counting accurately
- May misread numbers
- Difficulty memorizing and retrieving math facts
- Difficulty copying math problems and organizing written work
- Many calculation errors
- Difficulty retaining math vocabulary and concepts

- Loses papers
- Poor sense of time
- Forgets homework
- Messy desk
- Overwhelmed by too much input
- Works slowly

If your child is having difficulties learning to read and you have noted several of these characteristics in your child, he or she may need to be evaluated for dyslexia or a related disorder.

## ADHD—ATTENTION-DEFICIT/ HYPERACTIVITY DISORDER (ATTENTION)

- Inattention
- Variable attention
- Distractibility
- Impulsivity
- Hyperactivity

## WHAT KIND OF INSTRUCTION DOES MY CHILD NEED?

Dyslexia and other related learning disorders cannot be cured. Proper instruction promotes reading success and alleviates many difficulties associated with dyslexia. Instruction for individuals with reading and related learning disabilities should be:

- Intensive – given every day or very frequently for sufficient time.
  - Explicit – component skills for reading, spelling, and writing are explained, directly taught, and modeled by the teacher. Children are discouraged from guessing at words.
  - Systematic and cumulative – has a definite, logical sequence of concept introduction; concepts are ordered from simple to more complex; each new concept builds upon
- previously introduced concepts, with built in review to aid memory and retrieval.
  - Structured – has step-by-step procedures for introducing, reviewing, and practicing concepts.
  - Multisensory – links listening, speaking, reading, and writing together; involves movement and “hands on” learning. ✕

## SUGGESTED READINGS

Moats, L. C., & Dakin, K. E. (2007). *Basic facts about dyslexia and other reading problems*. Baltimore: The International Dyslexia Association.

Shaywitz, S. (2003). *Overcoming dyslexia: A new and complete science-based program for reading problems at any level*. New York: Knopf.

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“Promoting literacy through research, education and advocacy”™

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Fact sheet revised September 2008.

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# Self-esteem: The Cause and Effect of Success for the Child with Learning Differences

THE CONCEPT OF SELF-ESTEEM has become the topic of much debate in educational and psychological circles in recent years. A virtual movement and several "cottage industries" have sprung up in response to this debate. As a result, the critically important concept of self-esteem has become the object of both ridicule and adoration. Confusion reigns!

The seminal question in this "tastes great/less filling" debate is simply this: "Does competence build self-esteem or does self-esteem build competence?"



I feel that the debate is a fallacious one because **both** sides of the argument are correct. A dynamic relationship exists between self-esteem and skill development. It is a relationship wherein one side of the equation increases at a parallel rate to the other side. As a child improves in self-esteem, his academic competence increases. And as that competence increases, his self-esteem improves. The caring and concerned caregiver must come to realize that positive self-esteem is both a **prerequisite** and a **consequence** of academic success.

Self-esteem is commonly defined as the belief that a person is accepted, connected, unique, powerful, and capable. Self-esteem issues take on a particular significance for students with learning or attention problems because self-assessment of this concept requires the ability to evaluate and compare. These are two skills that are extraordinarily challenging for students with special needs. Therefore, these children are often unable to accurately measure or assess their own self-esteem.

Because self-esteem is a feeling - not a skill - it can only be measured by observing the way in which a person acts or behaves. Teachers and parents must become keen and insightful observers of children in order to assess their self-esteem.

Students with **high self-esteem** will:

- **Feel capable of influencing another's opinions or behaviors in a positive way.**
- **Be able to communicate feelings and emotions in a variety of situations.**
- **Approach new situations in a positive and confident manner.**
- **Exhibit a high level of frustration tolerance.**

- **Accept responsibility.**
- **Keep situations (*positive and negative*) in proper perspective.**
- **Communicate positive feelings about themselves.**
- **Possess an internal locus of control (*belief that whatever happens to them is the result of their own behavior and actions*).**

Conversely, students with **low self-esteem** will:

- **Consistently communicate self-derogatory statements.**
- **Exhibit learned helplessness.**
- **Not volunteer.**
- **Practice perfectionism.**
- **Be overly dependent.**
- **Demonstrate an excessive need for acceptance: a great desire to please authority figures.**
- **Have difficulty making decisions.**
- **Exhibit low frustration tolerance.**
- **Become easily defensive**
- **Have little faith in their own judgment and be highly vulnerable to peer pressure.**

We would all do well to be mindful of the sage words of Great Britain's classic *Plowden Report*:

**"The best preparation for being a happy and useful adult is to live fully as a child."**

—Richard Lavoie, 2002

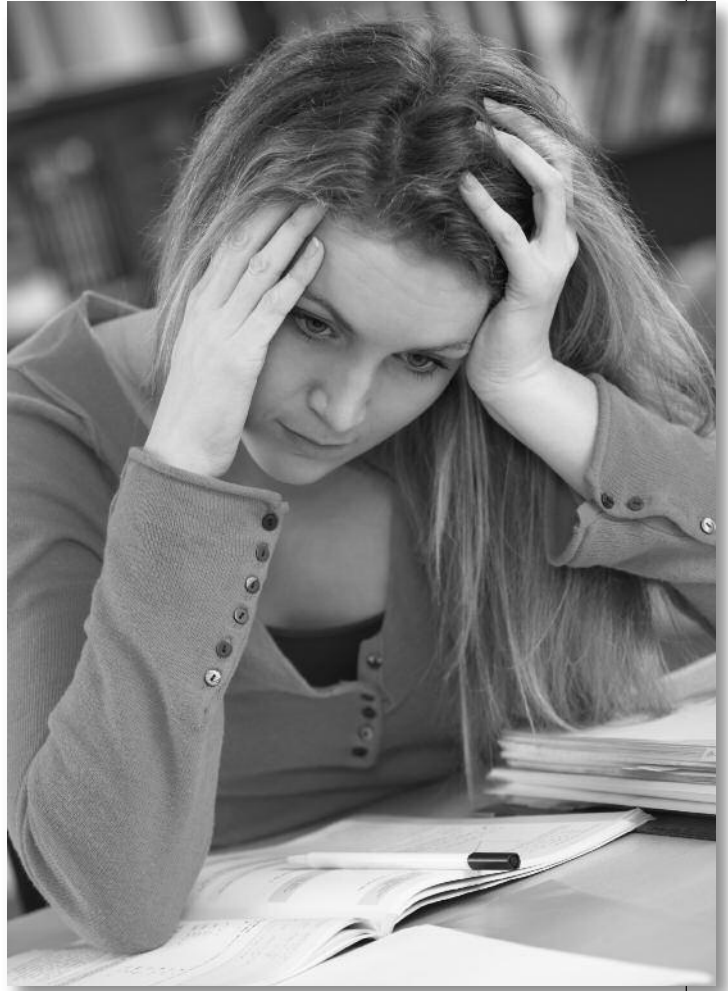


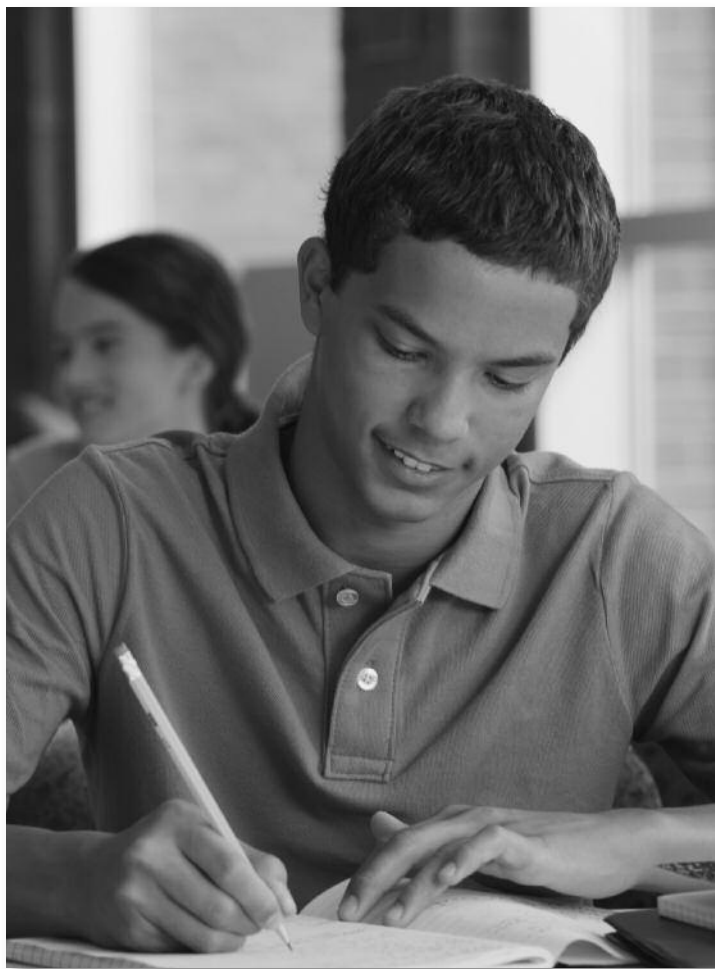


# Teaching Writing to Learn Content

## CLASSROOM SCENARIO:

In a middle school history class, the students are writing about several pieces of text that include a primary source, a textbook section, and a history magazine article. The writing assignment is to answer an extended response question by synthesizing information and using text evidence from the three sources. The teacher has given the students a set of guidelines that describes the purpose and type of the writing, the suggested length of the piece, and specific requirements such as how many main ideas should be included. The teacher has differentiated the assignment to meet the needs of students with a variety of writing skills. Scaffolds such as a pre-writing template have been provided for students who struggle with planning strategies. The teacher has provided models of good writing samples and has also provided opportunities for students to collaborate at various stages of the writing process. This is a classroom where the teacher is teaching students to write and also using writing to help them learn content. Unfortunately, classrooms like this are rare.





Along with reading comprehension, writing skill is a predictor of academic achievement and essential for success in post-secondary education. Students need and use writing for many purposes (*e.g., to communicate and share knowledge, to support comprehension and learning, to explore feelings and beliefs*). Writing skill is also becoming a more necessary skill for success in a number of occupations<sup>1</sup>. The goal of content writing instruction is to teach students how to use writing to learn content—that is, writing to learn.

Unfortunately, there are far too many students in the United States today who do not write well enough to meet grade-level demands. The writing assessment scores for grades 8 and 12 of the 2011 NAEP (National Assessment of Educational Progress) show that the number of students who do not reach proficient for their grade level remains at very high levels: 73% of eighth graders and 73% of twelve graders.<sup>2</sup> About a third of high school students intending to enter higher education do not meet readiness benchmarks for college-level English composition courses, and among certain ethnic groups,

the percent is higher: 50%.<sup>3</sup> Once in college, 20% of first-year college students require a remedial writing class and more than half of them are unable to write a paper relatively free of errors.<sup>3</sup> At least a quarter of new community college students enroll in remedial writing courses.<sup>4</sup> Compounding the problem, remedial enrollments appear to underestimate the number of students with reading and writing difficulties.

The good news is that we have a very good idea of what students need to acquire in order to become good writers. There is a significant amount of research that has been conducted and reviewed on effective writing instruction<sup>5</sup>. State literacy standards place a significant emphasis on teaching students in all subjects how to write and how to use writing to learn.<sup>6</sup> The key is getting this information to teachers, including teachers of science, social studies, math, English and other content areas.

It is often assumed that the job of teaching students how to write belongs to English language arts teachers. However, the truth is that they cannot do it alone and content teachers are needed to support learning to write. Writing to learn skills in particular are best taught by content teachers because they understand how to show examples of subject-specific writing, teach students how to write about subject-specific text, and provide feedback to students about content-based writing assignments. From grades four through twelve, content teachers are in a unique position to teach students how to write like a scientist, mathematician, historian, or literary author. This is described in the literature as disciplinary literacy.

### **What does the research say about effective writing instruction for grades 4 through 12?**

There are three broad findings that are consistent in the research on effective writing instruction:<sup>8</sup>

1. Teach the steps in the writing process
2. Explicitly teach writing strategies that are used at each step of the writing process
3. Increase how much students write – the more they write the better they get at writing

In their seminal report *Writing Next*, Graham and Perin<sup>7</sup> identified eleven elements of writing instruction that were found to be effective for

helping students in grades four through twelve learn to write well and to use writing as a tool for learning. These elements were recommended based on a large-scale statistical review of research (called a meta-analysis). The elements are: Writing Strategies; Summarization; Collaborative Writing; Specific Product Goals; Word Processing; Sentence Combining; Prewriting; Inquiry Activities; Process Writing Approach; Study of Models; Writing for Content Learning.

A second report, by Graham and Hebert, based on meta-analysis of research on effective content writing was *Writing to Read*.<sup>8</sup> The report presented three recommendations: (1) have students write about the texts they read; (2) teach students the writing skills and processes that go into creating text; (3) increase how much students write.

### Effective Content Writing Instruction

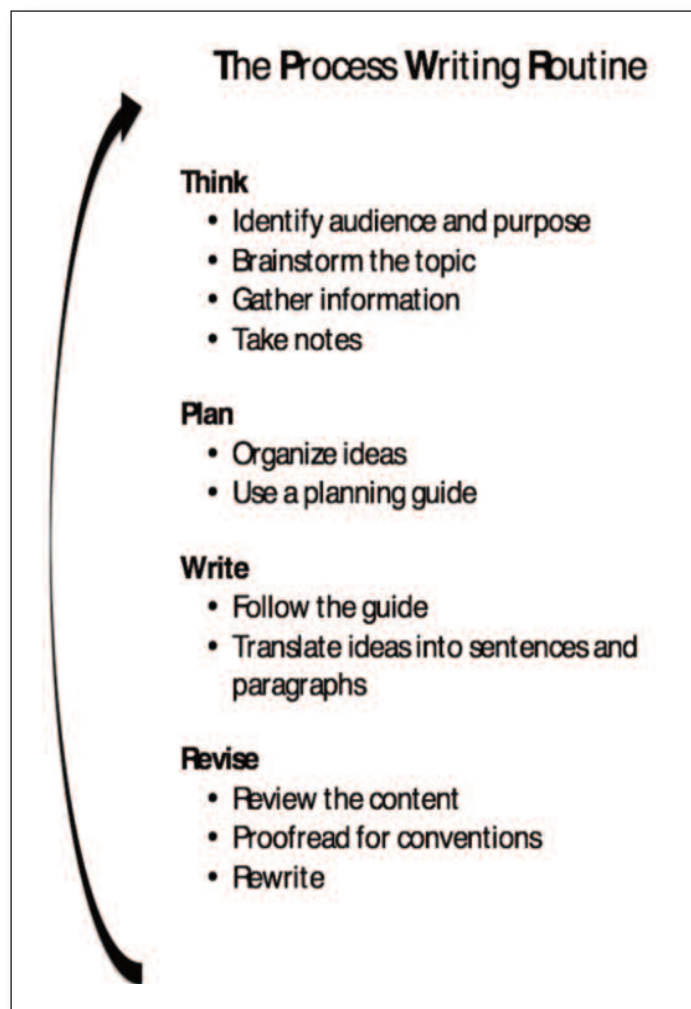
#### *Teach the Steps in the Writing Process*

It was noted earlier that teaching students the steps of the writing process was one of the eleven recommendations of the *Writing Next* report.<sup>8</sup> In 1980, Hayes and Flower published their seminal book chapter titled *Identifying the Organization of Writing Processes* in which they identified the actual mental behaviors of experienced writers at work.<sup>9</sup> Over the years, the model was informed by new research and substantially reconceptualized, 10 resulting in four major stages:

1. **Pre-Writing** (*reflection, selecting a topic, planning what to say*)
2. **Text Production** (*writing a draft*)
3. **Revising** (*reflection, making changes to improve the writing*)
4. **Editing** (*proofreading*)

The writing process is dynamic and recursive – writers repeat and revisit the stages several times as they develop a piece of writing. For example, a student may discover while he is writing a first draft that he needs to go back to the pre-writing stage to gather and organize more information about the topic. Similarly, while revising the draft, the student may discover he needs to change the way he originally planned to organize the content. Figure 1 is an example of a student writing routine based on the writing process.<sup>11</sup>

Figure 1



Source: Sedita, J. (2012)  
*Keys to Content Writing*. Rowley, MA;  
 Keys to Literacy.

Students need to be taught what each stage is, the skills and strategies they need to apply at each stage, and to make sure they do not skip any of the stages when they write. The more effort they put into pre-writing, the better the finished the product will be. Students also need to know that in some cases a piece of writing is never finished – further thinking and editing can always improve the piece. While students should know that it is not practical to develop multiple drafts for every writing piece (*e.g., an email message or a note to a family member*), but for important writing assignments, such as key homework assignments and research reports, students need to get in the habit of revising and rewriting.

## *Explicitly Teach Writing Strategies That are Used at Each Stage of the Writing Process*

Explicitly teaching strategies for each stage of the writing process has a strong impact on the quality of all students' writing, and it has been found especially effective for students who have difficulty writing. Strategy instruction can include teaching generic skills such as brainstorming a topic or how to use transition words, or it can include teaching strategies for a specific writing task such as how to write a summary or an argument.<sup>12</sup>

### *Teach Text Structure*

Students need to understand text structures in order to write well. When students write, they have to work through four structural levels: word structure, sentence structure, paragraph structure, and overall text structure. Difficulties on any level may cause writing to suffer.<sup>13</sup> Knowledge of word structure includes the ability to spell words correctly and join suffixes and prefixes to root words. Students need knowledge of the other three levels of text structure in order to organize and express



their ideas in writing. In this sense, text structure represents thinking.<sup>14</sup>

Knowledge of overall text structures includes recognizing that each type and genre of writing has a different overall structure for how the ideas and information are organized. State literacy standards require students to learn the differences and similarities between narrative, informational, and argument writing types. Narrative text structures is usually based on a sequence of events as well as literary elements such as setting, characters, and theme. Informational text is usually organized around hierarchies of topics and sub-topics. Argument writing is typically organized around a stated claim, reasons with evidence that back the claim, and a counterclaim with a rebuttal of that counterclaim. Some writing genres have unique structure, such as poetry, plays, and certain types of content-writing tasks such as a science lab report or a biography. It is important to make a distinction between text features and text structure. Text features includes thing such as headings, glossary, table of contents, and captions for illustrations. Text structure focuses more on how ideas and information are organized at the sentence, paragraph, and overall text levels.

State literacy standards also require students to learn to use several text structures that are common to all three types of writing: introductions, conclusions, and transition words and phrases (*e.g., at first, after, lastly, another, likewise, above all, for example, as a result*). Transitions can do a lot to help students make connections among sentences and paragraphs.

It should be noted that knowledge of text structure also aids comprehension. Text structure refers to how a piece of text is built. When students are writing, they use text structure to construct, and when they are reading they use text structure to deconstruct in order to make meaning. Increasing student knowledge of text structure improves reading comprehension and writing ability.<sup>15</sup>

### *Follow a Teaching Routine*

There are a number of best practices that teachers of any subject should incorporate when they assign writing tasks to students. Taken together, these practices constitute a teaching routine. Research finds that establishing a predictable routine that

permits ample practice with skills and strategies should be an essential component of a strong writing curriculum, regardless of grade or student writing ability.<sup>16</sup> Sedita has developed a teaching routine that includes six components: Set Writing Goals; Show Models; Provide Scaffolds; Provide Opportunities for Collaboration; Provide Feedback; and Provide Opportunities for Revision.<sup>17</sup> This routine embeds the most important research findings about effective writing instruction. Figure 2 provides details about each component of the routine.<sup>18</sup>

### Provide Scaffolds

Scaffolding describes a type of assistance offered by a teacher to support learning. It is one of the principles of effective instruction that enables teachers to accommodate individual student needs. When you scaffold, you help a student master a task or concept that the student is initially unable to grasp independently. The amount of scaffolding is gradually released as the student becomes

independent with his ability to complete the task or understand the concept.<sup>19</sup>

There are several types of scaffolding:<sup>20</sup>

**Content Scaffolding:** The teacher introduces simpler concepts and skills and slowly guides students through more challenging concepts and skills.

**Task Scaffolding:** The student proceeds from easier to more difficult tasks and activities.

**Material Scaffolding:** A variety of materials are used to guide student’s thinking, including partially completed graphic organizers or templates.

**Instructional Scaffolding:** The teacher demonstrates, models through the use of a think aloud, provides prompts, questions, or a set of steps that students can follow by instructing themselves through the steps. ✕

<p><b>Set Writing Goals</b></p>	<p><u>Identify and clarify the writing task:</u> set specific product goals that include characteristics of the finished product. This includes identifying the audience and purpose, providing guidelines about length, suggestions about the type of writing to be used (e.g., narrative, informational, argument), suggested format, and requirements for the finished product.</p> <p><u>Identify specific student goals:</u> when possible, provide students individual objectives to focus on a particular aspect of their writing.</p> <p>Goal-setting can be the basis for grading writing assignments.</p>
<p><b>Show Models</b></p>	<ul style="list-style-type: none"> <li>• Provide students with opportunities to read, analyze, and emulate models of good writing.</li> <li>• Show models of every step in the writing process.</li> <li>• Provide models of what the completed writing assignment should look like.</li> </ul>
<p><b>Provide Scaffolds</b></p>	<p>Provide supports for completing a writing task such as assignment guides, steps to follow, graphic organizers, two-column notes, or writing templates.</p>
<p><b>Provide Opportunities for Collaboration</b></p>	<p>Provide opportunities for students to work together and with the teacher to plan, draft, revise, and edit their writing. Collaboration engages students more in the writing process because writing is a social activity that is best learned in a community.</p>
<p><b>Provide Feedback</b></p>	<ul style="list-style-type: none"> <li>• The feedback you give students matters as much as the writing instruction you provide. Without feedback, students won’t learn how to improve their writing.</li> <li>• Students need to know if their writing is accurate and conveying the message.</li> <li>• Feedback can be from the teacher, peers, or the student himself.</li> <li>• Feedback should be more than marking mechanical errors on final drafts.</li> <li>• Teachers should:             <ul style="list-style-type: none"> <li>– provide feedback throughout the writing process</li> <li>– focus on the content of the writing first, mechanics later</li> <li>– provide feedback that is descriptive, specific, and based on the individual needs of the student</li> <li>– provide feedback checklists</li> </ul> </li> </ul>
<p><b>Provide Opportunities for Revision</b></p>	<p>Students need time to reflect on self-assessment and feedback from others, and then improve their drafts through revision. Students need explicit instruction in how to incorporate feedback to revise their writing. Not every writing task has to be revised to the point of “publication ready”, but students will not improve their writing skills if they do not have some opportunities to revise based on feedback.</p>

Figure 2

Source: Sedita, J. (2012, 2015). *Keys to Content Writing*. Rowley, MA: Keys to Literacy.

## Endnotes

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2. National Center for Education Statistics (2012).
3. (Intersegmental Committee of the Academic Senates, 2002 as cited in Graham, MacArthur, & Fitzgerald (2007).
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# Handwriting in a Modern World: Why It Matters & What To Do About It

IN MY THIRD SUMMER AT CAMP DUNNABECK at Kildonan, the oldest summer camp for students with dyslexia in the country, I was assigned two older students who had incredible difficulty with handwriting, a fact that impacted their writing output severely.

Throughout the summer, Diana Hanbury King, one of my mentors and the founder of Dunnabeck, tirelessly worked with me so that I could learn to help these two middle schoolers remediate their handwriting to a level of automaticity. This work was at once challenging and tedious, but what I learned in that one summer dramatically impacted the value I place on handwriting and its instruction and expanded the techniques at my disposal for remediating it. What intrigues me now, twenty-five years later, is how much current research supports what I learned about teaching handwriting from King and those two students that summer and in my professional work with students and teachers ever since.

## Using Research to Inform Practice

One of the greatest frustrations struggling writers face is the inability to capture their fine ideas on paper. Difficulty with transcription skills, and in particular the motor component, significantly hinders a student's ability to get ideas onto paper. Though handwriting does not correlate with intelligence, poor and inefficient handwriting clogs students' working memory, preventing them from writing their thoughts in a way commensurate with their intelligence. Instruction in handwriting, then, is not about making handwriting

pretty or perfect but instead about automatizing letter and word formations to free up working memory for the significant idea management necessary for good writing.

Unfortunately, handwriting instruction has been de-emphasized or sidelined in many educational settings, to the detriment of students' literacy skills. Even in the 21<sup>st</sup> century, when students have ready access to technology, automatic handwriting is an important "cornerstone of literacy" (Sheffield).

It should come as no surprise that handwriting impacts the writing process. Graham et al (2009) found that the handwriting of students 3<sup>rd</sup> grade and below, both regular ed and L.D., may impede text generation. Further, they found that students benefit from direct and explicit handwriting instruction. Mather et al (2009) found that "rapid, legible, and comfortable handwriting facilitates writing production." In addition, Berninger (2012) and Graham et al (2009) found that automatized handwriting significantly improves not just the quantity of students' writing but also its quality. The research is convincing across the board: handwriting is important to the writing process, and direct, explicit handwriting instruction makes fluent handwriting happen.

Compellingly, handwriting instruction also positively affects reading skills. Research indicates a causal link between teaching manuscript and improved reading skills. In a controlled study of low-achieving first graders, manuscript taught in isolation improved reading (Berninger et al. as cited in Wolf and Berninger, 2018). It is logical to assume that learning to form letters "in a





FIGURE 1A: HANDWRITING GRIP



FIGURE 1B: GOOD GRIP

format that children will encounter when they read” will strengthen their reading skills (Wolf and Berninger, 2018). Berninger (2012) found that “learning to form letters by hand improves perception of letters and contributes to better reading and spelling.” Moreover, James, Jao, & Berninger (2016) found that “writing is essential for developing the networks involved in letter processing” and also that “learning to write and perceive letters during early childhood may affect learning to spell and read words during middle childhood.” Berninger, Wolf, and Abbott (2016) found that handwriting instruction embedded into a multi-sensory, Orton-Gillingham based instructional curriculum helped students show more growth in both reading and spelling than did their peers who had no such handwriting component embedded into their instruction.

Instructors who make statements such as, “We don’t have time for handwriting” or “I’ve got too many other things to do with my class” miss the link between handwriting as a foundational transcription skill and other skills necessary to develop, such as reading, spelling, and composition. Poor, illegible, laborious handwriting negatively impacts all the skills these teachers are teaching, and thus it serves as an essential component of a structured language-based lesson.

Handwriting fluency, like reading fluency, involves a combination of accuracy and speed, and the long-term impact of handwriting development is surprising. Graham et al (2009) found that 42% of the variability in the quality of the writing of students in 4th-6th grade involves handwriting and that students’ handwriting speed continues to increase at least until Grade 9. In essence this foundational skill impacts reading, writing, and spelling, not only more significantly than many people once believed but also for a longer period of time in a student’s development as a writer. Students complete written assignments with greater regularity when they have grade-appropriate handwriting (McMenamin & Martin as cited in Wolf and Berninger, 2018), and those students with poor handwriting resulting in slow notetaking struggle with lecture comprehension (Strickling as cited in Wolf and Berninger, 2018). Even college students in several recent studies learned material more efficiently and thoroughly when they took notes by hand than when they used a word processor to record those notes. Born at the end of the 20<sup>th</sup> century, these students have had technology all their lives, yet they still activate language pathways for learning content better when writing by hand than when using a word processor (Mueller & Oppenheimer, 2014; May, 2014).



## Teaching Handwriting - Strategies for Success

### Grip

Though research indicates that many students develop a modified pencil grip as they mature as writers (Graham 2009), attention to and focused work with grip from the very beginning is perhaps the most important of the foundational handwriting skills to develop. It is certainly the most challenging to remediate when left untended for too long. The traditional triangular grip is both mainstream and efficient. Pointer and thumb grasp the pencil and bring it to rest on the middle finger, which serves as a bridge. *(Avoid the pointer and thumb touching each other, too much pressure on the middle finger, thumb tuck, and thumb overlap, modifications that add to finger and hand fatigue.)*

The middle/back of the pencil rests comfortably in the joint of the hand between pointer and thumb. The wrist is placed on the table to avoid developing a hook, which again increases fatigue and decreases stamina. (See Figure 1.)

#### Some recommendations to help develop or correct grip:

- Some instructors use golf pencils as these shorter pencils force the fingers into the correct grip. A sided pencil—hexagonal or tripod—is recommended whereas harder-to-grasp, round pencils and inexpensive ballpoints that write only when held upright should be avoided.
- Have students place the pencil on the desk with the point towards them, the eraser away from them. Then, ask them to clasp the pencil with their thumb and pointer, swinging the pencil up. Doing so will help students begin with the correct grip every time!
- When students' poor grips persist, use one of the ergonomically designed writing implements or grips, good for developing a proper grip and also maintaining it when students are not directly supervised by the instructor. Rubber bands wrapped around the pencil can serve this purpose as well, but arm your students in this way at your own risk!
- Sometimes, students have a good grip, but the middle/back of the pencil is not in the joint between thumb and pointer finger. Wrapping a rubber band around the wrist and pencil will position and anchor the pencil firmly in that joint, allowing for maximum control.



FIGURE 1C: THUMB OVERLAP



FIGURE 1D: THUMB TUCK



FIGURE 1E: HOOK



FIGURE 2: PAPER SLANT

- Have students who struggle with grip place a small ball, such as a bouncy ball, in the palm of their writing hand, a practice that forces the hand into the proper grip.
- Have students who clench too tightly on the pencil loosely wad a tissue into the palm of their hand, a practice that will help the palm relax and also absorb excess moisture.
- In the case of older students, who may resist the idea of changing their grip, one strategy King recommends is to drop a few raisins, peanuts, or even M&M's onto the table and ask the students to pick them up one at a time to eat them. Then ask, "Which fingers do you use?" When they answer, "My thumb and pointer," the response is, "Then you need to be using them to pinch your pencil as well."
- Make sure students breathe! Doing something new, such as developing a pencil grip, takes concentration, and they sometimes forget. Also, speak in a slow, calm voice. Handwriting is a process that requires students to relax, and an intense, harping voice will not help students automatize their letter formations. Forgetting to breathe and becoming stressed over grip typically result in over-clenching on the pencil, a practice that again increases fatigue and decreases stamina. Sometimes, having students listen to music may help.

### Paper Position

Though opinions on paper position vary somewhat, the general consensus is that for manuscript, students should slant their papers slightly to the dominant hand. In other words, right-handed students should tilt their papers slightly to the left whereas left-handed students should tilt their papers slightly to the right. With cursive, use a full 45° angle for paper position, facilitating the hand's movement across the paper, an elbow pivot, and the use of large-motor muscles, which do not fatigue, over fine-motor muscles, which fatigue rapidly, wherever possible. (See Figure 2.)

**Some recommendations to develop proper paper position:**

- Make sure students have a writing surface clear of other papers and materials. Developing writing takes elbow room!
- Have students fold the bottom corner of their paper so that it is parallel to the desk bottom, allowing students to begin with a proper paper slant and maintain it throughout the writing session. (See Figure 2.)
- Use spray paint or colored electrical tape to form a v on the desk where the paper should begin. Then, students know where to put their paper every time.
- Students should use their non-dominant hand to pull the paper up, always keeping the paper in the ideal place for the writing hand, rather than move the dominant hand down the page, increasing discomfort and fatigue.
- The writing surface should be at the correct height. With the arm dangling down as the student sits, it should be about two inches above the elbow. Use a book or cushion to boost smaller students to the proper height, but also make sure their feet touch the floor. Use a book to “raise the floor” as needed.
- Both elbows should be on the table at all times. This is the “listening, learning position.” Using an LLP poster or reference picture can help students independently position themselves correctly for good handwriting.

### Warm Ups & Letter Formation

Warm-up strokes are important to the writing process. Have students practice strokes similar to the letters they’ll form.

- Samples of manuscript preparation: students can warm up with “tall grass, short grass” alternating strokes. This practice helps them orient letter formation from top to bottom and prepares them for tall letters (e.g., t, l, h, k) and short letters (e.g., i, m, n, r) respectively. (See Figure 3.)
- Samples of cursive preparation: Students should begin with a sweeping motion from left to right

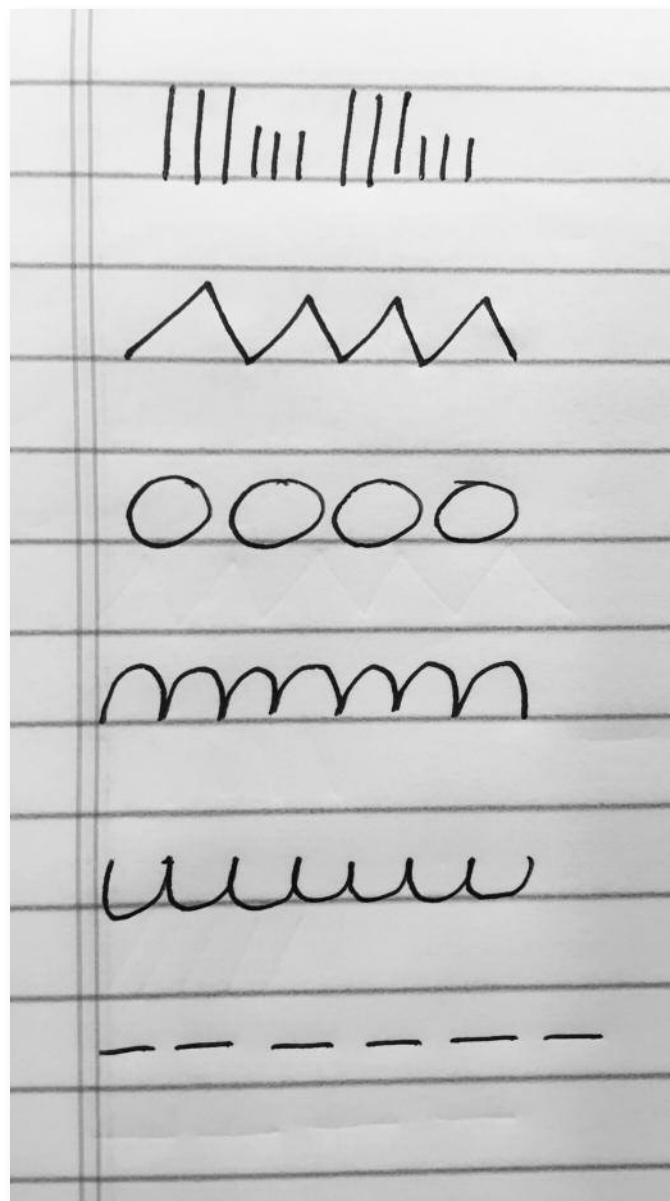


FIGURE 3: WARM-UP STROKES - PRINT

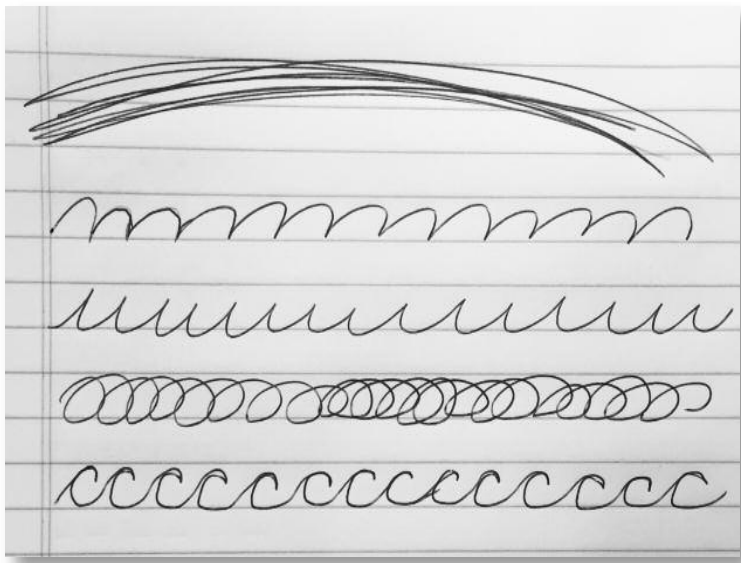


FIGURE 4: WARM-UP STROKES - CURSIVE

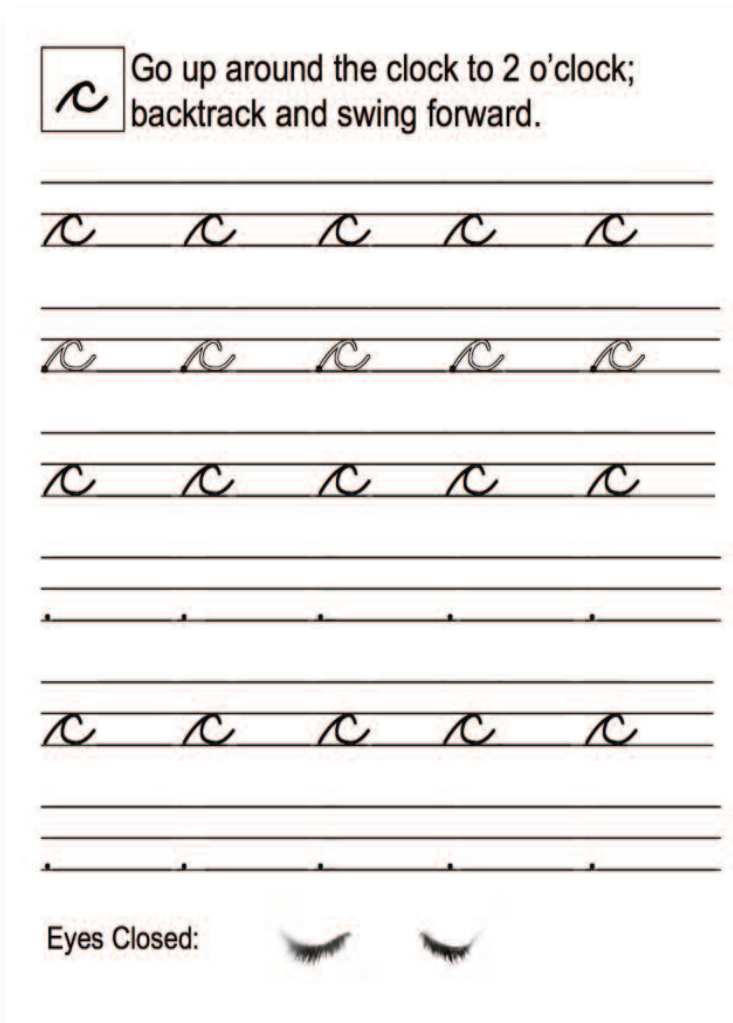


FIGURE 5: WORKBOOK PAGE FROM DHK BOOK

across the page—typically called window wipers—using arm, rather than hand, movement. This practice helps activate the large arm muscles, which do not fatigue as the small hand muscles do. Practicing loops that will turn into l, b, and h; waves that will turn into i, j, and p; and hills that will turn into a, c, and m, for example, helps the hand automatize the motions necessary for forming the letters students will need to form words. (See Figure 4.)

Tactile surfaces are an excellent way to motivate young writers and also help students of all ages develop and then warm up their muscles. Sand trays, shaving cream on the desk, finger paint in a zipper storage bag, carpet squares or carpeted floors, cinder block walls, chalkboards, and white boards—both vertical and lap—serve as excellent practice surfaces for students developing their handwriting. A number of commercial products are available and can further engage even the most resistant writer.

**Some recommendations to help develop or correct letter formation:**

- Attention to paper position, posture, and grip
- A focus on stroke formation, including where to start the letters and how to form them
- Instructional clustering based on formation
  - o In manuscript, for example, i, r, and m begin with the same, short downstroke and should be associated for formation.
  - o In cursive, for example, l, b, and f begin with the same tall loop and should be associated for formation.
- A minimum number of starting points for letters (for lowercase manuscript, 7 with only 6 “lift up” letters: i, t, j, k, f, and x; for lowercase cursive, only 1 as they all start on the baseline with only 4 “lift up” letters: i, j, t, and x)
- Simultaneous oral spelling, a practice whereby students verbalize the letter name or sound as the letter is formed (*This multi-sensory approach to handwriting helps students automatize letter formation by applying visual, auditory, kinesthetic-tactile, and kinesthetic-speech to the writing process, strengthening and cementing learning.*)
- Identification of “best” letters during practice, by instructor, classmate, or self (Graham et al, 2009)

## Manuscript Versus Cursive: The Great Debate

No research conducted in the United States indicates a preference for cursive or manuscript for mainstream students. A significant amount of statistical and empirical research supports the use of cursive with students who struggle, particularly those with language-based learning difficulties. Whatever decision is made, students require at least two years of instruction in a stroke before it is automatized, and manuscript and cursive should not be taught simultaneously (Berninger, Wolf, and Abbott, 2016). In the mainstream school setting, then, teachers might instruct students in manuscript in K-1, transitioning to cursive at some point during the second grade and continuing that instruction at least through third grade. It is important to recognize that many of the schools designed for students with dyslexia begin cursive in first grade and that Montessori instructors, occupational therapists, the entire continent of Europe, and, interestingly, Catholic nuns concur when it comes to starting cursive early.

### Reasons to Favor Cursive Over Manuscript for Struggling Writers:

- Students who struggle with directionality and starting point will find cursive less difficult and faster. First, in a good lowercase cursive alphabet, all letters begin on the baseline. Students always know where to begin. Second, since letters within words connect, students must only “begin again” once per word, rather than for each new letter.
- The kinesthetic-motor reinforcement of cursive is stronger than that of manuscript, and cursive is therefore better for spelling. Skywrite (always with two fingers) the word the in print and then in cursive. Feel the difference in your arm as you “write” the letter. Your body actually learns the spelling of the word better in cursive.
- Letters sometimes reversed in manuscript (e.g., b/d and m/w) not only look different in cursive but also are formed differently, so cursive decreases the frequency of reversals in writing.
- Thanks to the connected letters in cursive, students with word spacing issues can easily discern where one word ends and another begins.

### Choosing Curriculum:

There is no one best handwriting curriculum. As you investigate, pay heed to several important elements:

- (1) Is there direct, explicit instruction of letter formation with plenty of practice?
- (2) Are students asked to combine letters into words and eventually phrases and sentences as the curriculum unfolds?
- (3) Is the sequence focused on how letters are formed rather than where they appear in the alphabet?
- (4) For cursive, do all lowercase letters begin on the baseline?
- (5) For cursive, is there a left-handed and right-handed practice book with corresponding slant offered?

Handwriting curricula with which this author is familiar that adhere to most or all the above criteria:

- Alphabetic Phonics\*
- Diana King
- Foundations (primary Wilson)
- Language Foundations\*
- Neuhaus’s Curriculum\*
- Slingerland
- Wilson

\* *Slantless alphabets only*

### A Model Approach

Diana King’s manuscript and cursive (left-handed and right-handed) texts introduce a T.C.C.C. (trace, copy, cover, closed) approach to instruction. (See Figure 5.) While King’s texts do this efficiently, the strategies suggested can be adapted to any handwriting curriculum.

- (1) Students receive direct, explicit instruction in letter formation. Instructors model the letter as they discuss stroke formation (e.g., “Swing up, back down, and around”). Asking students to verbalize stroke formation is not an effective practice (Graham et al, 2009), most likely because the amount of oral language required complicates the formation process. Instead, again, students should name the letter or its sound as they form it.

- (2) Students follow a T.C.C.C. approach to instruction.
- a. Trace: Students trace the letter, saying its name or sound.
  - b. Copy: Students copy the letter from a model located above the letter they're forming.
  - c. Cover: With all existing letters covered, students write the letter from memory, relying on their multi-sensory practice to help them remember how it is formed.
- d. Closed: Students put their pencil to unlined paper and then close or avert their eyes, writing without looking at the paper. Writing is primarily a motor task, rather than a visual one, and students must rely on motor memory if they are to automatize their handwriting.

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by SOPHIA K. HAVASY, PH.D.

# The Language of Launching Young Adults with ADHD and Learning Differences

Seniors in high school think that the language of launching is:

“Where are you going to school?”

“What will you major in?” “Are you excited?”

“Are you ready?”



Parents think that the language of launching is: “Have you finished your essays?” “Which schools do you want to visit?” “How are your grades?” “What are you going to do without me?”

*These questions are the dance that young people and their parents do as they get ready for college. They are not the language of launching.*



**Young people with ADHD and LD are more vulnerable to being derailed by the lack of these skills than their peers with more neuro-typical development.**

adults, with and without risk factors such as ADHD or learning differences, is the development of executive functioning. According to Jack Naglieri, Ph.D., in a November 2017 APA-sponsored webinar, executive functioning allows us to figure out “how to do what we choose to do to achieve a goal.” Executive functioning involves the frontal lobes and is the last major growth spurt of the brain. It occurs roughly between 17 and 27 years of age.

According to Naglieri, “How you do what you decide to do’ demands ... Initiation to achieve a goal, planning and organizing parts of a task, attending to details to notice success of the solution, keeping information

The questions that need to be asked are more like: “What are your goals?” “How are you going to get there?” “If you don’t have goals, what are ideas that you have to figure it out?” “What skills and abilities do you need to develop before you leave home?” These questions are about executive functioning.

The key to successful launching of young

in memory, having flexibility to modify the solution as information from self-monitoring is received and demonstrating emotion regulation (which also demands inhibitory control) to ensure clear thinking so that the task is completed successfully.” These are the skills that comprise executive functioning. Young people with ADHD and LD are more vulnerable to being derailed by the lack of these skills than their peers with more neuro-typical development. The stakes are much higher when failure occurs in the post-high school years rather than during high school. Society gives much more leeway to high school kids messing up than to young adults messing up. For these reasons, I encourage parents and teens to use high school as the training ground for executive functioning.

There are two parts to Naglieri’s definition: the how of a task, and the ownership of the task. Usually, parents can figure out how to get something done more easily than their teens. The life experiences of adults make many things automatic, making it very easy to tell a teenager how to go about most anything. This can include: how to complete community service hours, the Eagle Scout project, returning a package, doing homework, preparing for the SAT, or completing college applications. It is not important, however, that the parent can take care of these tasks. It is important that the young person takes ownership of the goal and then problem-solves and learns how to go about doing what they need to do to make it happen.



# Gifted and Dyslexic: Identifying and Instructing the Twice Exceptional Student

As individuals, each of us has a unique combination of strengths and weaknesses. But sometimes we are exceptionally strong or weak in certain areas. In the school setting, students with exceptional strengths and weaknesses may have different instructional needs than other students. *Twice exceptional or 2e* is a term used to describe students who are both intellectually gifted (as determined by an accepted standardized assessment) and learning disabled, which includes students with dyslexia.

The NAGC (National Association for Gifted Children) recognizes three types of students who could be identified as 2e:

- Identified gifted students who have a learning disability
- Students with a learning disability whose giftedness has not been identified
- Unidentified students whose gifts and disabilities may be masked by average school achievement

It is commonly believed that many 2e students are misclassified, neglected, or receive inadequate intervention. Sometimes it can be a greater struggle to show that a student is eligible for services for treating dyslexia than for giftedness; at other times, proving eligibility for services for the giftedness is the challenge. For gifted students who also have dyslexia, it is important to *advocate with equal energy for both the disability and the ability*.

Raising awareness is an important first step toward helping these students. This fact sheet provides information on identifying 2e students, providing them with effective instruction, and raising questions for future research.



## HOW COMMON IS 2E?

Studies commonly suggest that 2-5% of school-age children are 2e, with some reports being much higher. It is unclear if the rates of 2e differ among girls and boys. Boys are more often identified with the disability part of the 2e equation and therefore may more often be identified as 2e.

Some research has also shown that dyslexia is more common among gifted people in spatially oriented occupations, such as art, math, architecture, and physics. While each of these studies may have specific methodological strengths and weaknesses, in general there is some evidence that higher incidences of reading and/

or language deficits are seen in such occupations or expertise. However, evidence is not conclusive that having dyslexia significantly increases the likelihood of being gifted.

## WHAT CAUSES 2E?

Specific causes of 2e are not known. Research, however, suggests three possibilities:

- In some cases, the co-occurrence of giftedness and dyslexia is due to chance or naturally occurring variations in human neurology
- Some people with dyslexia develop gifts outside of the reading domain through experience or practice
- In the course of early neurodevelopment, the brain is wired so that learning to read is difficult but learning in other domains is not; that is, in some cases, there may be a causal link between being at risk for dyslexia and giftedness

Exactly how and to what degree these three etiologies exist in the 2e dyslexia population remains to be discovered.

#### HOW CAN WE IDENTIFY 2E STUDENTS?

Parents and teachers may fail to notice both giftedness and dyslexia. Dyslexia may mask giftedness, and giftedness may mask dyslexia. Some common characteristics of 2e individuals follow:

- Superior oral vocabulary
- Advanced ideas and opinions
- High levels of creativity and problem-solving ability
- Extremely curious, imaginative, and questioning
- Discrepant verbal and performance skills
- Clear peaks and valleys in cognitive test profile
- Wide range of interests not related to school
- Specific talent or consuming interest area
- Sophisticated sense of humor

More formal criteria are also used to identify a person as 2e—both for dyslexia (see references below ) and intellectual giftedness. Generally, the accepted standardized assessment for intellectual giftedness is a common, general, verbal or nonverbal IQ test, or a specialized measure of cognitive ability in one or more specific domains. However, the identification of 2e in schools today, and giftedness alone for that matter, varies greatly. For example, to receive formal services for the gifted part of the 2e equation, some schools require high scores on a standardized test of intellectual ability such as the Naglieri Nonverbal Ability Test or the Wechsler Intelligence Scale for Children–IV (WISC-IV); other schools require exceptional scores on state achievement tests; and very rarely do schools recognize nonacademic gifts such as dance, leadership, or art, to qualify for the program.

#### KEY POINTS TO CONSIDER ABOUT ASSESSMENTS:

- An assessment should be *developmentally appropriate*. Some tests are better suited for identifying skills in the very young rather than the older student.
- *Developmental change* can cause changes in test scores because the types of variables that tests measure can change with age, and a child’s brain takes time to mature. For example, it is possible for a child to test as gifted at age 5 but not test as gifted when tested again at age 7. This is one reason that a thorough evaluation that includes more than one aptitude test is very important.
- The tests used should *validly measure the relevant skills*. Some schools have a “set in stone” test they

use to assess eligibility for gifted services (and the gifted portion of the 2e equation). These tests can be limited in scope and may not tap broad and potential areas of giftedness. For example, nonverbal tests will not adequately measure high verbal intelligence; likewise, relying on superior scores on certain academic achievement tests may not do justice to gifts that do not manifest themselves in these school subjects.

When using these or any criteria to assess the student who may be gifted and dyslexic, it is important to approach the task with a *developmental mindset*. Dyslexia, for instance, can change in expression, quality, and degree with age. The underpinnings of the disorder may become apparent as language or motor problems early in life, and then later show up as written word recognition/word decoding problems. Later still, the child may have difficulties with fluency and comprehension. Finally, in adulthood, dyslexia may manifest itself only mildly or when the adult with dyslexia is pressed to spell unfamiliar words; or, it may continue to significantly affect reading and written expression. Similarly, because the neurology of the child changes over time, the nature of the giftedness of the individual with dyslexia may also change. Thus, it is important to be vigilant in making these assessments.

Finally, it cannot be stressed enough that identifying 2e students is critical to their academic success. Without a dual classification that includes both giftedness and dyslexia, the student may not have access to appropriate services that will provide the support and stimulation necessary to succeed.

#### HOW IS 2E TREATED?

Twice exceptional students are often lost in the school or IEP system, have their talents neglected in favor of remediation, or confuse diagnosticians so they do not qualify for much needed differentiated, specialized instruction they need for their gifts and to address their dyslexia. Practitioners and clinicians agree that the needs of a gifted student with dyslexia are very different from the individual with dyslexia or giftedness alone. Intellectual giftedness can complicate the diagnosis of dyslexia such that (because of high IQ) a person may not be found eligible for special services. Moreover, a reading disability may hinder the development of an academic gift because of focusing on the disability and neglecting growth and challenge in the areas of giftedness.

Students who have both gifts and learning disabilities require a “dually differentiated program”: one that nurtures gifts and talents while providing appropriate instruction, accommodations, and other services for treating learning weaknesses. Unfortunately, research-based, well-

accommodations, and other services for treating learning weaknesses. Unfortunately, research-based, well-defined, and prescribed practices for the 2e student with dyslexia are hard to find, and current practices vary widely.

Instruction for 2e students should be designed to develop higher-level cognitive functioning, or for their challenges—to develop basic skills (e.g., handwriting, reading, spelling, written expression, math computation). Otherwise, these students may be labeled average students or underachievers who simply need “to try harder.”

One promising approach for 2e students is the multisensory, structured language approach used for the treatment of dyslexia. Like other students with dyslexia, gifted students may benefit from instruction that includes a variety of stimuli, technology, and multiple sensory modes. Many have also found success with home-based approaches. While remediation for the reading problem may occur in school, 2e students may not receive adequate attention for their gifts. Therefore, it may be up to the parent to stimulate, inspire, and nurture the development of the child’s strengths. There are many ways to do this, and some are described in the references below.

Generally, 2e can be a complicated condition to identify and treat. Perhaps because of the unique neurology and life experiences of 2e individuals, they are also at higher risk for personality disorders and depression. Evidence suggests that being 2e can be uniquely stressful, so teachers and parents need to consider the emotional as well as the academic needs of 2e individuals. Unlike dyslexia

and many other neurocognitive or emotional disorders that affect learning, 2e has no formal diagnostic definition (e.g., in DSM, IDEA, or NICHD). Most considerations of 2e are derived from gifted education, although 2e as a category has been receiving more attention from special educators interested in learning disabilities. In fact, many state and local school boards, as well as the National Education Association, are developing clearer standards, methods of identification and “treatment” prescriptions (for summaries and examples see NEA, 2006; Idaho Department of Education, 2010; Colorado Department of Education, 2009).

#### KEY POINTS TO REMEMBER

To summarize, as we continue to learn from research and practice with these students, we can do the following now to better help these students:

- Be aware of superior skills in areas in and outside of traditional academic domains
- Take a developmental perspective toward understanding the individual, the assessment, and interpretation of test results
- Advocate for broad behavioral assessments and eligibility for services that include appropriate treatments for both giftedness and dyslexia
- Be aware of the special emotional needs and struggles of the 2e individual
- Ensure that both the disability and the ability are addressed ✕

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#### SUGGESTED READINGS

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2e Newsletter available from [http://www.2enewsletter.com/topic\\_store\\_subscribe.html](http://www.2enewsletter.com/topic_store_subscribe.html)

*The International Dyslexia Association (IDA) thanks Jeffrey Gilger, Ph.D., for his assistance in the preparation of this fact sheet. Dr. Gilger is Professor and Chair of Psychological Sciences, School of Social Sciences, Humanities and Arts, University of California, Merced. He is also a former member of the IDA Board of Directors.*

# The Dyslexia-Stress-Anxiety Connection

## Implications for Academic Performance and Social Interactions

What is stress?

Stress is the reaction of the body and brain to situations that put us in harm's way. The stressor may be a physical threat (e.g., a baseball coming quickly toward you) or a psychological threat (e.g., a worry or fear that you will make a mistake delivering your lines in a play or write a passage that won't make sense to the reader). Stress, or more specifically, the stress response, is our body's attempt to keep us safe from harm. It's a biological and psychological response. When we're under stress, the chemistry of our body and our brain (and, therefore, our thinking) changes. A part of the brain called the amygdala does a great job learning what's dangerous, and it makes a connection between certain situations and negative outcomes.

How can stress be good and bad?

All human and non-human animals have the built-in capacity to react to stress. You may have heard of a "fight or flight" response. This means that when faced with a threat, we have two basic ways of protecting ourselves. We can run away (flee) or stand firm and try to overcome or subdue the threat (fight). When we have a sense that we can control or influence the outcome of a stressful event, the stress reaction works to our advantage and gets our body and brain ready to take on the challenge. That's good stress; at the most primitive level, it keeps us alive. It also allows us to return to a feeling of comfort and safety after we have

been thrown off balance by some challenge.

On the other hand, bad stress occurs in a situation in which we feel we have little or no control of the outcome. We have a sense that no matter what we do, we'll be unable to make the stressor go away. Body and

brain chemistry become over-reactive and get all out of balance. When that happens, it can give rise to another protective mechanism, to "freeze" (like a "deer in the headlights".) We can freeze physically (e.g., become immobilized), or we can freeze mentally (e.g., "shut down.") In these situations, the stressor wins and we lose because we're incapacitated by the perceived threat.

How does good and bad stress work with dyslexia?

Individuals with dyslexia are confronted regularly by tasks that are, either in reality or in their perception, extremely difficult for them. These tasks might be reading, spelling, or math. If they have experienced success at mastering this kind of task in the past, good stress helps them face the challenge with a sense of confidence, based on the belief that "I can do this

kind of task." If, on the other hand, someone has met with repeated failure when attempting this or a similar task in the past, his or her body and brain may be working together to send out a chemical warning system that gets translated as "This is going to be way too difficult for you! Retreat! Retreat! That's bad stress in action.



And remember, perception is everything! It doesn't matter if a teacher, a friend, or a spouse believes that you can do something; it's that you think you can do it that matters.

### What is anxiety?

Anxiety comes in many forms. It can be situational (that is, specific to one kind or class of worry, like traveling or being in social situations). Individuals with dyslexia may experience marked anxiety in situations in which they feel they will make mistakes, be ridiculed, or made to feel foolish in front of others. Severe anxiety or fears are known as phobias.

When the anxiety is specific to or triggered by the demands of being with or interacting with people, and is characterized by a strong fear of being judged by others and of being embarrassed, it is known as social anxiety disorder (or social phobia). This fear can be so intense that it gets in the way of going to work or school or doing everyday activities. Children and adults with social phobia may worry about social events for weeks before they happen. For some people, social phobia is specific to certain situations, while others may feel anxious in a variety of social situations.

Anxiety can also be generalized (that is, a kind of free-floating sense of worry or impending trouble that doesn't seem to be specific to one trigger or event). In its more serious form, this is considered a psychiatric disorder known as generalized anxiety disorder (GAD). According to the National Institutes of Mental Health website <http://www.nimh.nih.gov/health/topics/generalized-anxiety-disorder-gad/index.shtml>:

GAD is diagnosed when a person worries excessively about a variety of everyday problems for at least 6 months. Generalized anxiety disorders affect about 3.1% American adults age 18 years and older (about 18%) in a given year, causing them to be filled with fearfulness and uncertainty. The average age of onset is 31 years old.

### How is anxiety different from stress?

Simply put, anxiety is a state of worry about what *might be*— as compared to stress, which is a reaction to what *is*. Both stress and anxiety trigger the same chemical reactions in the brain, which does a really good job remembering negative experiences. If you worry all the time about something bad happening to

you, that puts you in a state of chronic stress. Individuals with dyslexia worry about reading, writing, and arithmetic much of the time. The irony is, the more they master, the more work they get. It's an unending cycle.

### What's the connection to dyslexia?

Stress and anxiety increase when we're in situations over which we have little or no control (a car going off the road, tripping on the stairs, reading in public). All people, young and old, can experience overwhelming stress and exhibit signs of anxiety, but children, adolescents, and adults with dyslexia are particularly vulnerable. That's because many individuals do not fully understand the nature of their learning disability, and as a result, tend to blame themselves for their own difficulties. Years of self-doubt and self-recrimination may erode a person's self-esteem, making them less able to tolerate the challenges of school, work, or social interactions and more stressed and anxious.

Many individuals with dyslexia have experienced years of frustration and limited success, despite countless hours spent in special programs or working with specialists. Their progress may have been agonizingly slow and frustrating, rendering them emotionally fragile and vulnerable. Some have been subjected to excessive pressure to succeed (or excel) without the proper support or training. Others have been continuously compared to siblings, classmates, or co-workers, making them embarrassed, cautious, and defensive. Individuals with dyslexia may have learned that being in the company of others places them at risk for making public mistakes and the inevitable negative reactions that may ensue. It makes sense, then, that many people with dyslexia have become withdrawn, sought the company of younger people, or become social isolates.

How can individuals with dyslexia move from distress to DE-STRESS? The DE-STRESS model that follows is a step-by-step guide for addressing stress, anxiety, and dyslexia.

- Define: Professionals working with the person need to analyze and understand the way dyslexia presents itself in that individual.
- Educate: Based on the information gleaned by the professionals above, the child or adult needs to be taught how dyslexia has an impact on his or

her performance in school, workplace, or social situations.

- **Speculate:** This step involves encouraging individuals with dyslexia to look ahead and anticipate the problems they might encounter because of their condition as they face new challenges.
- **Teach:** It's important to teach children, adolescents, and adults developmentally appropriate strategies, techniques, and approaches that will maximize success and minimize frustration and failure. This involves actively teaching people how to recognize and manage stress, the skills of honest self-appraisal, and the ability to learn from and repair errors.
- **Reduce the Threat:** Educators and others involved need to create learning and social environments that reduce, remove, or neutralize the risk. This means giving students the chance to practice newly learned skills in a safe place. It also involves teaching people with dyslexia how to recognize and deactivate "stress triggers."
- **Exercise:** Regular and vigorous physical activity is known to enhance brainpower and reduce stress. So it is important to build in opportunities for exercise. This step also involves encouraging the person to drink plenty of water and eat a healthy diet.
- **Success:** Children and adults need abundant opportunities to display mastery and experience success. Providing these opportunities gives individuals with dyslexia a chance to learn how to replace the language of self-doubt with the language of success.
- **Strategize:** The child or adult should be encouraged to use what he or she has learned about minimizing and managing stress, and the relationship between stress and dyslexia, to plan for a future in which continued success is likely.

A little bit of stress is a good thing; it keeps us on our toes and gets us ready for the challenges that are a normal and helpful part of living in a complex world. Yoga, mindfulness activities, meditation, biofeedback, cognitive behavioral therapy (CBT), medication and

exercise are among the many ways that individuals (with and without dyslexia) can conquer excessive or debilitating stress. For the individual with dyslexia, effectively managing and controlling stress must also involve learning more about the nature of the specific learning disability. Gaining an understanding of the daily impact of dyslexia and learning how to work through or around the dyslexia to gain a better sense of control over the environment, is the key to reducing stress and achieving greater success.

Competence instills confidence and competence leads to success. When children, adolescents, and adults are able to develop a sense of mastery over their environments (school, work, and social interactions), they develop a feeling of being in control of their own destiny. Control through competence is the best way to eradicate stress and anxiety. ✕

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*The International Dyslexia Association (IDA) thanks Jerome J. Schultz, Ph.D., for his assistance in the preparation of this fact sheet. Dr. Schultz is a clinical neuropsychologist and lecturer on psychology in the Department of Psychiatry at Harvard Medical School.*

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# Understanding

# DYSGRAPHIA

*Dysgraphia* is a Greek word. The base word *graph* refers both to the hand's function in writing and to the letters formed by the hand. The prefix *dys* indicates that there is impairment. *Graph* refers to producing letter forms by hand. The suffix *ia* refers to having a condition.

Thus, *dysgraphia* is the condition of impaired letter writing by hand, that is, disabled handwriting. Impaired handwriting can interfere with learning to spell words in writing and speed of writing text. Children with dysgraphia may have only impaired handwriting, only impaired spelling (without reading problems), or both impaired handwriting and impaired spelling.



## What is dysgraphia?

Research to date has shown orthographic coding in working memory is related to handwriting and is often impaired in dysgraphia. *Orthographic coding* refers to the ability to store written words in working memory while the letters in the word are analyzed or the ability to create permanent memory of written words linked to their pronunciation and meaning. Children with dysgraphia do not have primary

developmental motor disorder, another cause of poor handwriting, but may have difficulty *planning sequential finger movements* such as the touching of the thumb to successive fingers on the same hand without visual feedback. Children with dysgraphia may have difficulty with both orthographic coding and planning sequential finger movements.

## Does dysgraphia occur alone or with other specific learning disabilities?

Children with impaired handwriting may also have attention-deficit disorder (ADHD)— inattentive, hyperactive, or combined inattentive and hyperactive subtypes. Children with this kind of dysgraphia may respond to a combination of explicit handwriting instruction plus stimulant medication, but appropriate diagnosis of ADHD by a qualified professional and monitoring of response to both instruction and medication are needed.

Dysgraphia may occur alone or with dyslexia (impaired reading disability) or with oral and written language learning disability (OWL LD, also referred to as selective language impairment, SLI).

Dyslexia is a disorder that includes poor word reading, word decoding, oral reading fluency, and spelling. Children with dyslexia may have impaired orthographic and phonological coding, rapid automatic naming and focused, switching, and/or sustained attention.

OWL LD (SLI) is impaired language (morphology— word parts that mark meaning and grammar; syntax— structures for ordering words and understanding word functions; finding words in memory, and/or making inferences that go beyond what is stated in text). These disorders affect spoken as well as written language. Children with these language disorders may also exhibit the same writing and reading and related disorders as children with dysgraphia or dyslexia.

## Why is diagnosis of dysgraphia and related learning disabilities important?

Without diagnosis, children may not receive early intervention or specialized instruction in all the relevant skills that are interfering with their learning of written language. Considering that many schools do not have systematic instructional programs in handwriting and spelling, it is important to assess whether children need explicit, systematic instruction in handwriting and spelling in addition to word reading

and decoding. Many schools offer accommodations in testing and teaching to students with dysgraphia, but these students also need ongoing, explicit instruction in handwriting, spelling, and composition. It is also important to determine if a child with dysgraphia may also have dyslexia and require special help with reading or OWL LD (SLI) and need special help with oral as well as written language.

## What kinds of instructional activities improve the handwriting of children with dysgraphia?

Initially, children with impaired handwriting benefit from activities that support *learning to form letters*:

- ♦ playing with clay to strengthen hand muscles;
- ♦ keeping lines within mazes to develop motor control;
- ♦ connecting dots or dashes to create complete letter forms;
- ♦ tracing letters with index finger or eraser end of pencil;
- ♦ imitating the teacher modeling sequential strokes in letter formation; and
- ♦ copying letters from models.

Subsequently, once children learn to form legible letters, they benefit from instruction that helps them develop *automatic letter writing*, using the following steps to practice each of the 26 letters of the alphabet in a different order daily:

- ♦ studying numbered arrow cues that provide a consistent plan for letter formation;
- ♦ covering the letter with a 3 x 5 card and imaging the letter in the mind's eye;
- ♦ writing the letter from memory after interval that increases in duration over the handwriting lessons; and
- ♦ writing letters from dictation (spoken name to letter form).

In addition, to develop handwriting speed, they benefit from writing letters during composing daily for 5 to 10 minutes on a teacher-provided topic.



Students benefit from explicit instruction in spelling throughout K–12:

- ◆ initially in high frequency Anglo-Saxon words;
- ◆ subsequently in coordinating the phonological, orthographic, and morphological processes relevant for the spelling of longer, more complex, less frequent words; and
- ◆ at all grade levels in the most common and important words used for the different academic domains of the curriculum.

Throughout K–12, students benefit from strategies for composing:

- ◆ planning, generating, reviewing/evaluating, and revising compositions of different genre including narrative, informational, compare and contrast, and persuasive; and
- ◆ self-regulation strategies for managing the complex executive functions involved in composing.

Do children with dysgraphia make reversals or other letter production errors?

Some children do make reversals (reversing direction letter faces along a vertical axis), inversions (flipping letters along a horizontal axis so that the letter is upside down), or transpositions (sequence of letters in a word is out of order). These errors are symptoms rather than causes of handwriting problems. The automatic letter writing instruction described earlier has been shown to reduce reversals, which are less likely to occur when retrieval of letters from memory and production of letters have become automatic.

What kind of instructional strategies improve spelling of children with dysgraphia?

If children have both handwriting and spelling problems, the kinds of handwriting instruction described earlier should be included along with the spelling instruction.

Are educators in public schools identifying children with dysgraphia and providing appropriate instruction in public schools?

In general, no. Although federal law specifies written expression as one of the areas in which students with learning disabilities may be affected, it does not clearly identify the transcription problems that are the causal factors in dysgraphia—impaired handwriting and/or spelling—for impaired written expression of ideas. Some of the tests used to assess written expression are not scored for handwriting or spelling problems and mask the nature of the disability in dysgraphia. Content or ideas may not be impaired. All too often, the poor writing or failure to complete writing assignments in a timely fashion or at all is misattributed to lack of motivation, laziness, or other issues unrelated to the real culprit—dysgraphia. Children who are twice exceptional—gifted and dysgraphic—are especially under-diagnosed and underserved. Teachers mistakenly assume that if a student is bright and cannot write it is because the student is not trying.

Are there research-supported assessment tools for diagnosing dysgraphia?

Yes. See Barnett, Henderson, Scheib, and Schulz (2007), Berninger (2007a), Milone (2007), and Slingerland assessment below for assessing handwriting problems associated with dysgraphia. Also, see Berninger (2007b) and Berninger, O'Donnell, and Holdnack (2008) for using these tests and other evidence-based assessment procedures in early identification, prevention, and diagnosis for linking assessment results to evidence-based handwriting and spelling instruction (also see Troia, 2008).

In summary, dysgraphia is a specific learning disability that can be diagnosed and treated. Children with dysgraphia usually have other problems such as difficulty with written expression. It is important that a thorough assessment of handwriting and related skill areas be carried out in order to plan specialized instruction in all deficient skills that may be interfering with a student's

learning of written language. For example, a student may need instruction in both handwriting and oral language skills to improve written expression. Although early intervention is, of course, desirable, it is never

too late during the school age years to intervene to improve a student's deficient skills and provide appropriate accommodations. ✕

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The International Dyslexia Association (IDA) thanks Virginia W. Berninger, Ph.D., and Beverly Wolf, M.Ed., for their assistance in the preparation of this fact sheet.

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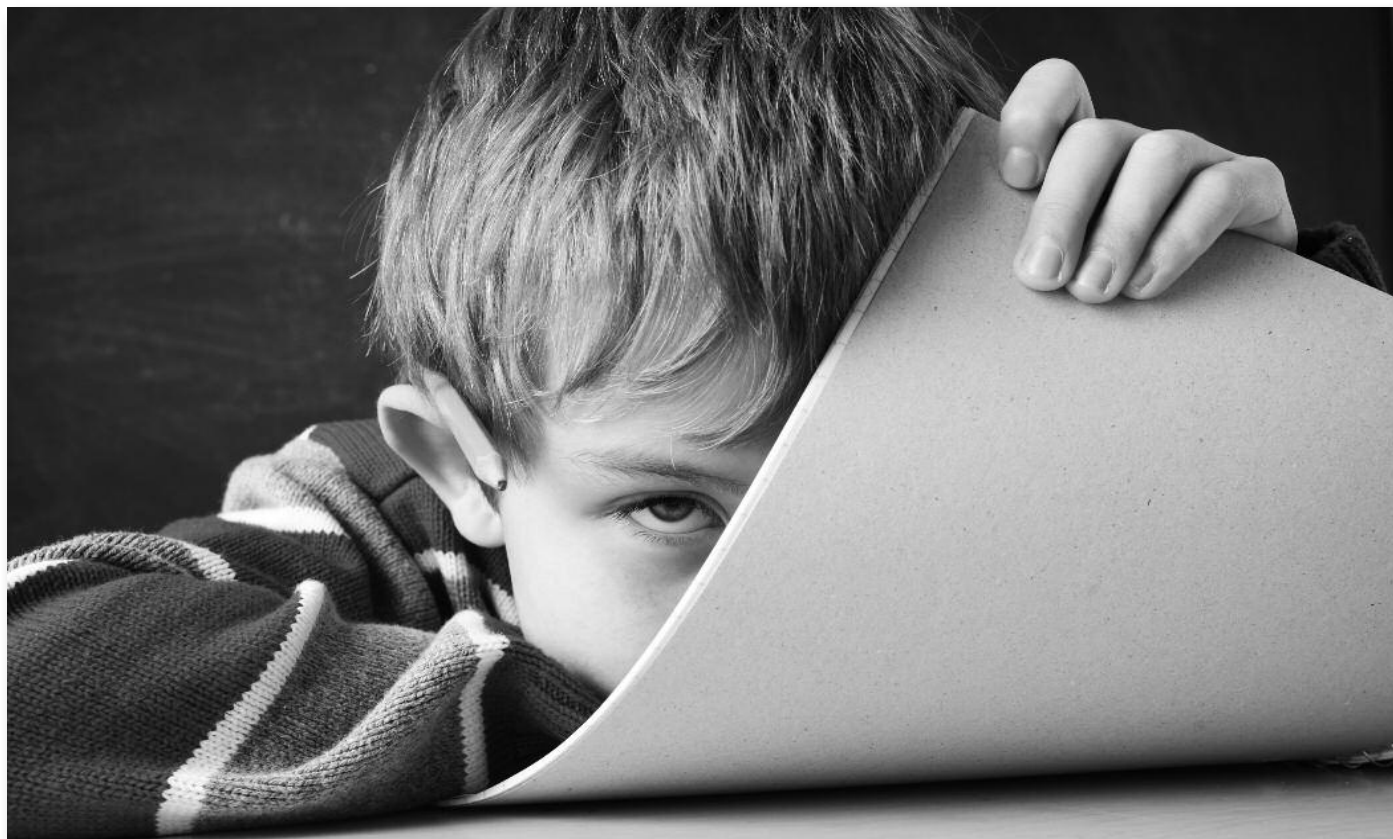
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# Attention-Deficit/Hyperactivity Disorder (AD/HD) and Dyslexia



AD/HD AND DYSLEXIA ARE DISTINCT CONDITIONS that frequently overlap, thereby causing some confusion about the nature of these two conditions. AD/HD is one of the most common developmental problems, affecting 3–5% of the school population. It is characterized by inattention, distractibility, hyperactivity and impulsivity. It is estimated that 30% of those with dyslexia have coexisting AD/HD. Coexisting means the two conditions, AD/HD and dyslexia, can occur together, but they do not cause each other. Dyslexia is a language-based learning disability characterized by difficulties with accurate and fluent word recognition, spelling, and reading decoding. People with dyslexia have problems discriminating sounds within a word or phonemes, a key factor in their reading and spelling difficulties. (See IDA fact sheets “Definition of Dyslexia” and “Dyslexia Basics.”)

**Both AD/HD and dyslexia run in families. Genetics play a role in about half of the children diagnosed with AD/HD. For the other half, research has yet to identify a cause. Regarding dyslexia, about one third of the children born to a dyslexic parent will also likely be dyslexic.**

### **How are AD/HD and dyslexia diagnosed?**

AD/HD and dyslexia are diagnosed differently. An evaluation for AD/HD is carried out by a physician or a psychologist. This evaluation should include the following:

1. complete medical and family history
2. physical examination
3. interviews with parents and child
4. behavior rating scales completed by parents and teachers
5. observation of the child
6. psychological tests to measure intellectual potential, social and emotional adjustment, as well as to assess for the presence of learning disabilities, such as dyslexia.

Although AD/HD has been given numerous names since it was first identified in 1902, the Diagnostic and Statistical Manual, 4<sup>th</sup> Edition (DSM-IV) describes three different subtypes. These subtypes are

1. *AD/HD predominantly inattentive type* is characterized by distractibility and difficulty sustaining mental effort and attention.

2. *AD/HD predominantly hyperactive-impulsive type* is characterized by fidgeting with hands and feet, squirming in one's chair, acting as if driven by a motor, interrupting and intruding upon others.
3. *AD/HD combined type* meets both sets of inattention and hyperactive/impulsive criteria.

Dyslexia is diagnosed through a psycho-educational evaluation. (See IDA Dyslexia Assessment Fact Sheet.)

### **Is AD/HD overdiagnosed?**

The American Medical Association and the Centers for Disease Control and Prevention have concluded that AD/HD is not overdiagnosed; however, increased awareness has resulted in an increase in the number of individuals diagnosed with AD/HD. Girls and gifted children are actually underdiagnosed or may be diagnosed late. Girls often have *AD/HD predominantly inattentive type* where the essential feature is inattention. This subtype of AD/HD can easily be overlooked because the more obvious characteristics of hyperactivity and impulsivity are not present. Gifted children may be identified late because their strong intellectual abilities help them to compensate for these weaknesses in attention.

### **Can individuals inherit AD/HD and dyslexia?**

Both AD/HD and dyslexia run in families. Genetics play a role in about half of the children diagnosed with AD/HD. For the other half, research has yet to identify a cause. Regarding dyslexia, about one third of the children born to a dyslexic parent will also likely be dyslexic.

### **Are there characteristics that individuals with AD/HD and dyslexia have in common?**

Dyslexic children and children with AD/HD have some similar characteristics. Dyslexic children, like children with AD/HD, may have difficulty paying attention because reading is so demanding that it causes them to fatigue easily, limiting the ability to sustain concentration. People with dyslexia and those with AD/HD both have difficulty with reading. The dyslexic person's reading is typically dysfluent, with major problems with accuracy, misreading both large

and small words. The person with AD/HD may also be a dysfluent reader, but his or her reading is not characterized by misreading words. The AD/HD reader may skip over punctuation, leave off endings, and lose his or her place. The dysfluency of both the ADHD person and the dyslexic reader may negatively impact comprehension. Both may avoid reading and derive little pleasure from it. Both the person with dyslexia and the person with AD/HD typically have trouble with writing. The typical dyslexic writer has significant problems with spelling, grammar, proofreading, and organization. The AD/HD writer often has difficulty with organization and proofreading. Both the dyslexic writer and the AD/HD writer may have handwriting difficulties.

Individuals with dyslexia and AD/HD may be under-achieving in school even though they are often bright and motivated. The goal for them, as it is for all children, is to meet their potential. It is critical that children with these disorders be carefully evaluated because treatment for one disorder is different from the other. Inaccurate diagnosis can lead to inappropriate intervention and a delay in timely, effective intervention.

### **Have neurological studies shown functional and/or anatomical differences in the brains of people with AD/HD as compared to dyslexia?**

The scientific community has been attempting to define the exact changes in the human brain that lead to AD/HD and dyslexia. There have been pathologic studies of a few brains from people with dyslexia after they died. While some changes in the brain have been found between the brains of people with dyslexia and people who do not have dyslexia, no consistent pattern has emerged that allows the exact “dyslexic center” to be determined. More promising techniques have been developed, which can be performed in living persons. These include imaging studies, as well as physiologic studies. Once again, interesting leads have been found, but none has given us a definitive answer regarding the underlying mechanisms of these disorders. It should also be mentioned that these tests are research tools. There are currently no biologic tests routinely available that allow an objective diagnosis of dyslexia or AD/HD.

### **What is the outlook for children with dyslexia and AD/HD?**

If dyslexia and AD/HD are identified and treated early, children with these disorders are more likely to learn to overcome their difficulties while maintaining a positive self-image. Even though children with dyslexia do not outgrow their disability, they can learn to adapt and improve their weak skills. With proper remediation and needed accommodations, students with dyslexia can go on to be very successful students in colleges and universities, as well as in professional and adult life. After puberty, about 40–50% of children with AD/HD will improve and develop enough coping skills so that their symptoms no longer have a negative impact on their quality of life; however, the other 50–60% will continue to exhibit symptoms of AD/HD through adolescence and adulthood that will negatively affect their lives. It is important to remember that many students with AD/HD with appropriate support and accommodations can be very successful with higher level academic work and in their professional lives. It is never too late to diagnose these disorders. It is not uncommon for a gifted person in college or graduate school to be diagnosed with dyslexia or AD/HD. Such individuals can learn to develop their personal strengths and become not only successful students, but happy and productive adults, as well. ✕

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## What is brain imaging?

A number of techniques are available to visualize brain anatomy and function. A commonly used tool is magnetic resonance imaging (MRI), which creates images that can reveal information about brain anatomy (e.g., the amount of gray and white matter, the integrity of white matter), brain metabolites (chemicals used in the brain for communication between brain cells), and brain function (where large pools of neurons are active). Functional MRI (fMRI) is based on the physiological principle that activity in the brain (where neurons are “firing”) is associated with an increase of blood flow to that specific part of the brain. The MRI signal bears indirect information about increases in blood flow. From this signal, researchers infer the location and amount of activity that is associated with a task, such as reading single words, that the research participants are performing in the scanner. Data from these studies are typically collected on groups of people rather than individuals for research purposes only—not to diagnose individuals with dyslexia.

## Which brain areas are involved in reading?

Since reading is a cultural invention that arose after the evolution of modern humans, no single location within the brain serves as a reading center. Instead, brain regions that sub serve other functions, such as spoken language and object recognition, are redirected (rather than innately specified) for the purpose of reading (Dehaene & Cohen, 2007). Reading involves multiple cognitive processes, two of which have been of particular interest to researchers: 1) grapheme-phoneme mapping in which combinations of letters (graphemes) are mapped onto their corresponding sounds (phonemes) and the words are thus “decoded,” and 2) visual word form recognition for mapping of familiar words onto their mental representations. Together, these processes allow us to pronounce words and gain access to meaning. In accordance with these cognitive processes, studies in adults and children have demonstrated that reading is supported by a network of regions in the left hemisphere (Price, 2012), including the occipito-temporal, temporo-

parietal, and inferior frontal cortices. The occipito-temporal cortex holds the “visual word form area.” Both the temporo-parietal and inferior frontal cortices play a role in phonological and semantic processing of words, with inferior frontal cortex also involved in the formation of speech sounds. These areas have been shown to change as we age (Turkeltaub, et al., 2003) and are altered in people with dyslexia (Richlan et al., 2011).

## What have brain images revealed about brain structure in dyslexia?

Evidence of a connection between dyslexia and the structure of the brain was first discovered by examining the anatomy of brains of deceased adults who had dyslexia during their lifetimes.

The left-greater-than-right asymmetry typically seen in the left hemisphere temporal lobe (planum temporale) was not found in these brains (Galaburda & Kemper, 1979), and ectopias (a displacement of brain tissue to the surface of the brain) were noted (Galaburda, et al., 1985). Then investigators began to use MRI to search for structural images in the brains of research volunteers with and without dyslexia. Current imaging techniques have revealed less gray and white matter volume and altered white matter integrity in left hemisphere occipito-temporal and temporo-parietal areas. Researchers are still investigating how these findings are influenced by a person’s language and writing systems.

## What have brain images revealed about brain function in dyslexia?

Early functional studies were limited to adults because they employed invasive techniques that require radioactive materials. The field of human brain mapping greatly benefited from the invention of fMRI. fMRI does not require the use of radioactive tracers, so it is safe for children and adults and can be used repeatedly which facilitates longitudinal studies of development and intervention. First used to study dyslexia in 1996 (Eden et al., 1996), fMRI has since been widely used to study the brain’s role in reading and its components (phonology, orthography, and semantics).

Studies from different countries have converged in findings of altered left-hemisphere areas (Richlan et al., 2011), including ventral occipito-temporal, temporo-parietal, and inferior frontal cortices (and their connections). Results of these studies confirm the universality of dyslexia across different world languages.

## What about genes, brain chemistry, and brain function?

Several genetic variants are associated with dyslexia, and their impact on the brain has been investigated in people and mice. Using animals that have been bred to have genes associated with dyslexia, researchers are investigating how these genes might affect development of and communication among brain regions (Che, et al., 2014; Galaburda, et al., 2006). These investigations dovetail with studies in humans. Differences in brain anatomy (Darki, et al., 2012; Meda et al., 2008) and brain function (Cope et al., 2012; Pinel et al., 2012) have been observed in people who carry dyslexia-associated genes, even those people who have good reading skills. In addition to these investigations at the anatomical, physiological, and molecular levels, researchers are trying to pinpoint the chemical connection to dyslexia. For example, brain metabolites that play a role in allowing neurons to communicate can be visualized using another MRI-based technique called spectroscopy. Several metabolites (for example, choline) are thought to be different in people with dyslexia (Pugh et al., 2014). Researchers continue to explore the connections between these findings and are hopeful that what they learn will help to determine the causes of dyslexia. This is a difficult aspect of research because differences in the brains of people with dyslexia are not necessarily the cause of their reading difficulties (for example, it could also be a consequence of reading less).

## Changes in Reading, Changes in the Brain

Brain imaging research has revealed anatomical and functional changes in typically developing readers as they learn to read (e.g. Turkeltaub et al., 2003), and in children and adults with dyslexia following effective reading instruction (Krafnick,

et al., 2011; Eden et al., 2004). Such studies also shed light onto the brain-based differences of those children with dyslexia who benefit from reading instruction compared to those who fail to make gains (Davis et al., 2011; Odegard, et al., 2008). Neuroimaging data have also been used to predict long-term reading success for children with and without dyslexia (Hoeft et al., 2011).

## Cause versus Consequence

An important aspect of research on the brain and reading is to determine whether the findings are the cause or the consequence of dyslexia. Some of the brain regions known to be involved in dyslexia are also altered by learning to read, as demonstrated by comparisons of adults who were illiterate but then learned to read (Carreiras et al., 2009). Longitudinal studies in typical readers reveal anatomical changes with age, some of which are related to development (Giedd et al., 1999) and others to the firming up of language skills (Sowell et al., 2004) in correlation with improvements in phonological skills (Lu et al., 2007). As such, researchers are teasing apart the brain-based differences that can be observed before children begin to learn to read from differences that may occur as a consequence of less reading by people with dyslexia. For example, researchers have found altered brain anatomy (Raschle, et al., 2011) and function (Raschle, et al., 2012) in pre-reading children with a family history of dyslexia. Future studies using longitudinal designs (i.e., long term), will inform the timeline of these changes and clarify cause and consequences of anatomical and functional differences in dyslexia.

## Summary

The role of the brain in developmental dyslexia has been studied in the context of brain anatomy, brain chemistry, and brain function—and in combination with interventions to improve reading and information about genetic influences. Together with results of behavioral studies, this information will help researchers to identify the causes of dyslexia, continue to explore early identification of dyslexia, and determine the best avenues for its treatment. ✕



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# Apps and Other Resources for the iPad that Promote Reading Skills

The 21st-century learner has access to applications and other technology resources that can enhance their educational experience. With these assistive technologies at their fingertips, there are more ways than ever for students to find help with academic struggles. These innovative and engaging tools are particularly beneficial for students with dyslexia. Assistive technology can aid in the areas of phonemic awareness, alphabetic principle, written expression, spelling, and reading comprehension. Additionally, employing technology tools can help boost confidence and increase executive functioning skills. These tools help learners find new ways of approaching challenges and broaden the pathways of success for students with dyslexia.

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## Phonemic Awareness:

**Sound Sorting** ([lakeshorelearning.com/apps](http://lakeshorelearning.com/apps)) A true phonological awareness app. It teaches beginning sound matching. The graphics and games are good. The price is not bad. \$.99

**Phonics Awareness** ([bugbrained.com](http://bugbrained.com)) Phonics Awareness is an app that teaches your child how to segment and blend sounds and use vowels. There is a pre/post test called “Check Yourself” that evaluates their ability to do each task. Free

**Phonics Tic-Tac-Toe** ([lakeshorelearning.com/apps](http://lakeshorelearning.com/apps)) Children build language skills in a fast-paced game of tic-tac-toe. This interactive game explores vowel sounds, syllables, and more. Free

**ABA Problem Solving Game-What Rhymes?** ([kindergarten.com](http://kindergarten.com)) This app has children choose the rhyming words by selecting a picture of an item that rhymes with another item shown and read. There is immediate reinforcement with a short cheer when the correct answer is selected or “try again” is said if a non-rhyming word is chosen. This app offers visual and auditory stimulation, which is great for all learners. The app also gives feedback; time, correct answers and unanswered questions. \$1.99

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## Alphabetic Principle:

**Bob Books** ([bobbooks.com](http://bobbooks.com)) Simple illustration brings magic to your kids. It will catch their attention in a fun, entertaining and educational way and help them to learn how to read. Lite version available. Full version \$3.99

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## Handwriting:

**ABC Cursive Writing** ([deepocketseries.com](http://deepocketseries.com)) The program is easy to use and helps the user practice writing letters in cursive. The key to getting better is by practicing. This iPhone app makes it fun. The program has different colors to choose from and allows the user to practice upper, lower case letters, and numbers. The app also allows the user to customize and enter any word for practice. Lite version available. Full version \$.99

**Letter School** ([Letterschool.com](http://Letterschool.com)) This is for younger children. It contains upper and lower case and numbers and allows kids to practice essential skills. Lite version available. Full version \$2.99

**Kids Writing Pad** is a basic large lined writing pad useful for practicing numbers and letters to make sure you draw them appropriately. It has a middle dotted line between two solid lines like most primary school paper so you can practice having the appropriate parts of the letters or numbers in the right areas. You can choose the color of your pencil or use an eraser, or touch the big eraser to erase the entire page. \$1.99

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## Spelling:

**Spelling City** ([spellingcity.com](http://spellingcity.com)) Over 42,000 spelling words with customizable sentences and definitions. A real person says each word and sentence. This app also has free home pages for teachers and parents to save lists, and has teacher training videos. There are free printable handwriting worksheets. Ten games are on the iPad and there are over twenty-games on the internet. Free, with upgrades available.

**Build a Word Express** (Atreks.com) Learn to spell sight words, long vowel and short vowel words (700+ words and an option to create your own spelling words with your own voice). The base game is free with options to upgrade.

**Simplex Spelling HD** (pyxwise.com) This program focuses on teaching the Dolch Sight Words, which make up 50%-75% of all printed text (this includes the most common words in the English language such as 'the', 'and', 'of', etc). It is designed to help emergent readers build a strong foundation in spelling and reading skills. The complete word list contains over 260 words and can be found on their website. Lite version available. Full Version- \$4.99

**Chicktionary** (shockwave.com) Unscramble a roost full of letters and create as many words as possible. Each chicken bears a letter. Touch them to spell out a word, then watch as the word appears below them. CHICKTIONARY COOP is the next generation of the award-winning CHICKTIONARY word game named as a Top 25 iPad app for kids by TIME and a top iPhone and iPad app for grade-schoolers by MSNBC, Mashable, and Tecca. *Free* - \$1.99

**Bookworm** (Popcap.com) Similar to the board game Boggle, link letter tiles to build words and keep "Lex" sated and smiling. The bigger the word, the better the bonus. \$2.99

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## Comprehension:

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**Brain Pop** (brainpop.com) Watch a free educational movie everyday and then test your new knowledge with an interactive quiz. For an optional in-app subscription you have access to over 750 videos in any academic areas. All videos are close-captioned so it is easy to follow along. *Free* - \$1.99 month

**Meet Millie** (/www.milliewashere.com/) Millie Was Here is a fun and furry book app series designed for little fingers (but you'll watch too). Kids can listen to the story, read along, play games, hunt for stickers, and more. They'll think they're playing a game. You'll know they're reading a book. *Free*

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## Written Expression:

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**Inspiration Maps** (inspiration.com/inspmaps) This program is filled with multiple tasks. You can brainstorm and visualize ideas with maps and diagrams. Organize your thoughts and ideas. Make sense of concepts and projects. Build critical thinking and reasoning skills. Organize yourself for studying by building study and note taking skills. *Free* - \$9.99

**Explain Everything** (explaineverything.com) Explain Everything is an easy-to-use design tool that lets you annotate, animate, and narrate explanations and presentations. You can create dynamic interactive lessons, activities, assessments, and tutorials using Explain Everything's flexible and integrated design. Use Explain Everything as an interactive whiteboard

using the iPad2 video display. Explain Everything records on-screen drawing, annotation, object movement and captures audio via the iPad microphone. Import Photos, PDF, PPT, and Keynote from Dropbox, Evernote, Email, iPad, photo roll and iPad2 camera. \$2.99

**Shake-A-Phrase** (shakeaphrase.com) Shake your iPhone/iPad to create a new silly sentence every time. Tap on the words to see the definitions. Perfect for learning in the classroom or on the go, this educational app features over 2000 words and definitions in 5 colorful and engaging themes - animals, fairytale, monsters, and sports. \$1.99

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## Reading Alternatives:

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**Speak it!** (Future-apps.net) This is a text to speech app. Copy any document, web page, PDF file then paste them into Speak it! It will read it back to you with the highest quality sound available. \$1.99

**Read to Kids** (Beesneststudios.com) Read To Kids is an app that uses your voice recording to let your kids hear you read a story when you can't be there. Lite version Available. Full version \$ .99

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## Writing Alternatives:

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**Dragon Dictation** (nuancemobilelife.com) Dragon Dictation is an easy-to-use voice recognition application powered by Dragon NaturallySpeaking that allows you to easily speak and instantly see your text content for everything from email messages to blog posts on your iPad™, iPhone™ or iPod touch™. *Free*

**Felt Board** (softwaresmoothie.com) Upon entering this application, users will immediately get a craft like feeling as every aspect of this educational app is created with felt. Use your fine motor and hand-eye coordination skills to develop amazing stories as you tap, drag, drop, pinch and zoom pieces into a scene. Felt Board for iPad is a very user friendly application for children young and old. It is an application that encourages all learning styles as children can work collaboratively or independently. \$2.99

**Sock Puppets** (Smithmicro.com) Sock Puppets lets you create your own puppet shows in seconds, then share them on Facebook and YouTube with just a few taps. Just add puppets, props, scenery, and backgrounds to start creating. Hit the record button and the puppets will automatically lip-sync to your voice. *Free*-\$3.99

**Tapikeo** (tapikeo.com) Tapikeo allows you and your children to easily and quickly create your own audio-enabled picture books, storyboards, visual schedules, memory aids, audio flashcards, and more using a versatile grid style layout.

Create engaging combinations of your own photographs and narration for pre-reading children to enjoy independently, or watch the imagination of your older children soar with this unique method of creative expression. Two versions available \$1.99 and HD for \$3.99

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## Notetaking:

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**Evernote** (www.evernote.com) This app allows users to take notes in an innovative way. Users are able to organize their notes into different notebooks and can add pictures, sound, and set alarms to remind them to study. It is synced to your phone, tablet, and computer. *Free*

**Quizlet** (www.quizlet.com) Users can create digital flashcards as a study tool with Quizlet. Users can also add in images and sound recordings to enhance their flashcards. Once created, users can review with games and different tests until they master information. *Free*

**Notability** (gingerlabs.com) Integrates handwriting with PDF annotation, typing, recording and organizing so notes can be taken anyway you want. \$1.99

**My Homework** (myhomeworkapp.com) Tracks your homework, test, project and lessons. Get reminded when an assignment is due. Supports time, block and period based schedules. Can sync to any device. Teachers can create an account and students can automatically be in sync with their teacher with one touch. *Free*

**iVocAudio** (ivocaudio.com) iVocAudio provides a fun and easy way to memorize things quickly using your own recorded Voice. What makes it different from using audio flash cards is that the app takes care of everything. You simply have to record your Q & A pairs with your iPhone's or iPad's microphone and then practice until it finally gets stored into your brain. \$1.99

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## Teacher Supportive Apps:

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**Kahoot** (www.getkahoot.com) Using the Kahoot dashboard, teachers can create unique and interactive games to review content with their students. The highly engaging format and easy-to-use platform transforms the classroom. *Free*

**Quizalize** (www.quizalize.com) Quizalize allows teachers to create fun games on any topic. Students can then play them individual games in class or teachers can assign it for homework. As a bonus, teachers can import information directly from Quizlet. *Free*

**Flocabulary** (www.flocabulary.com) Flocabulary offers hundreds of videos on a variety of topics, including Language Arts, Math, Science, Social Studies, and Vocabulary. The videos include companion activities to complement each lesson. In addition, they are all close-captioned for easy viewing. \$12.99/month for a subscription

**Nearpod** (www.nearpod.com) Using Nearpod, users can create slideshow presentations with interactive activities, websites, and videos. While presenting, the slideshow can be synced across all devices in the classroom. *Free*

**Sound Literacy** (3DLiteracy.com) If you are using any Orton-Gillingham program, this app will make perfect sense. This app was designed with opened ended possibilities. This one is well worth the price of \$24.99.

**Socrative App for teachers and Students** (go to YouTube for instructions) Great way for a teacher to give a short T/F, multiple answer or short answer quiz. Quoted from their website, "Socrative is a smart student response system that empowers teachers to engage their classrooms through a series of educational exercises and games via smart phones, laptops, and tablets." Works well and could transform the use of "Clickers" in every school! *Free*.

**iTunes U-** iTunes U has lots of curriculum material created by educators categorized by subject area, submitting institution, and grade level. All the material is vetted through the submitting organizations, mostly Colleges, Universities and K-12 Education groups. There is a Beyond Campus area that also has materials from museums, libraries (think Library of Congress!), and other educationally minded organizations. *Best of all, all material is available for free.*

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## Executive Functioning

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**Alarmed** (iTunes store) This app is great to help students remember important dates and times. The app allows you to set up repeat scheduling, pop up notifications, and customized alarms. The best part is the "nag" feature, which will have the alarm go off every minute until the task is complete. *Free*

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## Vocabulary

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**Marie's Words** (www.marieswords.com) This vocabulary program uses flashcards that combine full color, engaging drawings with 550 of the most common SAT words. Each flashcard has the definition, synonyms, and antonyms on the front and a coordinated drawing on the back. This program is ideal for a variety of learners. \$19.95 for the complete set

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## Written Expression

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**Snaptypes** (www.snaptypesapp.com/) A huge help for students who struggling with writing, Snaptypes allows users to take a picture of any document. Using the app, they can type directly on to the worksheet, preventing any handwriting struggles. Additionally, they can send the completed worksheets to their teachers directly within the app. It also stores all the documents, helping with organization.

**Learning Ally** (www.learningally.org) Learning Ally is a collection of human-narrated audiobooks, literature, and textbooks. The program offers over 80,000 audiobooks, making it ideal for students with reading challenges. \$135 a year

**WebOutLoud** (iTunes store) This innovative app is ideal for struggling readers. The app will read the content of any website to the user. *Free*

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## Behavior Support

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**Classcraft** ([www.classcraft.com](http://www.classcraft.com)) Classcraft is an innovative behavior management system where students create an avatar. After the avatar is created, students earn XP based on positive behaviors. This combines video games and behavior management. *Free*

**Class Dojo** ([www.classdojo.com](http://www.classdojo.com)) Class Dojo allows the user to track positive and negative behaviors in their classroom. The behaviors are fully customizable and the interface is very user-friendly. Data can also be shared with parents with the touch of a button. *Free*

**Casper Focus** ([www.jamf.com](http://www.jamf.com)) This app allows the user to “lock” a student in to various apps. This prevents them from getting off-task and not following directions. The app allows you to do this remotely. *Pricing on Website*

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## Remote Access:

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**Splashtop 2** ([Splashtop.com](http://Splashtop.com)) Splashtop 2 is the easiest way to access all of your content from your computer from any device from anywhere. *Right now it is on sale for \$2.99 to install, but there is a monthly fee of \$.99*

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## Math:

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**Dragon Box** ([dragonboxapp.com](http://dragonboxapp.com)) This is the first real Algebra game for iPads. The idea was to create a game that children experience that is actually fun, but where they also would be able to solve mathematical equations. \$5.99

**iAllowance** ([Jumpgapsoftware.com](http://Jumpgapsoftware.com)) Allows you to manage your child's finances and teach him or her about saving and spending money. Whether you want to set up a weekly allowance or pay out a special reward. Support for multiple children, unlimited banks, chores and you can email & print reports. *Free - \$3.99*

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## Science:

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**Touch Physics** ([gamez4touch.com](http://gamez4touch.com)) -Touch physics models real physics. Play your own music and change the laws of physics. This app resumes where you last left off and shake to reset. It is very addictive. *Free*

**NASA App** ([nasa.gov](http://nasa.gov)) Current NASA information. Over 150,00- images with the latest news and stories. It has launch information and countdown clocks. *Free*

**The Elements** ([touchpress.com](http://touchpress.com)) - The Elements: A Visual Exploration is a beautiful interactive iPad book. It preserves the lush look and beautifully composed pages of the best-selling hardcover edition, but adds an astonishing new dimension to

the material. Examine over 500 3D objects from all sides by spinning the images. Compare the properties of every element in beautiful detail. \$9.99

**Google Earth** ([earth.google.com](http://earth.google.com)) Take a virtual journey to any location in the world. Explore 3D buildings, imagery, and terrain. Find cities, places and local businesses. *Free*

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## Miscellaneous:

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**Common Core Standards** ([masteryconnect.com](http://masteryconnect.com)) - View the Common Core Standards in one convenient app. It is a great reference for students, parents, and teachers for understanding the core standards. You can quickly find the standards by subject, grade and domain. *Free*

**Dyslexia** ([nessy.com](http://nessy.com)) Short video of what it is like being Dyslexic, with tips for parents and teachers. *Free*

**Dyslexie Font** ([www.dyslexiefont.com](http://www.dyslexiefont.com)) This font was created by someone with Dyslexia to help improve his own reading ability. After finding success with it, he decided to offer it to others in hopes that it could help them too. The font has nine main features, including bigger opening and slanted letters. *Free*

**Mad Libs** ([madlibs.com](http://madlibs.com)) Based on the original Mad Libs books. This app works on building grammar. Use your voice recognition to enter your funny silly words. Share your stories on Facebook, Twitter, or email. *Free*

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## Stack the States/ Countries

([dan-russell-pinson.com/my-games/](http://dan-russell-pinson.com/my-games/))– This is a great educational app that helps you learn the 50 states the easy way. Watch the states actually come to life in this colorful and dynamic game!

As you learn state capitals, shapes, geographic locations and more, you can actually click, move and drop the animated states anywhere on the screen. \$.99

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[thegatewayacademy.org](http://thegatewayacademy.org)

[neuhaus.org](http://neuhaus.org)





*The following books are available for purchase at the IDA website—click on “Publications/Online Bookstore”. If you are a member of IDA, you receive a discount on all books purchased from IDA.*

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### PROMOTING EXECUTIVE FUNCTION IN THE CLASSROOM

By: Lynn Meltzer

Accessible and practical, this book helps teachers incorporate executive function processes—such as planning, organizing, prioritizing, and self-checking—into the classroom curriculum. Chapters provide effective strategies for optimizing what K–12 students learn by improving how they learn. Noted authority Lynn Meltzer and her research associates present a wealth of easy-to-implement assessment tools, teaching techniques and activities, and planning aids. Featuring numerous whole-class ideas and suggestions, the book also shows how to differentiate instruction for students with learning or attention difficulties.

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### WRITING MATTERS: DEVELOPING SENTENCE SKILLS IN STUDENTS OF ALL AGES

By: William Van Cleave

Teacher’s Manual

This Manual Includes...

- unique, research-based lesson design
- alignment with the Common Core
- sequence of skills for instruction techniques for one-to-one and classroom instruction
- model dialogues
- 326 pages: spiral bound

Each Unit Includes...

- an overview of general information for the teacher
- clarification of points teachers sometimes confuse
- steps for initial instruction and subsequent lessons
- sample activities and assignments

MULTISENSORY TEACHING OF BASIC LANGUAGE SKILLS  
3<sup>RD</sup> EDITION Edited by: *Judith R. Birsh, Ed.D*

As new research shows how effective systematic and explicit teaching of language-based skills is for students with learning disabilities—along with the added benefits of multisensory techniques—discover the latest on this popular teaching approach with the third edition of this bestselling textbook. Adopted by colleges and universities across the country, this definitive core text is now fully revised and expanded with cutting-edge research and more on hot topics such as executive function, fluency, and adolescent literacy.

MULTISENSORY TEACHING OF BASIC LANGUAGE SKILLS  
ACTIVITY BOOK, REVISED EDITION  
By: *Suzanne Carreker, Ph.D. and Judith R. Birsh, Ed.D.*

Description: With the new edition of this activity book—the companion to Judith Birsh's bestselling text, *Multisensory Teaching of Basic Language Skills*—students and practitioners will get the practice they need to use multisensory teaching effectively with students who have dyslexia and other learning disabilities. Ideal for both pre-service teacher education courses and in-service professional development, the activity book aligns with the third edition of the *Multisensory Teaching* textbook, so readers can easily use them in tandem.

OVERCOMING DYSLEXIA: A NEW AND COMPLETE SCIENCE-BASED PROGRAM FOR READING PROBLEMS AT ANY LEVEL  
By: *Sally Shaywitz, M.D.*

Description: From one of the world's leading experts on reading and dyslexia, the most comprehensive, up-to-date, and practical book yet to help us understand, identify, and overcome the reading problems that plague American children today. For the one in every five children who has dyslexia and the millions of others who struggle to read at their own grade levels—and for their parents, teachers, and tutors—this book can make a difference.

ESSENTIALS OF DYSLEXIA ASSESSMENT AND INTERVENTION By: *Nancy H. Mather and Barbara J. Wendling*

Description: *Essentials of Dyslexia Assessment and Intervention* provides practical, step-by-step information on accurately identifying, assessing, and using evidence-based interventions with individuals with dyslexia. Addressing the components that need to be considered in the assessment of dyslexia—both cognitive and academic—this book includes descriptions of the various tests

used in a comprehensive dyslexia assessment along with detailed, evidence-based interventions that professionals and parents can use to help individuals struggling with dyslexia.

Like all the volumes in the *Essentials of Psychological Assessment* series, each concise chapter features numerous callout boxes highlighting key concepts, bulleted points, and extensive illustrative material, as well as test questions that help you gauge and reinforce your grasp of the information covered.

Providing an in-depth look at dyslexia, this straightforward book presents information that will prepare school psychologists, neuropsychologists, educational diagnosticians, special education teachers, as well as general education teachers, to recognize, assess, and provide effective treatment programs for dyslexia. The book is also a good resource for parents who are helping a child with dyslexia.

- A practical guide to understanding, assessing, and helping individuals who have dyslexia
- Expert advice and tips throughout
- Conveniently formatted for rapid reference

BASIC FACTS ABOUT DYSLEXIA AND OTHER READING PROBLEMS By: *Louisa Cook Moats & Karen E. Dakin*

Description: This essential resource defines dyslexia and illustrates, with real-life examples, how to recognize dyslexia and other reading problems at various stages of development, from preschool to adulthood. The authors have masterfully selected and distilled the most significant research in the field to create this descriptive and informative resource. An IDA Bestseller!

SCHOOL STRUGGLES: A GUIDE TO YOUR SHUT-DOWN LEARNER By: *Dr. Richard Selznick*

Description: *School Struggles*, is Dr. Richard Selznick's follow-up to the acclaimed *The Shut-Down Learner*. *School Struggles* talks about the common themes facing children and their challenges every day. Dr. Selznick explores reading and writing issues, behavioral problems, difficulties with organization, social skills, medication, parents' interactions with teachers, excessive use of technology, the importance of patience, and more. The practical, down-to-earth tone and helpful, easily applicable tools make this book a great support for parents staying awake at night worrying about their child's learning and school experience.

**BACKWORDS FORWORD: MY JOURNEY THROUGH DYSLEXIA**  
By: *Catherine A. Hirschman, MEd & R. Christine Melton, MD, MS*

Description: In this smart and compassionate firsthand account of dyslexia, written by Catherine Hirschman with her mother, Christine Melton, we see a struggle to cope with and overcome learning differences from very early childhood. Taking pains to be honest in and explicit about the experience of dyslexia, Catherine's story introduces the reader to the most helpful and current information, while providing feedback from her parents, former caregiver and siblings about how her struggle with dyslexia affected her relationship with her family – and advice for families facing the same challenges. Despite the difficulties she faced and continues to face in reading and writing, the author has achieved an impressive range of successes that attest to her desire to learn and thrive academically and professionally. And ultimately, as a teacher, Catherine has helped others do so as well.

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**THE DYSLEXIC ADVANTAGE: UNLOCKING THE HIDDEN POTENTIAL OF THE DYSLEXIC BRAIN**

By: *Brock L. Eide, M.D. and Fernette F. Eide, M.D.*

Description: Did you know that many successful architects, lawyers, engineers- even bestselling novelists-had difficulties learning to read and write as children? In this groundbreaking book, Brock and Fernette Eide explain how 20 percent of people-individuals with dyslexia share a unique learning style that can create advantages in a classroom, at a job, or at home. Using their combined expertise in neurology and education, the authors show how these individuals not only perceive the written word differently but may also excel at spatial reasoning, see insightful connections that others simply miss, understand the world in stories, and display amazing creativity.

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**GOT DYSLEXIA?** By: *Heather Pritchard*

Description: Matthew has trouble reading because of something called dyslexia. When he learns he's getting a new teacher, he's a little nervous. Will Mrs. Hanke be the teacher Matthew needs? Can Matthew finally believe that he can do well and have fun in school?

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**ELI: THE BOY WHO HATED TO WRITE, 2ND EDITION**  
By: *Regina G. Richards, M.A. and Eli I. Richards, foreword by Richard D. Lavoie*

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**THE ADVENTURES OF EVERYDAY GENIUSES: MRS. GORSKI, I THINK I HAVE THE WIGGLE FIDGETS** By: *Barbara Esham*

**THE MANY FACES OF DYSLEXIA**  
By *Margaret Byrd Rawson*

Description: A selection of the writings of Margaret B. Rawson, a pioneer in the field of dyslexia, and editor emeritus of IDA. Mrs. Rawson has inspired several generations of professionals, parents, and students through her lectures, papers, and teacher-training sessions dealing with language and its meaning in our lives.

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**THE DYSLEXIA EMPOWERMENT PLAN**  
By *Ben Foss*

Description: A blueprint for renewing your child's confidence and love of learning—identifying and building on your child's strengths, best practices for accommodations and the latest technologies and simple ways to secure your child's legal rights.

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The following books are available for  
purchase on [Amazon.com](https://www.amazon.com)—

**JAMIE'S JOURNEY: THE SAVANNAH** by *Susan M. Ebbers and Cory Godbey*

In this beautifully illustrated story a boy follows his dream, using nothing but imagination and a marvelous morphing mat to brave the ocean, see the savannah, and make friends with an African elephant. The message? Read to awaken your dreams. Imagine, and make it happen. Excerpt: As he hides from the hail in his marvelous dome an elephant suddenly enters his home! He's only a baby, not even one year. Feeling lost and alone, he's quaking with fear.

---

**LEADERS, VISIONARIES AND DREAMERS: EXTRAORDINARY PEOPLE WITH DYSLEXIA AND OTHER LEARNING DISABILITIES**  
by *Paul J. Gerber (Editor), Marshall H. Raskind (Editor)*

This book is an in-depth look at 12 incredible people with LD and dyslexia whose lives are characterised by major accomplishments and contributions that they have made in their respective fields as well as on the contemporary American scene. These men and women are from a variety of fields—arts and literature, science, politics and sports.



By our 2017 Annual Conference Keynote Speaker:  
Jerome J. Schultz, Ph.D

*NOWHERE TO HIDE: Why Kids with ADHD and LD Hate School and What We Can Do About It*  
By: Jerome J. Schultz, Ph.D

*Now available in audio format at Learning Ally*

In his latest book, Dr. Schultz examines how stress, brought on by ADHD and LD, negatively impacts learning and behavior. Leveraging over 30 years of experience in neuropsychology and education, Schultz presents parents and teachers with practical and understandable strategies that effectively reduce this stress and give their children a better home and school life.

Dr. Schultz's new book offers:

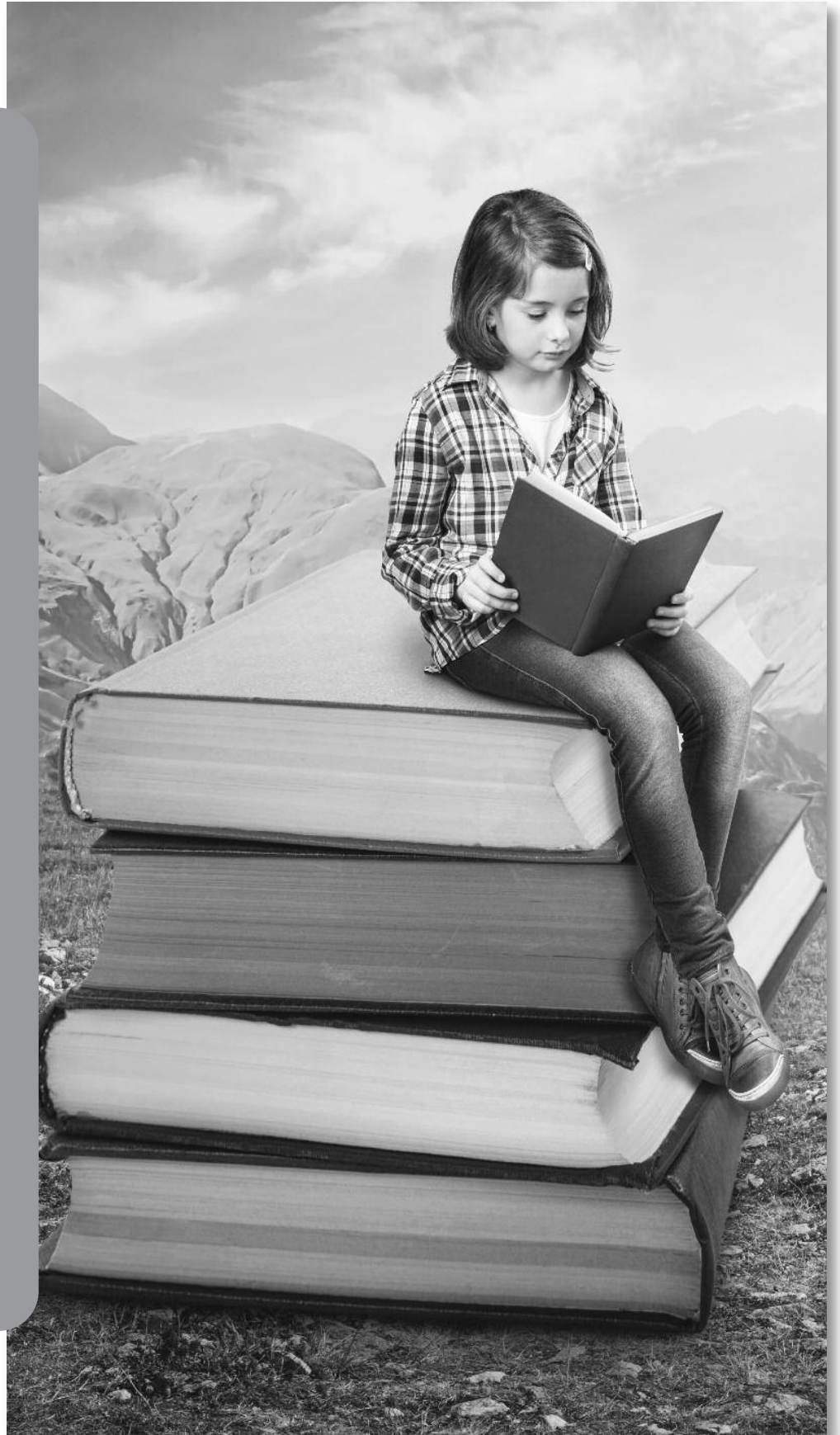
- a new way to look at why kids with ADHD/LD struggle at school
- ways to reduce stress in kids with ADHD and LD
- helpful rating scales, checklists and printable charts to use at school and home

A new approach to help kids with ADHD and LD succeed in and outside the classroom. This groundbreaking book addresses the consequences of the unabated stress associated with Learning disabilities and ADHD and the toxic, deleterious impact of this stress on kids' academic learning, social skills, behavior, and efficient brain functioning. Schultz draws upon three decades of work as a neuropsychologist, teacher educator, and school consultant to address this gap. This book can help change the way parents and teachers think about why kids with LD and ADHD find school and homework so toxic.

This important resource is written by the HBIDA Conference Keynote Speaker— faculty member of Harvard Medical School in the Department of Psychiatry and former classroom teacher. ✕



Young  
People's  
Books  
Focusing  
on  
Dyslexia



## Young People's Books Focusing on Dyslexia

### CLOSE TO FAMOUS

by Joan Bauer

Plucky twelve-year-old Foster McFee is not going to let her inability to read keep her from reaching her goal of having her own television cooking show. In fact, her ambitions engage everyone around her, including an unlikely reading tutor who forces her to confront the vulnerability she is trying to keep hidden.

### ELEVEN

by Patricia Riley Giff

Sam, a talented boy who can't read, is trying to discover his true identity through written documents. This action-packed psychological mystery is both suspenseful and touching.

### HANK ZIPZER: THE WORLD'S GREATEST UNDERACHIEVER

A Series by Henry Winkler & Lin Oliver

*"Hank Zipzer is the kid next door. Humor, magic, a school bully, a pet dachshund named Cheerio, and a pet iguana that slurps soup at dinner add up to a fun novel with something for everyone."*

—Library School Journal

*Henry Winkler's real-life experiences as a young "underachiever" inspire these humorous and exciting stories in the Hank Zipzer series. These books will engage even the most reluctant reader in a fun romp through the days of Hank Zipzer, who always manages to keep things lively and, in the end, helps deliver a message of understanding for all kids, especially for those who share Hank's learning differences.*

Visit Hank Zipzer's official site.

*"The Fonx Makes Dyslexia Cool" A video on BBC News.*

*"Henry Winkler, who played the Fonx in the 1970s sitcom Happy Days, has been in Hampshire talking to schoolchildren about his struggle with dyslexia." —BBC*

### THE LIGHTNING THIEF

and others in the series by Rick Riordan

*"My son and all his friends from ages 10-15 years old like these series, they are filled with excitement, danger, and personal triumph. They can also be downloaded for an MP3 player."*

—Marcia Mishaan, YCDC Council Member

From Myth & Mystery: The Official Blog for Author Rick Riordan...On a more personal level, mythology was very helpful to me. Before I wrote *The Lightning Thief*, my son Haley was struggling in second grade, or Year 3. It turned out he was dyslexic and ADHD. These learning disabilities, by the way,

are also a frontier, a way of seeing from the edge. ADHD and dyslexic people are creative, out-of-the-box thinkers. They cannot do things traditionally, so they learn to improvise. Percy Jackson was a myth to help him make sense of who he is. Mythology is a way of explaining something that can't be explained, except by allegory, and my son's struggle in school definitely applied. He completely bought in to the idea that ADHD/dyslexia, taken together, was an almost sure sign that you have Olympian blood.

### TRAPPED. A NOVEL

by Judy Spurr

*"A short, empathetic novel for middle-schoolers that addresses learning disabilities and bullying...nicely executed fiction with a neatly resolved ending that will leave readers smiling."*

—Kirkus Reviews

School is difficult for Jamie—dyslexia not only makes coursework a challenge, but he is often bullied at school. Spurr, a former reading teacher, enters the real-life, day-to-day struggles of kids with dyslexia and shows how friendships and perseverance can change a life. The book is written appropriately for young people, but parents will learn something, too, of both the academic and social challenges kids face. The book offers lots of food for thoughtful discussion between parents and kids or kids in a classroom or book-club setting.

### AUTHOR

by Helen Lester

*"Lester's lighthearted book of how she came to write children's books will give aspiring authors of any age a lift and encouragement to persevere."*

—Publishers Weekly

An inspirational true story of a girl, Helen Lester, who has trouble writing even something as simple as a grocery list yet becomes a teacher and then a celebrated children's book author.

### TACKY THE PENGUIN

by Helen Lester & illustrated by Lynn M. Musinger

*"This book is must reading for any kid—or grown-up—who refuses to follow the pack." —Publishers Weekly*

This delightful tale of an odd penguin who doesn't fit in with the perfect penguins in his colony is well suited to budding out-of-the-box thinkers who often do things differently from their peers.

## Young People's Books Focusing on Dyslexia

Stories give children a way to think positively about themselves, and Tacky is a hero for children who struggle with differences. *Note: A Read-Along Book/CD combo is also available.*

**WHAT IS DYSLEXIA?: A BOOK EXPLAINING DYSLEXIA FOR KIDS AND ADULTS TO USE TOGETHER**  
by Alan M. Hultquist, illustrated by Lydia Corrow

*"...a must read for parents and children struggling with dyslexia."*

Children with dyslexia can be left "out of the loop" when it comes to discussions about the reasons for their struggles at school. *What Is Dyslexia?* is designed to help adults explain dyslexia to children aged 8-11. Hultquist offers clear examples and explanations, interactive activities for parents (or other adults) and children to do together, and highlights of the courage and strengths of people with dyslexia.

**IT'S CALLED DYSLEXIA BY JENNIFER MOORE-MALLINOS & ILLUSTRATED**  
by Nuria Roca

Whoever said that learning to read and write is easy? The little girl in this story is unhappy and she no longer enjoys school. When learning to read and write, she tries to remember which way the letters go but she often gets them all mixed up. After she discovers that dyslexia is the reason for her trouble, she begins to understand that with extra practice and help from others, she will begin to read and write correctly. At the same time, she also discovers a hidden talent she never knew existed!

**THANK YOU, MR. FALKER**  
by Patricia Polacco

*"...an inspiring picture book...the author clearly shows the ways that children internalize critical comments made by others and suffer for their differences."*

—School Library Journal

*"This story is truly autobiographical. It is about my own struggle with not being able to read. This story honors the teacher that took the time to see a child that was drowning and needed help...Mr. Falker, my hero, my teacher, not only stopped this boy from teasing me, but he also noticed that I wasn't reading well and got a reading specialist to help."*

—Patricia Polacco

**THE ALPHABET WAR: A STORY ABOUT DYSLEXIA**  
by Diane Burton Robb and Gail Piazza

*"Adam's experience will inspire and encourage many youngsters who find themselves in similar predicaments. Equally important, the book sounds an alarm for educators and parents."*

—Booklist

"When Adam was little, he loved to sink into his mother's warm lap and listen to her read." Yet reading becomes a frustrating, daily battle once Adam starts school. Finally, in third grade, Adam learns that he has dyslexia...and begins a journey back to enjoying reading.

**MY NAME IS BRAIN**  
by Jeanne Betancourt

*"Children with learning problems will relate well to this book."*  
- School Library Journal

It's a new school year and Brian is hoping to have a much better academic year. He's still joking with his friends, and makes them laugh especially hard when he writes his name on the board as "Brain." But this is no joke, as his new no-nonsense teacher spots Brian's previously undiagnosed dyslexia. With tutoring and the help of his teacher, Brian starts to see his potential and himself in a whole new light.

**TWO-MINUTE DRILL: MIKE LUPICA'S COMEBACK KIDS**  
by Mike Lupica

*Teaming up brings new opportunities for the class brain and the class jock.*

Chris Conlan is the coolest kid in sixth grade—the golden-armed quarterback of the football team, and the boy all the others look up to. Scott Parry is the new kid, the boy with the huge brain, but with feet that trip over themselves daily. These two boys may seem like an odd couple, but they team up when Scott figures out how to help Chris with his reading problem, while Chris helps him with his football, and both boys end up winners.



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RICK LAVOIE, M.A., M.Ed. is best known for his videos “How Difficult Can This Be?, The F.A.T. City Workshop” and “Last One Picked, First One Picked On: The Social Implications of Learning Disabilities”. These award-winning films have brought Rick's sensitive and compelling message to countless thousands throughout the world. After viewing the videos, former First Lady Barbara Bush stated, “You really wowed us! I only wish that every parent and teacher in the United States today could also see your program.” His new video on behavior management is entitled “When the Chips are Down...” is now available through LD Online.

Rick Lavoie has served as an administrator of residential programs for children with special needs since 1972. He holds three degrees in Special Education and has served as an adjunct professor or visiting lecturer at numerous universities including Syracuse, Harvard, Gallaudet, Manhattanville College, University of Alabama and Georgetown. His numerous national television appearances include CBS Morning Show, Good Morning America, ABC Evening News and Disney Channel Presents.



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**Keynote Speaker:**  
**Joan Sedita, M.A.**

**“KEYS TO CONTENT LITERACY:  
Causes of reading comprehension  
difficulty and instructions solution”**

Joan Sedita is the founder of Keys to Literacy, a literacy professional development organization based in MA. For over 35 years, Joan has been an experienced educator and nationally recognized teacher trainer. She has authored multiple literacy professional development programs, including The Key Comprehension Routine, The Key Vocabulary Routine, Keys to Content Writing, Keys to Early Writing, and Keys to Close Reading. Beginning in 1975, she worked for 23 years at the Landmark School, a pioneer in the development of literacy intervention programs. As a teacher, principal, and director of the Outreach Teacher Training Program at Landmark, Joan developed expertise, methods, and instructional programs that address the literacy needs of students in grades K-12. Joan was one of the three lead trainers in MA for the Reading First Program and is a LETRS author and trainer. Joan received her M.Ed. in Reading from Harvard University and her B.A. from Boston College.

**Please visit [www.houstonida.org](http://www.houstonida.org)  
for complete speaker biographies  
and a full listing of Breakout  
Sessions—times and details.**



**Sophia K. Havasy, Ph.D.**

**“Complicated Launchings:  
From Teens to Adults”**

Dr. Havasy is the senior psychologist and works with a dynamic interdisciplinary team of professionals at the Tarnow Center for Self-Management. Over the past 20+ years, Dr. Havasy has specialized in helping young adults with ADHD, LD, bipolar, etc., and their families to work together to become independent adults. She refers to their process as complicated launchings. Dr. Havasy completed her undergraduate degree at Duke University, and her doctorate from Northwestern University. She has been in Houston for 35 years.



**William Van Cleave, M.A.**

William Van Cleave is in private practice as an educational consultant whose specialties include morphology and written expression. A nationally recognized speaker, he has presented on effective teaching practices at conferences and schools around the country since 1995. While his own background is in language-based learning difficulties, the strategies William promotes are effective for students of all skill levels and abilities. His high level of enthusiasm and energy, his interactive style, and his passion for working with teachers make him an effective presenter, whether he is visiting a school and sharing with its faculty or presenting at a national conference. He has provided professional development at state education conferences; dyslexia and learning disabilities conferences; E.L.L. conferences; and private and public schools, both remedial and mainstream.

In 2004 William published the first edition of *Everything You Want To Know & Exactly Where To Find It*, an Orton-Gillingham based reference guide. Now in its fourth edition, this manual serves tutors and teachers of struggling readers and spellers around the country. In the fall of 2013, he and co-author Caroline Dover published *Phrases & Sentences for Reading & Spelling*, a companion to the Everything text.

In the spring of 2012, William completed *Writing Matters: Developing Sentence Skills in Students of All Ages*. Schools in the public and private school arenas have adopted his methodology, and his writing approach is used by both one-on-one language therapists and classroom teachers.

In addition to workshops at conferences, schools, and districts around the country, William has recently been fortunate enough to participate in several interesting projects. He has provided professional development through a S.I.G. grant at SeeWorth Academy in Oklahoma City, OK. In addition, he is currently on an Rttll Committee devising writing standards for Pennsylvania. He is also writing a series of workbooks to complement the Writing Matters approach, designing a new sentence expansion card game, and beginning a long-awaited reference guide for teaching composition skills.

During his career William has tutored; taught literature, writing, and math; and held several administrative posts. He received his B.A. in English and Women's Studies from The College of Wooster and earned his M.A. in English from S.U.N.Y. New Paltz.



**Anna E. Williamson, M.A.**

Anna E. Williamson is a native Houstonian who returned to the city in 2013 after working in the education field in Washington, DC for ten years. Ms. Williamson has her M.A. in early childhood special education and human development from The George Washington University's Graduate School of Education and Human Development. Since 2014 she has been a school administrator at St. Luke's Day School, a private school serving 425 students between the ages of three months and six years. As the school's Assessment Coordinator, she specializes in intervening early in an inclusive environment, supporting teachers as they make appropriate accommodations and modifications for students, and partnering with parents as they begin the challenging and often emotional journey following a child's diagnosis.

Ms. Williamson has experience working directly with both typically developing infants and young children and children with delays, special needs, and learning differences. She believes in the power of collaboration between parents, teachers, and therapists and strives to create partnerships with families that are filled with communication, trust, and positive action.

Before joining St. Luke's Day School's administrative team in the summer of 2014, she taught Pre-Kindergarten at the school. Ms. Williamson serves as both the Infant/Toddler Program Coordinator and Assessment Coordinator for all Day School students.



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—SEE WILLIAM VAN CLEAVE'S ARTICLE — "Handwriting in a Modern World: Why It Matters & What To Do About It" —ON PAGE 21—



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Fax (713) 785-9613  
7500 San Felipe, Suite 875  
Houston, TX 77063  
[www.houstonslrc.com](http://www.houstonslrc.com)

A a B b C c D d E e F f  
G g H h I i J j K k L l M m N n  
O o P p Q q R r S s T t U u V v W w X x Y y Z z

**SANDY COLT**  
LICENSED DYSLLEXIA THERAPIST  
CERTIFIED ACADEMIC  
LANGUAGE THERAPIST

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13515 Tosca Lane  
Houston, Texas 77079  
713.410.6778  
mfcolt@gmail.com



**KAHN EDUCATIONAL GROUP, LLC.**  
CERTIFIED EDUCATIONAL PLANNERS

**Lindy Kahn, M.A., CEP**  
Consulting and Placement Services



6717 Vanderbilt Street  
Houston, TX 77005  
713.668.2609  
[lkahn@educationalconsulting.com](mailto:lkahn@educationalconsulting.com)  
[www.educationalconsulting.com](http://www.educationalconsulting.com)

**JANIS S. BLOCK, M.ED.**  
Educational Assessment • Consultation

4265 San Felipe  
Suite 1100  
Houston, Texas 77027

Tel 713-960-6660

**Teresa A. Langford, Ed.D.**

Comprehensive Evaluation and Consultation, LLC  
Intellectual, Cognitive, Educational Evaluation

**Educational Diagnostician**

4545 Bissonnet Ste. 201  
Bellaire, TX 77401

[teresa.langford10@gmail.com](mailto:teresa.langford10@gmail.com)  
<http://www.houstontest.com>

832-758-0186

*Responding to the Needs of All Learners Pk-Adult*



**HBIDA LOCAL  
TELEPHONE  
HELPLINE**

for information and  
referral services:

**832-282-7154**

or

email: [info@houstonida.org](mailto:info@houstonida.org)

# WEBSITES



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## DYSLEXIA

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International Dyslexia Association-  
Houston Branch

**832-282-7154** [houstonida.org](http://houstonida.org)

*HBIDA provides four programs per year for teachers, professionals, and parents, a free Resource Directory annually, two free newsletters annually, a local telephone helpline and email for information and referral services, and a Speakers Bureau of professionals available to present to groups about dyslexia.*

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Academic Language Therapy  
Association (ALTA)

**(972) 233-9107 ext. 208**

[altaread.org](http://altaread.org)

*Referrals to Certified Academic Language Therapists; information about dyslexia.*

**Helpline: 1-866-283-7133**

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Region 10 Education Service Center

**972-348-1410; (in Texas)**

**800-232-3030 ext. 1410**

State Dyslexia Coordinator

[region10.org/dyslexia/](http://region10.org/dyslexia/)

*Texas Dyslexia Law Handbook,  
accommodations and resources*

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Neuhaus Education Center

**713-664-7676**

[neuhaus.org](http://neuhaus.org)

*Teacher and Parent education, on-line classes,  
adult literacy classes*

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Reading Teachers Network

[readingteachersnetwork.org](http://readingteachersnetwork.org)

*“Neuhaus in Your Pocket” – resource for reading  
teachers and administrators*

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Parent Networking Group

(PNG) [www.houstonida.org](http://www.houstonida.org)

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## PRESCHOOL AND ADULT RESOURCES

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Get Ready to Read [getreadytoread.org](http://getreadytoread.org)

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## TECHNOLOGY

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Learning Ally

Formerly Recording for the Blind and  
Dyslexic [learningally.org](http://learningally.org)

Texas State Library – “Talking Books  
Program” [tsl.state.tx.us/tbp](http://tsl.state.tx.us/tbp)

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## LEGAL

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Advocacy, Inc. (Disability Rights  
Texas)

**713-974-7691, 800-252-9108**

[advocacyinc.org](http://advocacyinc.org)

*Advocating for people with disabilities in Texas*

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The Arc of Greater Houston

**713-957-1600**

[thearcofgreaterhouston.com](http://thearcofgreaterhouston.com)

*Advocating for inclusion; classes  
for parents, and information*

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Dyslexia and Related  
Disorders Handbook

[region10.org/dyslexia/](http://region10.org/dyslexia/)

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National Center for  
Learning Disabilities

**212-545-7510;**

**888-575-7373**

[nclld.org](http://nclld.org)

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US Dept. of Education Office  
of Special Education and  
Rehabilitative Services

**800-872-5327**

[www2.ed.gov/about/offices/  
list/osers/osep/index.html](http://www2.ed.gov/about/offices/list/osers/osep/index.html)

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Wrights Law

[wrightslaw.com](http://wrightslaw.com)

*Workshops and information on federal  
special education law*

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[www.wrightslaw.com/law/](http://www.wrightslaw.com/law/)

[ocr/sec504.guide.ocr.2016.pdf](http://ocr/sec504.guide.ocr.2016.pdf)

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## ATTENTION DEFICIT HYPERACTIVITY DISORDER

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Attention Deficit Disorder Association,  
Southern Region, ADDA-SR

**adda-sr.org** **281-897-0982**

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## LEARNING DISABILITIES

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Learning Disabilities Association of Texas  
**800-604-7500, 512-458-8234**

[ldat.org](http://ldat.org)

*Annual Texas conference, information*

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LD on Line

[ldonline.org](http://ldonline.org)

*Website with articles and resources*

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## IDA MEMBERSHIP

THE INTERNATIONAL DYSLEXIA ASSOCIATION (IDA) is an international organization that concerns itself with the complex issues of dyslexia. IDA membership includes a variety of professionals in partnership with people with dyslexia and their families and all others interested in our mission.

The purpose of IDA is to pursue and provide the most comprehensive range of information and services that address the full scope of dyslexia and related difficulties in learning to read and write...in a way that creates hope, possibility, and partnership.

### HOW TO BECOME A MEMBER

Simply go to :

**<https://dyslexiaida.org/>** and complete the online Membership Registration, then click "JOIN" at the bottom of this page to send IDA your registration via our secure connection; OR print the form, fill it out, and fax or mail it to headquarters. Be sure to fax a copy of your ID if you are joining at the Student level. Institutional (Non-Profit) applicants please fax proof of Non-Profit status.

### RENEWING YOUR MEMBERSHIP

You may renew your membership online by filling out the Membership Form. Be sure to include the Member ID as it appears in the upper left hand corner of your renewal notice.

### QUESTIONS ABOUT MEMBERSHIP?

Please contact headquarters at  
**<https://dyslexiaida.org/membership-account/membership-levels/>**

(410) 296-0232.

Office Hours are

Monday-Friday

8:30am-4:30pm Eastern.



# Giving to the Nancy LaFevers Ambroze Scholarship Fund

## ———— Memorial and Tributes ————

*The Nancy LaFevers Scholarship Fund is to promote the appropriate diagnosis and treatment of dyslexia and related disorders by offering scholarships for diagnostic testing of children and adults. Donations provide funds to fulfill Nancy's wish to enable diagnostic services for families who could not afford them otherwise.*

SINCE THE INCEPTION OF THE FUND THROUGH AUGUST 2016, thirty-three scholarships have been granted for a total of \$17,440. Funds donated in 2006 in memory of Nancy are being depleted and new funds are needed to continue Nancy's legacy.

A donation to the Nancy LaFevers Ambroze Scholarship Fund gives you the opportunity to remember special individuals with a memorial or tribute gift. A commemorative gift honors a loved one's life and serves to reflect upon the memories that live forever. A gift made in honor of an individual recognizes a person who has had a special impact on your life. When making a gift to HBIDA NLA scholarships, your gift will be used to fund scholarships for those who could not afford dyslexia testing.

We will send an acknowledgment to the family of the person you memorialize and to the person you have honored. The amount of your gift will not be disclosed.

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## Remembering Nancy LaFevers, M.A. CCC



NANCY LAFEVERS, M.A., CCC, believed in early diagnosis and remediation of dyslexia. She believed that remedial reading curriculums based on Orton-Gillingham (O-G) principles were the answer for remediating students with dyslexia. An effective and powerful advocate for children with dyslexia, learning differences, and related language disorders, Nancy was a founding member of the Houston Branch (HBIDA) and had served as president.

In April, 2006, the Houston Branch presented her with the HBIDA 2006 Nancy LaFevers Community Service Award, which was founded to recognize Branch members who made outstanding contributions for students with dyslexia and related language learning differences in our community. Donations from friends, family, and colleagues provided funds to fulfill Nancy's wish to enable diagnostic services for families

who could not afford them otherwise. In April, 2006, the Nancy LaFevers Ambroze Scholarship Fund was established.

For more information or to make a donation,  
please go to [www.houstonida.org](http://www.houstonida.org) and click on "scholarships".

## New Opportunity for Parents!

# PNG!

### NEW Parent Networking Group

As the parent of a child with dyslexia, are you feeling isolated and frustrated? HBIDA's Parent Networking Group provides an opportunity for parents of children with dyslexia to come together. PNG provides interesting speakers and a forum for discussion for parents at all points in their child's journey. Special attention is paid to research-based remediation approaches, educational best practices and reputable Houston resources.

Following is the schedule for gatherings. Parents of public schools and private schools will enjoy the informal and casual forum. There is no cost to attend the coffees, and drop-ins are encouraged and welcome. Parents receive reduced registration fees to Conferences and Symposiums with topics of interest to parents!

### Join PNG in 2018!

**March 3, 2018 –**  
**HBIDA Spring Conference**  
Registration and details available  
online at [www.houstonida.org](http://www.houstonida.org)  
Many topics for parents

**April, 2018 – Date to be Announced**  
Location to be Announced

**October 13, 2018 –**  
**HBIDA Fall Symposium**  
Registration and details available online  
at [www.houstonida.org](http://www.houstonida.org)  
Learn from knowledgeable speakers.  
Listen to an adult with dyslexia on dyslexia.



# HBIDA/IDA CALENDAR OF EVENTS

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HBIDA RESOURCE—  
a resource directory  
published annually  
by the Houston Branch  
of the International  
Dyslexia Association

For information or if  
you would like  
additional copies of  
HBIDA RESOURCE contact:  
houstonida@gmail.com  
Helpline: 832.282.7154  
www.houstonida.org

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P.O. Box 540504,  
Houston, Texas 77254-0504

Helpline phone number:  
832-282-7154

houstonida@gmail.com  
www.houstonida.org

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**January 3, 2018**

**COLLEGE PANEL**  
**Neuhaus Education Center**  
**7 pm - 9pm**

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**March 3, 2018**

**HBIDA 22<sup>ND</sup> ANNUAL CONFERENCE**  
**St. John the Divine Episcopal Church**  
**2450 River Oaks Blvd.**  
**Houston, Texas 77019**  
**8:00am - 4:15pm**

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**April TBD**

**Parent Network Group Coffee**  
**(see houstonida.org for details)**  
**FREE!**  
**Location to be determined**

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**Month of October**

**Dyslexia Awareness Month**

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**October 13, 2018**

**HBIDA FALL SYMPOSIUM**  
**The Junior League**  
**Houston, Texas**  
**8:00am - 1:15pm**

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**October 24-27, 2018**

**INTERNATIONAL DYSLEXIA ASSOCIATION**  
**69<sup>TH</sup> ANNUAL CONFERENCE**  
**Mashantucket, Connecticut**

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**December 3, 2018**

**HBIDA Annual Membership**  
**Meeting**  
**St. John the Divine**  
**7:00 pm – 8:30 pm**

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# Neuhaus Education Center

**WE HELP  
DISTRICTS**



Founded in 1980, Neuhaus Education Center is a 501 (c) (3) educational foundation dedicated to promoting reading success for all. Neuhaus provides evidence-based training and support to teachers, supplies information and resources to families, and offers direct literacy services to adult learners.

**WE HELP  
EDUCATORS**

Neuhaus has more than 35 years of experience in research, instruction and teacher training in the areas of dyslexia and related reading disabilities. We also have evidence-based, independently verified professional learning programs designed specifically for teachers of children from economically disadvantaged families.

**WE HELP  
FAMILIES**



Neuhaus meets the standards of the International Dyslexia Association and is accredited by the International Multisensory Structured Language Education Council. Our professional staff members are certified by the Academic Language Therapy Association.

**WE HELP  
ADULT  
LEARNERS**

## What We Offer Districts or Campuses:

- Customized, comprehensive and sustainable school transformation
- Diagnostic analysis and data review
- Teacher professional learning
- Leadership development
- Literacy coaching
- Family engagement



## What We Offer Educators:

- Classes online, in-house, or on-site
- Complimentary web-based resources
- Dyslexia Specialist Program



**WE KNOW  
READING**



## What We Offer Families:

- Referrals to dyslexia interventionists
- Information about dyslexia and related disorders
- Twice-monthly information sessions



## What We Offer Adult Learners:

- Reading and spelling classes for adults
- Neuhaus Academy – a web-based literacy program



Neuhaus Education Center  
4433 Bissonnet  
Bellaire, Texas 77401

T 713.664.7676  
F 713.664.4744

neuhaus.org  
neuhausacademy.org