



Building a Teacher's Toolbox
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In this edition of "Building a Teacher's Toolbox", I am responding to those teachers and directors who said that they would like research based articles. I chose for a topic, "Dyslexia", to research for you.

You will find articles contained within this newsletter about dyslexia and reading as well as strategies. Once again, what I found remarkable is that the research for helping students with dyslexia with specific teaching strategies can be used by all students. They are just good teaching practice.

I hope that you find the articles interesting and helpful.

The first article I found is about "Novel treatment helps dyslexics significantly improve reading skills, show brain changes as children learn." (Pages 2-3)

The second article enclosed for you is about famous people with dyslexia and learning disabilities, including ADHD. What a list! (Pages 4-12)

The third article is about "improving reading comprehension". (Pages 13-14)

The fourth article is "what is dyslexia". (Pages 15-18)

The fifth article is "how to improve reading skills in your child". It is an article about children, but the ideas are sound for beginning readers. (Pages 19-22)

I have also included another "ice breaker". I hope that you find it useful for your planning for September. You can find this on pages 23-24.

May 24, 2000 | Not Classified | Health and Medicine

Novel treatment helps dyslexics significantly improve reading skills, shows the brain changes as children learn

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A novel treatment for dyslexia not only helps children to significantly improve their reading skills but also shows that the brain changes as dyslexics learn, according to a study by an interdisciplinary team of University of Washington scientists.

The research, published in the current issue of the *Journal of Neuroradiology*, also provides new evidence that dyslexia is a treatable brain-based disorder, according to neurophysicist Todd Richards and neuropsychologist Virginia Berninger, who headed the UW research team. Dyslexia, which is a reading disorder and the most common learning disability, affects an estimated 5 percent to 15 percent of children. Contrary to popular myth, the hallmarks of the disorder are subtle deficits in oral language processing of the sounds of the language, not reversal of letters.

"We want to make it very clear that we didn't cure dyslexia, but we think we effectively treated it," said Berninger. "Because of differences in their brains, the boys in our study will need additional educational treatment if they are to continue developing their reading skills. There are no quick fixes or magic bullets for curing dyslexia."

Richards and Berninger said the new study is the first in a line of research that will explore the degree to which the brain affects ease of learning and, in turn, is affected by specific educational interventions. They expect this kind of research will build a foundation that educators can draw upon to improve the accountability of teaching practices.

"Some children learn to read easier than others, and unless there is real brain damage, the brain will change as children learn," said Berninger. Dyslexia is not brain damage. There are just differences in the wiring of the brain for those parts that are involved in reading. There is no such thing as a perfect brain. Any brain probably has structural anomalies. With appropriate instruction, dyslexic brains may become more efficient at processing the sounds of language. Because they are more efficient they use less brain area and metabolic energy."

Complete details about the intervention program - a three-week reading and science workshop developed by Berninger - will be published next fall in the journal *Learning Disability Quarterly*. The intervention draws on elements of existing treatments, putting them together in a novel way.

In the workshop the boys were taught to analyze sound in spoken words, to attach sounds to letters automatically and to use different strategies for translating written words into spoken words. The treatment was novel because it took advantage of the boys' talent and interest in science and technology. It linked reading instruction with a hands-on science workshop that used materials from Seattle's Pacific Science Center. The workshop is only one of a number of dyslexic treatments being developed at the UW.

The current study builds on previous UW research showing that there are chemical differences in brain function of dyslexic and non-dyslexic children during sound processing tasks.

tasks.

Fifteen boys - eight dyslexics and seven non-dyslexics - were involved in the new study. The boys ranged in age from 10 to 13 years and the dyslexic and control groups were matched for age, IQ and head size, but not in reading skills. The controls were above average readers for their age and learned to read very easily. The dyslexics had delayed reading skills and were reading well below average for their age group. They also had a family history of multi-generational dyslexia.

Both groups underwent spectroscopic imaging at the beginning of the study. The dyslexic boys then entered the treatment program that was designed to improve their phonological abilities or skills in understanding and using the sounds of language. About a year after the first imaging session, the dyslexics' reading skills were tested and both groups were imaged again using the same tests to evaluate the long-term effect of the treatment.

Following treatment the dyslexics expended 1.8 times the energy to do the same sound-processing task as the controls, compared to about 4 times the energy before treatment. According to Richards the dyslexics and controls were not statistically different after treatment. Over this same period the dyslexics also made large strides in their reading ability, especially in sounding out new words.

"The relative gains they made compared to children of the same age were more than what would be expected for the time that passed between tests," added Berninger. They made significant gains in analyzing sounds needed to decode words and in sounding out unknown words. After the workshop all but one of the boys could read grade appropriate passages.

"This research offers a message of hope. We can see improvement in children's reading levels with this intervention even if there are pre-existing brain differences that make learning difficult. "Parents of the boys in the study told us that children who didn't read independently before are now picking up books on their own and reading them."

The new results are part of a larger UW effort to understand the basis of dyslexia and develop treatments for the disorder. The National Institute of Child Health and Human Development funds the research and the UW's multidisciplinary Learning Disabilities Center. The center does not offer a summer treatment program to the general public. Treatment studies are only open to children of families participating in the dyslexia family genetics and brain imaging project.

Other members of the UW research team and co-authors of the study are David Corina, associate professor of psychology; Stephen Dager, professor of psychiatry and behavioral science; Robert Abbott, professor of educational psychology; Kenneth Maravilla, professor of radiology; and Ken Marro, a post-doctoral researcher in radiology. In addition, UW doctoral students Sandra Serafini and Keith Steury and radiology technician Denise Echelard, participated in the research.

<http://faculty.washington.edu/toddr/dyslexic.htm>

Famous People with Dyslexia, Other LD and/or AD/HD

Could you and your child use a little inspiration? Read about famous folks who overcame the challenges of LD and AD/HD.

By [Editorial Staff](#)

Did you know that many successful and famous people grew up with learning disabilities (LD) and/or Attention-Deficit/Hyperactivity Disorder (AD/HD)? Actress Whoopi Goldberg, business leader Charles Schwab, and Olympic swimmer Michael Phelps, to name a few, are all inspirations. Talk with your child about some of these successful people whose interests he shares or whose accomplishments he may admire. This will help him understand that he's not alone with his struggles and will foster hope for his future goals.

Note: You may notice that we haven't included some of the people mentioned on other lists of people suspected of having LD and/or AD/HD. While they may have struggled with certain aspects of learning, we can't confirm that they had a specific disability because they lived before these diagnostic categories came into use.

Look for information about successful people with LD and/or AD/HD, in the following categories:

[Artists & Artisans](#)

[Legal & Political Figures](#)

[Athletes](#)

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[Musicians](#)

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[Scientists](#)

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[Explorers](#)

Artists & Artisans

- **Chuck Close** is one of the nation's [most celebrated contemporary artists](#).
- **Andrew Dornenberg**, an award-winning chef, says that [cooking "saved" him from his struggle with dyslexia](#).
- Sculptor **Robert Graham** [struggled with dyslexia](#). His wife, actress Anjelica Huston explains, "Robert didn't realize he had a form of dyslexia until his own

son was diagnosed. But Robert's artistic gift immeasurably outstripped his difficulty."

- **Tommy Hilfiger** is an [internationally-known fashion designer](#).
- Robert Rauschenberg was a [multi-media artist](#) who had significant influence in the world of modern art and was even called the "Picasso of the 21st Century."
- **Mackenzie Thorpe**, [world-famous painter](#), urges people at an exhibit of his work to "stop looking with your eyes and see with your feelings."
- **Acclaimed artist Robert Toth** has paintings, sculptures, and bronzes on display in museums throughout the world, including the Smithsonian's National Portrait Gallery in Washington, D.C.
- **Acclaimed artist Willard Wigan** is the creator of the smallest works of art on earth. He is emerging as the most celebrated micro-miniaturist of all time.

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Athletes

- **Billy Blanks**, [world class martial artist](#) and television and movie actor, has created a foundation to promote self-sufficiency among high-risk women and children.
- **Terry Bradshaw**, former NFL quarterback, now host of Fox's NFL pre-game show, recently wrote a book in which he [reveals that he has AD/HD](#).
- **Scott Eyre**, San Francisco Giants pitcher, was [diagnosed with AD/HD at 30](#).
- **Cammi Granato** is a two-time [Olympian in ice hockey](#) and a U.S. National Women's Team member since 1990.
- **Bruce Jenner**, [1976 gold medalist in the Olympic decathlon](#), is described as the "World's Greatest Athlete."
- **Chris Kaman** is the [center for the NBA's Los Angeles Clippers](#).
- **Hank Kuehne**, PGA star, used golf as an escape from [his troubles at school](#).
- **Mike Lorenz** is a [lineman for the New England Patriots](#).
- **Greg Louganis** received an [Olympic gold medal in diving](#) in the 1984 and 1988 games and advocates for AIDS awareness.
- **John E. Morgan**, PGA champion, was bullied as a kid because of [his learning disabilities](#).

- **[New]** Olympic swimmer **Michael Phelps** made history by breaking records and winning 8 gold medals. He also inspired thousands [by speaking candidly about having AD/HD](#). His mother has also been very public about [telling their story](#).
- **Jim Shea, Jr.** earned a gold medal competing in the skeleton (a small sled) event at the 2002 Winter Olympics, making him [the first third-generation Winter Olympian in U.S. history](#).
- **[New]** Former Olympic fencer **Molly Sullivan Sliney** has made it her mission to speak to students and encourage them to believe in themselves and follow their dreams. She rose above [her own struggle with dyslexia](#) to become a world-class athlete.
- **Neil Smith**, [NFL professional football player](#), is defensive end for the San Diego Chargers.
- **Jackie Stewart** is a [race car driving champion](#) who has been inducted into the Grand Prix Hall of Fame.
- **Stan Wattle** is an [up-and-coming race car driver](#) in the Indy Racing League.

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Business Leaders

- **Richard Branson** is an [enormously successful entrepreneur](#) and founder of 150 enterprises that carry the Virgin name, such as Virgin Airlines.
- **John T. Chambers**, [CEO of Cisco Systems](#), has revolutionized the technology industry and is recognized as one of the most fascinating business leaders of our times.
- **Barbara Corcoran**, [founder of one of New York City's largest residential real estate agencies](#), recently authored *Use What You've Got & Other Business Lessons I Learned From My Mom*.
- **Ingvar Kamprad**, Swedish founder and chairman of IKEA stores, claims he adapted the inner workings of his business to [compensate for his dyslexia](#).
- **David Neeleman** founder and CEO of Jet Blue Airways, [started his first airline while he was still in college](#).
- **Paul Orfalea** is the [founder and chairperson of Kinko's](#), an international, billion-dollar copy service company.

- **Charles Schwab** is the founder, chairperson, and CEO of the Charles Schwab Corporation, the largest brokerage firm in the U.S. He [also has dyslexia](#).
- **Diane Swonk** is [Senior Managing Director and Chief Economist](#) for Chicago based Mesirow Financial, one of the nation's largest banks.
- **James Levoy Sorenson** is a [Utah entrepreneur](#) who brings his talents to a wide range of ventures.
- **Donald Winkler**, [CEO of Ford Motor Credit](#), has inspired businesses to overcome obstacles to success. He actively supports individuals with LD.

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Community Advocates & Activists

- **Erin Brockovich**, [inspiration for the movie of the same name](#), now serves as Director of Environmental Research at the law offices of Masry & Vititoe.
- **Dexter Scott King**, [son of civil rights leader Dr. Martin Luther King, Jr.](#), is President and CEO of The King Center in Atlanta, GA. His memoir, *Growing Up King*, was published in 2003.
- **Valli Kugler**, Miss Tennessee 2002, who set up a summer camp for children with learning disabilities (LD) when she was a student at the University of Tennessee, [used the pageant as a platform to increase understanding of LD](#).
- **Kelly McCorkle**, legislative correspondent for Representative Jim DeMint (R-S.C.), is a former Miss South Carolina who [made learning disabilities part of her pageant platform](#).

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Entertainers & Celebrities

- **Princess Beatrice** of England, [daughter of Prince Andrew](#) and fifth in line to the throne, speaks out about dyslexia.
- **Daniel Bedingfield**, [British pop star/composer](#), recorded his first hit record in his bedroom.
- Singer **Tony Bennett**, best known for his hits *Rags to Riches*, *Fly Me to the Moon*, and *I Left My Heart in San Francisco* is a 2005 Kennedy Center honoree and the [recipient of 12 Grammy Awards](#).
- **Orlando Bloom**, the [popular English actor](#), played Legolas, the elf warrior in the film, *Lord of the Rings*.

- **Cher**, an Academy Award-winning actress, is also well-known for her pop music and 1970s hit TV variety show. (Source: *Barbara Walters Special* excerpted in *Everybody Has a Song*, 2001.)
- **Patrick Dempsey's 20-year acting career** includes leads in the recent films *Sweet Home Alabama* and *Scream 3*. He currently stars in the television medical drama *Grey's Anatomy*.
- **Danny Glover**, acclaimed actor of theatre and film, has used his celebrity status to advance many community programs and worthy causes, such as AIDS awareness in South Africa and the advancement of minority youth. (Source: *On a Roll – Talk Radio about Life and Disability*, October 29, 1999)
- **Whoopi Goldberg** is an **actress and comedian** who has used her stardom to raise money to eliminate homelessness.
- **Brian Grazer**, successful producer of movies such as *A Beautiful Mind* and *Apollo 13* recalls his personal struggle with dyslexia. (Source: *Christian Science Monitor*, January 4, 2002.)
- Actor **Woody Harrelson** rose to fame as Woody on TV's hit series, *Cheers*. His movie career includes many starring roles and an Academy Award nomination.
- **Salma Hayek** is a **Mexican-born actress** who co-produced and starred in the film *Frida*, about artist Frida Kahlo.
- **English film actress Keira Knightley**, starred in *Bend It Like Beckham* and *Pirates of the Caribbean*, and played the role of Guinevere in a new *King Arthur* film.
- **Jay Leno** is a popular comedian and **late-night talk show host**.
- **Brad Little**, **star of the Cincinnati production of *Phantom of the Opera***, also works to preserve African wildlife.
- **Jamie Oliver**, **Britain's "Naked Chef"**, whose programs appears on the Food Network, is known for his lively personality and easy-to-prepare recipes.
- **Edward James Olmos** is a **celebrated actor**, entrepreneur, and activist who supports and advocates for Latino culture in the U.S.
- **Joe Pantoliano**, **television actor** in *The Sopranos*, survived life on the streets as a kid.

- **[New]** Celebrity designer **Ty Pennington** was [diagnosed with AD/HD as a teenager](#) and now talks openly and publicly about his experience managing the disorder. He wants to "help other kids and families understand that there are people out there ready to help them and that it's possible to live a productive life with ADHD."
- **Suzanne Somers** is an [actress and Las Vegas entertainer](#) who has also become a successful entrepreneur.
- **Vince Vaughn** is a [movie actor](#) who was featured in *The Break-Up*, *Wedding Crashers*, *Thumbsucker*.
- **Lindsay Wagner**, most famous for her title role on the hit 1970s TV series *Bionic Woman*, has dedicated much of her time to [raising awareness about learning difficulties](#).
- **Henry Winkler**, [also known as "The Fonz"](#) from the hit TV series *Happy Days*, is a producer, author, Yale graduate, and children's advocate.

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Explorers & Adventurers

- **Ann Bancroft**, an honoree in the National Women's Hall of Fame, was [the first woman to travel to the North Pole](#) and lead an all-woman dog-sled team to the South Pole.

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Legal & Political Figures

- **David Boies**, a runner-up in 2000 for *Time Magazine's* Man of the Year, is a [prestigious lawyer](#) involved in high-profile cases.
- **James Carville**, is [one of America's most famous political consultants](#). According to E. Clarke Ross, CEO of Children and Adults with Attention-Deficit/Hyperactivity Disorder (CHADD), "Mr. Carville is perhaps one of the best-known people in Washington, and he lives with AD/HD." Carville is also an author, restaurateur, and co-host of radio and television shows. Today he concentrates on international political and corporate consulting.
- **Gavin Newsom** is the youngest [mayor of San Francisco](#) in 100 Years.
- **Nelson Rockefeller** served as governor of New York for 12 years and as [Vice President of the United States](#) under Gerald Ford.

- **Peter Wright** is an [attorney and advocate](#) who represents children with special educational needs.

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Medical Professionals

- **Harvey Cushing, M.D.** (1869-1939) a [world renowned neurosurgeon](#), had dyslexia.
- **Helen Taussig, M.D.** (1898-1986) This successful cardiologist [struggled with dyslexia](#), which made school difficult for her. Even so, she graduated from Johns Hopkins Medical School.
- **Delos Cosgrove, M.D.** is a [cardiothoracic surgeon](#), inventor of several medical devices, and CEO of the Cleveland Clinic. He says, "I didn't know I was dyslexic until I was 33 years old. I went all the way through medical school without knowing it."

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Musicians

- **Harry Belafonte** is a famous [African American singer](#), actor, entertainer and political activist who, even into his seventies, uses his position as a celebrity to promote human rights worldwide.
- **Jon Finn** is [active in the music business](#) as a musician, songwriter, and engineer/producer.
- **Stephan Jenkins**, is a former University of California at Berkeley valedictorian and the [singer-songwriter for Third Eye Blind](#), a rock group with two platinum albums to its credit.
- **Jewel** is a young [pop-music sensation](#) who recently wrote an autobiography of her life growing up in Alaska.
- **Phillip Manuel**, one of the country's leading jazz vocalists, was [diagnosed with AD/HD](#) in 2000 and says only then did his life journey begin to make sense to him.
- **Bob Weir**, [guitarist and vocalist](#), formerly with *The Grateful Dead*, is now bandleader of *RatDog*.

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Scientists, Engineers & Technology Experts

- **Engineer and inventor William "Bill" Hewlett** (1913-2001) co-founded with David Packard the Hewlett-Packard Company in 1939, which became the second-largest computer company in the world.
- **Dr. John (Jack) Horner** is a **famous paleontologist**, or dinosaur expert, who advised Steven Spielberg on films such as *Jurassic Park* and *The Lost World*.
- **Don Johnston**, CEO of Don Johnston, Inc. His mission is to **support diverse learners with proven instructional models**, effective literacy strategies, and innovative technologies to help them reach grade-level performance.
- **John Roberts**, **CEO and co-founder of SugarCRM**, is seen as a pioneer in commercial open-source software applications that businesses use for tasks such as managing sales and keeping track of customers.
- **Richard Rogers**, **one of Britain's most-admired architects**, is known for his many stunning buildings and his pioneering views on sustainable cities.
- **Bill Wilson**, **fire investigator** with a "seventh sense," has a reputation for solving the unsolvable in car crash mysteries.

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Writers & Media Professionals

- **Avi**, is the **award-winning author** of more than 50 books for children and young adults.
- **Robert Benton**, a three-time **Academy Award-winning screenwriter and director** who is dyslexic, still finds reading and writing laborious.
- **Gareth Cook** is a **Pulitzer Prize-winning science writer** for the Boston Globe newspaper.
- **Stephen J. Cannell** is a successful novelist and an **Emmy Award-winning TV writer and producer** who has created or co-created over 40 different shows.
- **Anderson Cooper** is a **CNN news anchor** who gained public attention for his coverage of Hurricane Katrina.
- **John Dunning** is a Denver **mystery writer** who's also a bookstore proprietor.
- **Fannie Flagg** is a **writer and actor** who is most famous for her novel *Fried Green Tomatoes* which was later produced as a movie.

- **Richard Ford** is an author who won both the Pulitzer Prize and the PEN/Faulkner Award for his novel, *Independence Day* in 1996 – a first in the literary world. (Source: *Newsday*, March 20, 2002)
- **Jackie French** is the [author of numerous kids' books](#), as well as books about gardening and Australian history.
- **Terry Goodkind** is the [author of 8 best-selling fantasy novels](#).
- **John Irving** is a [novelist and screenplay writer](#) of *World According to Garp*, *Hotel New Hampshire*, and *Cider House Rules*, a movie that recently won acclaim and award nominations.
- Poet **Richard Moore** has [struggled with dyslexia all his life](#), yet it hasn't kept him from doing what he loves. A graduate of Yale University, he has published a novel, a book of literary criticism, and 12 books of poetry – the first of which, *A Question of Survival*, earned him a Pulitzer Prize nomination in the 1970s.
- **Patricia Polacco**, prolific [children's author and illustrator](#), didn't learn to read until she was 14.
- **Victor Villaseñor** is a [Mexican-American author](#) who has written 9 novels, 65 short stories, and a critically-acclaimed screenplay.
- **Art Rodriguez** is a California author who [documents his challenging childhood](#) in children's and young adult books.
- **Atoosa Rubenstein**, who has dyslexia, was successful as the [editor in chief of *Seventeen* magazine](#). Today she has her own digital business and a consulting firm advising companies how to speak to the teen market.
- **[New]** Poet **Philip Schultz**, a recent winner of the Pulitzer Prize, suffers from dyslexia and didn't learn to read until he was in the fifth grade.
- **Writer and playwright Wendy Wasserstein** (1950-2006) won multiple awards for her play, *The Heidi Chronicles*, including the Pulitzer Prize.
- **Ahmet Zappa**, [son of the late rock musician](#), Frank Zappa, has authored the first book in a planned trilogy of monster stories.
- <http://www.greatschools.net/cgi-bin/showarticle/2258>

Improving Reading Comprehension - Strategy Improves Reading Comprehension

By [Ann Logsdon](#), About.com

Students with [specific learning disabilities](#) (SLDs) in [basic reading](#) , [reading comprehension](#), and [dyslexia](#) need effective strategies to understand what they read and to remember details of what they've read. This strategy can also help non-disabled students improve reading comprehension and retention. The PQ4R strategy is a good [study skill](#) that can be adapted for students of all ages.

This strategy will improve the student's understanding of text. It also improves recall of facts by as much as 70%. PQ4R is an acronym for Preview, Question, Read, Reflect, Recite, and Review. here are the steps:

1. **Preview:** Look through the pages of your reading passage and read the headings of the chapter and any sections dividing the chapter. Read the first and last paragraph in each section. View the illustrations in each section. Read the captions under the pictures and take a few minutes to look at charts, graphs, or maps.
2. **Question:** Think about the information you learned in the Preview. Ask yourself questions about it. Think about what do you already know about ideas you saw during your Preview. What do you think are main points that will be raised in the chapter? What do you expect to learn from reading this material?
3. **Read:** Read the passage. If there are ideas seem important, make a note of them on paper. If the book belongs to you, consider making notes in the margins and highlight important parts in the book. If you just can't imagine writing in your book, make notes on paper.
4. **Reflect:** Take time to reflect on what you have read. How are the passages or chapters inter-related? How does the information fit into things you have already learned? What new information did you learn? Did the passage include the information you expected it to cover? Was there information that surprised you?
5. **Recite:** Think about the material. Discuss it with someone else or write down the main points you learned. Generally, writing information down by hand will improve memory of the material. If writing is a problem for you, consider brief notes or discuss the material with other students. It is important to summarize the material in writing using your own words. Explain it aloud to someone else or recite your notes aloud to yourself. Consider using a graphic organizer to increase your understanding of how concepts in the reading relate to each other.
6. **Review:** Consider the main points of the material. Were your questions answered? Do you feel that the writer's points are fully understood?

Use the PQ4R strategy with new reading material to improve comprehension and retention, which can lead to better grades and improved achievement in all school subject areas.

<http://learningdisabilities.about.com/od/instructionalmaterials/a/pq4rstrategy.htm>

About Dyslexia & Reading Problems

Developmental dyslexia is a condition related to poor reading. Children with dyslexia have difficulty learning to read due to one or more information processing problems such as visual perceptual or auditory perceptual deficits. Many but not all children with dyslexia have difficulty with reversals of numbers, letters or words. New research points the way to specific methods of instruction that can help anyone learn to read well no matter what the underlying problem may be. Following the links will provide interesting new information as well as extremely effective solutions for all types of reading problems including developmental dyslexia.

What is dyslexia?

Children who have an average or above IQ and are reading 1 1/2 grades or more below grade level may be dyslexic. True dyslexia affects about 3 to 6 percent of the population yet in some parts of the country up to 50% of the students are not reading at grade level. This means that the reason for most children not reading at grade level is ineffective reading instruction. The dyslexic child often suffers from having a specific learning disability as well as being exposed to ineffective instruction.

Children may have dyslexia or a learning disability if they have one or more of the following symptoms:

- Letter or word reversals when reading. (Such as was/saw, b/d, p/q).
- Letter or word reversals when writing.
- Difficulty repeating what is said to them.
- Poor handwriting or printing ability.
- Poor drawing ability.
- Reversing letters or words when spelling words that are presented orally.
- Difficulty comprehending written or spoken directions.
- Difficulty with right - left directionality.
- Difficulty understanding or remembering what is said to them.
- Difficulty understanding or remembering what they have just read.
- Difficulty putting their thoughts on paper.

Children with dyslexia do not exhibit these symptoms due to poor vision or hearing but because of brain dysfunction. The eyes and ears are working properly but the lower centers of the brain scramble the images or sounds before they reach the higher (more intelligent) centers of the brain. This causes confusion as well as frustration for the learner.

When a child is having difficulty learning, a comprehensive neurodevelopmental exam is important. This includes testing of hearing, vision, neurological development, coordination, visual perception, auditory perception, intelligence, and academic achievement.

Often, perception problems can be helped with simple exercises which either help to improve a specific problem or teach techniques to compensate for a problem. These often can be done at home. In a few cases, a referral to an educational or speech therapist may be helpful.

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What causes dyslexia and reading problems?

The main reasons for reading problems are:

1. Ineffective reading instruction
2. Auditory perception difficulties
3. Visual perception difficulties
4. Language processing difficulties

Over 180 research studies to date have proven that phonics is the BEST WAY to teach reading to all students. They also have shown that phonics is the ONLY WAY to teach reading to students with dyslexia and other learning disabilities.

Unfortunately, 80% of our nations schools do not use an intensified phonics approach for reading instruction. They either use the whole word (see & say) approach or a cursory use of phonics along with the whole word method.

While most people can learn to read using the whole word approach, it is not the best way to learn. It teaches through memorization of word pictures and guessing. Unlike Chinese or Japanese which are picture languages, the English language is a phonetic language. With the exception of the United States which dropped phonics in the 1930's, all other countries that have a phonetic language, teach reading through phonics.

There are only 44 sounds while there are about 1 million words in English. These facts readily explain why having to memorize 44 sounds as opposed to memorizing hundreds of thousands of words is the most efficient way to learn to read.

Reading and writing is simply "talking on paper." Children learn to talk by imitating sounds and then combining the sounds to form words. The brain is programmed to learn language in this

fashion. Therefore, the most efficient way to learn to read is through phonics because it teaches children to read the same way they learned to talk. [\[Click Here For Latest Brain Research Related To Learning To Read\]](#)

Children and adults who do not learn to read through an intensive phonics program often have one or more of the following symptoms:

- Below grade level reading achievement
- Slow reading
- Poor comprehension
- Fatigue after reading only for a short while
- Poor spelling skills
- Lack of enjoyment from reading

Some children have auditory discrimination problems. This may have been the result of having chronic ear infections when they were young. Others may be born with this learning disability. Correction involves educational exercises to train the brain in discrimination and to over teach the formation of the sounds used in speaking and reading.

Another group of children have visual perception problems. They may actually reverse letters or words. They have difficulty matching the word image on the page with a previously stored image in their brain. Exercises that train the brain to "see" more accurately may help but instruction with phonics is the best approach to overcome this problem.

Language development problems can contribute to poor reading and listening comprehension along with difficulty in verbal and written expression. Learning appropriate word attack skills through phonics along with special help in receptive and/or expressive language skills improves this type of learning disability.

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Helping Children With Reversals

It is not unusual for children to reverse letters and words when they read or write up to the age of 6 or 7. This is due to immaturity in brain development. Children who have problems with reversals usually also have problems with left-right directionality. Below are some exercises that have been found to help improve directionality and reduce reversals.

Symptoms:

1. Spatial confusion - unable to differentiate left-right, on self, other, or paper.
2. Confuses letter pairs as b-d, m-w, p-q. Confuses words such as was-saw, on-no.

Remediation:

1. Simplify tasks so only one new discrimination is made at a time.
2. Make each simple discrimination automatic before the next one is introduced. Overteach 'b', then overteach 'd', before presenting both together.
3. Each discrimination that causes repeated errors should be worked with by itself until the problem is overcome.
4. Trace, then write, the confused letter or word and pronounce it as written.
5. Use short frequent practice periods. Lengthen the time between practice sessions as the material is retained.
6. If the child is confused about his own left/right, use a ring, watch, ribbon or band on his writing arm. Color cue side of desk or paper or word as a starting place.
7. Gradually increase the difficulty of material to discriminate. If errors are made, go back to simpler practice.

Suggestions for Improving Laterality:

1. Trace hands on paper. Label "right," "left."
2. Play "Simon Says" - "Touch right foot; raise left hand," etc.
3. Child follows the directions in drawing lines up, down, right to left, etc. and in touching parts of body.
4. Child connects dots on blackboard to make a completed pattern; repeats process on paper.
5. Child shows hands in sequence pattern: left, right, left, right, etc. Use marching as a variation.
6. Child names objects on right and on left. He moves to different parts of the room and repeats.
7. Arrange story pictures in sequence, left to right.
8. Use lined paper for writing.
9. Use weighted wristband to designate right or left hand.
10. Tracing activities, left to right. Mark left with small "x." Use color tracing to repeat.
11. When beginning writing the lessons, teach the child to begin as close to left edge of sheet as possible (then can move only toward the right).
12. In reading, use markers, "windows," and other left-to-right directional aids.

<http://www.childdevelopmentinfo.com/learning/dyslexia.shtml>

How to Improve Reading Skills in Children with ADHD or Learning Disabilities

Guaranteed tips for improving reading comprehension in children with ADHD or learning disabilities like dyslexia.

by [Matthew Cruger, Ph.D.](#)

ADDitude Magazine

Read aloud as your child follows along. Hearing the words helps clarify the meaning.

In first and second grade, most children learn to read. Beginning in third grade, they're expected to read to learn. They may be assigned to find facts on the Internet for a project on aquatic mammals, for instance, or asked to identify plot points in a work of fiction. The ability to extract meaning from written sources — to learn independently — becomes increasingly important with each new grade.

Reading comprehension depends on the ability to quickly sound out and recognize words, which can be hard for students with attention deficit disorder (ADD ADHD) or learning disabilities like [dyslexia](#).

Even after the mechanics of reading have been mastered, many children with ADHD have trouble understanding the text, making connections within the story, and relating what they're reading to what they already know. Fortunately, reading comprehension skills and strategies can be learned. Children who are taught multiple strategies, and guided in their use, eventually choose some to use on their own.

Read to your child.

Even if your child can read on his own, there is value in [reading aloud](#) to him. A child's listening skills are usually stronger than his reading skills, so your child can comprehend more if he reads along silently as you read the book out loud.

Begin with short passages, and extend the time if your child maintains focus. Books on tape, with accompanying texts, provide another way to pair reading and listening.

Engage the imagination.

While your child reads or listens, encourage her to visualize the events in the story, creating a picture or movie in her mind. After a few pages, ask her to describe it.

Show how books are organized.

Textbooks are often structured in a way that highlights and summarizes important material. Show your child how paying attention to captions, charts, section headings, and sample study questions can organize his thinking and provide valuable facts.

When your child reads fiction, train him to look for the five W's: *Who* are the main characters, *where* and *when* does the story take place, *what* conflicts do the characters face, and *why* do they act as they do.

Although newspaper and magazine articles don't always contain a narrative, information about the five W's typically appears in the first paragraph or two.

Ask for predictions.

When reading a book with your child, stop occasionally to ask what she thinks might happen next. This requires her to integrate what she has learned so far about the characters and storyline—and about the way stories are typically organized—to anticipate the rest of the plot.

If she's reading a Harry Potter novel, for example, asks what she thinks will happen the next time Harry and Draco Malfoy face each other in a Quidditch match. Or get her opinion on what she thinks author J.K. Rowling will write about in the next book.

It doesn't matter if her hunches are correct: Asking for predictions encourages her to pay very close attention to what she reads. What's more, it helps you gauge just how much she's comprehending.

Show interest in what your child is reading.

Ask her to tell you about the book or chapter she just finished. What was the main idea? Who was her favorite character? Why did she like or dislike the book? Did it remind her of other stories she's read or of experiences she has had?

If it was a textbook chapter, what did she learn, and how does it apply to what she's learning in school? Having to verbalize what she has read requires her to make sense of it.

If your child is unable to provide a coherent summary, read the book yourself. Engage her in a discussion of *your* favorite parts and characters, and talk about how you connected parts of the story so that it all came together.

Encourage note-taking.

Have your child keep a notepad or index cards nearby to jot down important information as he reads. Note-taking pushes a reader to make sense of the material, and the cards become terrific tools when studying for a test later on.

If a book belongs to your child, permit her to mark relevant details with a pencil or highlighter. Do this together the first few times—it's an opportunity to demonstrate how to pick out important facts.

Does your child learn best visually? Help him create a chart with boxes for the story's setting, characters' names, and major themes and events. Or show her how to make a mind map—a diagram that uses key words, colors, and symbols to represent ideas and information.

Increase word power.

The stronger your child's vocabulary, the better his comprehension—and the less frequently he'll put down a book to ask about a word.

If you know that a passage contains unfamiliar words, define them—or have him look them up in a dictionary—before he begins to read.

Translate figures of speech.

A child with a language-based learning disorder can be overly literal: Reading that a character "took the bull by the horns" or "looked like he'd seen a ghost" can stop him cold.

Help your child understand that a phrase that seems out of context may be a figure of speech. Together, compile a list of expressions and what they mean.

Teach your child to read between the lines.

Point out sentences in which information is implied, and ask her to fill in what's missing. She should understand that the statement, "George was excited about winning top prize at his school's science fair for the second time," means that George has won the science award once before.

Build on background knowledge.

It's easier to understand subject matter that you know something about. Help your child select reading materials that reflect his interests, and encourage him to bring his own experiences to his understanding of a book.

Form a book group.

If your child has friends who enjoy similar books, get them together to discuss what they've read or to collaborate on a project, such as a mural or a skit about the story.

Once you've introduced your child to this array of reading comprehension strategies, have him write each of his favorites on a separate bookmark. He can use these in schoolbooks—choosing the strategy best-suited to each text—and have a handy reminder to hold his place.

<http://www.additudemag.com/adhd/article/983.html>

Categories

A fun, interactive, introductory get-to-know-you activity for medium to large groups. This activity works best with large groups, the minimum would be about 15 people).

It is useful for celebrating diversity.

Particularly useful as an icebreaker, e.g. can be used as an opener for a workshop/conference.

Ask everyone to stand up and then to walk around; explain that you will announce a category (see [list](#) below or use your own) and that participants should then quickly organize themselves into smaller groups, based on the category to which they belong.

Once everyone is organized into their groups, ask each group to identify itself.

(Optional) Make a brief comment or ask each group a question.

Allow participants time to say hello and mingle/chat with each other when the smaller groups are formed.

Keep things moving by asking participants to walk around before announcing the next category.

Continue until the group is "warmed up" and ready for the next activity. This will probably be after about 5 topics, depending on the group, purpose, and time available.

Categories can also be used as a fun, simple way to organize people into smaller groups for other activities.

For the first category, use one with two options and announce one side of the room for one category and the other side of the room for the other category. This should help participants to get the idea for how the activity works.

List of categories

Two categories

When you clasp your hands together and fold the thumbs across the top, is your right or left thumb on top?

Fold your arms across your chest. Is your right or left arm on top?

Which leg do you put into your pants first?

Which eye do you prefer to wink with?

Which side of the bed (left or right) do you get out of in the morning?

Are you a folder or scruncher (toilet paper)

Can you roll your tongue? (yes/no)

Three categories

When licking an ice cream cone...do you:

Twirl the cone clockwise

Twirl the cone counterclockwise

Lick up and down?

Many categories

- What is your favorite season?
- How many siblings do you have?
- What color are your eyes?
- What's your shoe size?
- What type of shoes are you wearing?
- What's your favorite color
- What's your star sign?

References

Collard, M. (1996). Categories. In *No props: Great games with no equipment* (p. 10). Project Adventure Australia: Viewbank, Victoria, Australia.

<http://wilderdom.com/games/descriptions/Categories.html>