

Search	

Understanding Dyslexia

Sarah hates reading aloud in class. She's never been a good reader, and even when she recognizes the words on the page, she seems to have trouble saying them correctly.

School's never been her favorite place anyway because her teachers always complain about her writing and her spelling. She often gets discouraged, thinking that she's not as smart as other students.

Fortunately, Sarah has discovered she has talents that others don't. She's great at dreaming up costume and scenery ideas in drama club, and she's one of the best artists in her school. Sometimes she wonders how she can do so well in some areas of her life and so poorly in others.

What Sarah, her parents, and her teachers don't realize is that Sarah has dyslexia.

What Is Dyslexia?

Dyslexia (pronounced: dis-LEK-see-uh) is a type of **learning disability**. A person with a learning disability has trouble processing words or numbers. There are several kinds of learning disabilities; dyslexia is the term used when people have difficulty learning to read, even though they are smart enough and are motivated to learn. The word dyslexia comes from two Greek words: **dys**, which means abnormal or impaired, and **lexis**, which refers to language or words.

Dyslexia is not a disease. It's a condition that you are born with, and it often runs in families. People with dyslexia are not stupid or lazy. Most have average or above-average intelligence, and they work very hard to overcome their learning problems.

What Causes Dyslexia?

Research has shown that dyslexia happens because of the way the brain processes information. Pictures of the brain, taken with modern imaging tools, have shown that when people with dyslexia read, they use different parts of the brain than people without dyslexia. These pictures also show that the brains of people with dyslexia don't work efficiently during reading. So that's why reading seems like such slow, hard work.

What do Leonardo da Vinci, Michelangelo, Albert Einstein, Thomas Edison, Walt Disney, Cher, Will Smith, Keira Knightley, Orlando Bloom, Vince Vaughn, and Patrick Dempsey all have in common? They had (or have) dyslexia, yet all are acknowledged to be among the most creative and successful people in their fields. Dyslexia doesn't have to stop anyone from achieving his or her goals.

Most people think that dyslexia causes people to reverse letters and numbers and see words backwards. But reversals happen as a normal part of development, and are seen in many kids until first or second grade. The main problem in dyslexia is trouble recognizing **phonemes** (pronounced: FO-neems), which are the basic

sounds of speech (the "b" sound in "bat" is a phoneme, for example). Therefore, it's a struggle to make the connection between the sound and the letter symbol for that sound, and to blend sounds into words.

This makes it hard to recognize short, familiar words or to sound out longer words. It takes a lot of time for a person with dyslexia to sound out a word. The meaning of the word is often lost, and reading comprehension is poor. It is not surprising that people with dyslexia have trouble spelling. They may also have trouble expressing themselves in writing and even speaking. Dyslexia is a **language processing disorder**, so it can affect all forms of language, either spoken or written.

Some people have milder forms of dyslexia, so they may have less trouble in these other areas of spoken and written language. Some people work around their dyslexia, but it takes a lot of effort and extra work. Dyslexia isn't something that goes away on its own or that a person outgrows. Fortunately, with proper help, most people with dyslexia learn to read. They often find different ways to learn and use those strategies all their lives.

What's It Like to Have Dyslexia?

If you have dyslexia, you might have trouble reading even simple words you've seen many times. You probably will read slowly and feel that you have to work extra-hard when reading. You might mix up the letters in a word, for example, reading the word "now" as "won" or "left" as "felt." Words may blend together and spaces are lost. Phrases might appear like this:

Thew ord sare notsp aced cor rect ly.

We spell wrds xatle az tha snd to us.

Sometimesallthelettersarepushedtogether

You might have trouble remembering what you've read. You may remember more easily when the same information is read to you or heard on tape. Word problems in math may be especially hard, even if you've mastered the basics of arithmetic. If you're doing a presentation in front of the class, you might have trouble finding the right words or names for various objects. Spelling and writing usually are very hard for people with dyslexia.

How Is Dyslexia Diagnosed?

People with dyslexia frequently find ways to work around their disability, so no one will know they're having trouble. This may save some embarrassment, but getting help could make school and reading easier. Most people are diagnosed as kids, but it's not unusual for teens or even adults to be diagnosed.

A teen's parents or teachers might suspect dyslexia if they notice many of these problems:

- poor reading skills, despite having normal intelligence
- poor spelling and writing skills
- · difficulty finishing assignments and tests within time limits
- · difficulty remembering the right names for things
- difficulty memorizing written lists and phone numbers
- difficulty with directions (telling right from left or up from down) or reading maps
- difficulty getting through foreign language classes

If someone has one of these problems it doesn't mean he or she has dyslexia, but someone who shows several of these signs should be tested for the condition.

A physical exam should be done to rule out any medical problems, including hearing and vision tests. Then a school psychologist or learning specialist should give several standardized tests to measure language, reading, spelling, and writing abilities. Sometimes a test of thinking ability (IQ test) is given. Some people with dyslexia have trouble in other school skills, like handwriting and math, or they may have trouble paying attention or remembering things. If this is the case, more testing will be done.

Dealing With Dyslexia

Although dealing with dyslexia can be tough, help is available. Under federal law, someone diagnosed with a learning disability like dyslexia is entitled to extra help from the public school system. A child or teen with dyslexia usually needs to work with a specially trained teacher, tutor, or reading specialist to learn how to read and spell better. The best type of help teaches awareness of speech sounds in words (called **phonemic awareness**) and letter-sound correspondences (called **phonics**). The teacher or tutor should use special learning and practice activities for dyslexia.

A student with dyslexia may get more time to complete assignments or tests, permission to tape class lectures, or copies of lecture notes. Using a computer with spelling checkers can be helpful for written assignments. For older students in challenging classes, services are available that provide any book on tape, even textbooks. Computer software is also available that "reads" printed material aloud. Ask your parent, teacher, or learning disability services coordinator how to get these services if you need them.

Treatment with eye exercises or glasses with tinted lenses will not help a person with dyslexia. It's not an eye problem, it's a language processing problem, so teaching language processing skills is the most important part of treatment.

Emotional support for people with dyslexia is very important. They often get frustrated because no matter how hard they try, they can't seem to keep up with other students. They often feel that they are stupid or worthless, and may cover up their difficulties by acting up in class or by becoming the class clown. They may try to get other students to do their work for them. They may pretend that they don't care about their grades or that they think school is dumb.

Family and friends can help people with dyslexia by understanding that they aren't stupid or lazy, and that they are trying as hard as they can. It's important to recognize and appreciate each person's strengths, whether they're in sports, drama, art, creative problem solving, or something else.

People with dyslexia shouldn't feel limited in their academic or career choices. Most colleges make special accommodations for students with dyslexia, offering them trained tutors, learning aids, computer software, reading assignments on tape, and special arrangements for exams. People with dyslexia can become doctors, politicians, corporate executives, actors, musicians, artists, teachers, inventors, business entrepreneurs, or whatever else they choose.

Reviewed by: Laura L. Bailet, PhD

Date reviewed: June 2015

View: Mobile | **Desktop**

About KidsHealth About Nemours Contact Us Partners Editorial Policy Privacy Policy & Terms of Use

 $Note: All\ information\ is\ for\ educational\ purposes\ only.\ For\ specific\ medical\ advice,\ diagnoses,\ and\ treatment,\ consult\ your\ doctor.$

 $@ 1995-2015 \ Kids Health @ All \ rights \ reserved. \ Images \ provided \ by \ The \ Nemours \ Foundation, \ iStock, \ Getty \ Images, \ Corbis, \ Veer, \ Science \ Photo \ Library, \ Science \ Source \ Images, \ Shutterstock, \ and \ Clipart.com$