

Dyslexia/Reading Disorder



What is a reading disorder?

- A reading disorder is when one has difficulty in reading or understanding material within a reading.
- Most people with reading disorders have problems with their phonemic (sound/symbol relationships) awareness development. This means that they have a difficult time putting together letters to make a sound. (7)

What is Dyslexia?

- With dyslexia, a person mixes up letters and/or word sequences and therefore has interference in his or her learning as the brain has a problem processing language. (9)
- There are two kinds of dyslexia.
 - a) **Developmental phonological dyslexia**- where one has a problem with nonword reading.
(Nonword reading is changing the initial and middle letters of a word. Examples are mana (mama) and aufo (auto)).
 - b) **Developmental surface dyslexia** – where one has difficulty in reading irregular words. (1)
(25% English words are irregular, which means that they violate English spelling-to-sound word rule. Examples: pretty, bowl, and sew.)



Background information:

- **80%** of all initial learning disabilities are diagnosed as a reading disability. (9)
- **40%** of population in US reads below grade level. (8)
- Half of those people have reading disabilities. (7)
- Dyslexia is most common reading disability and affects **2-8%** of school age children. (4)

Sources of reading disorders/dyslexia:

- Reading disorders come from both heredity and the environment.
- Heredity:
 - a) It is believed that a family gene carries the disorder.
 - b) Studies have shown that males are four xs more likely to have a reading disorder than a female; however, it is believed that a male's behavior contributes to this as it brings forth the disorder to a teacher's attention more easily. (8)



- Environment:
 - a) Most at risk students are ones who have a limited amount of English in their vocabulary like English as second language students.
 - b) In addition, students who are most at risk have a hard time understanding phonemics. (6)
 - c) A person raised in poverty is more likely to have a reading disability than a person who is not due to their standard of education.
 - d) Students who have parents with low reading levels are more likely to have a reading disorder.
 - e) Students who have speech or hearing impairments are also more likely to have a reading disorder as the English language is based on phonemics. (4)



Other factors leading to a reading disability:

- Vocabulary deficits.
- Inadequate background knowledge relevant to information presented in text.
- Lack of familiarity with semantic and syntactic structures that can help predict and better understand words.
- Lack of knowledge about different writing conventions that are employed by the author.
- Lack of verbal reasoning ability.
- Memory impairment.
- The ability to remember or recall information. (4)

Signs of a reading disorder:

- A good predictor of knowing if one has a reading disorder is the speed and accuracy that a person can read a single word. (The slower one reads that word, the more difficulty they have with reading.) (6)
- Poor recognition of the written word.
- Very slow oral reading.
- Many mistakes in oral reading.
- Very poor comprehension of what has been read (2)



Signs of dyslexia:

- For a child
 - Can begin in Kindergarten
 - A student who has a problem putting letters in correct order.
 - A student who has a hard time recognizing rhyming words. (7)
- For someone who is older (8)
 - Messy handwriting
 - Disorganization
 - Poor decoding and spelling abilities
 - Spoken language difficulties
 - Poor short term memory
 - Hard time learning a foreign language

This survey from Dyslexia Association is an indicator for adults on whether or not they have dyslexia (10):

Please pick **Yes** or **No** to each question. Don't miss any questions. If in doubt pick the answer that you feel is true most often

	Yes	No
1. Do you find difficulty telling left from right?		
2. Is map reading or finding your way to a strange place confusing?		
3. Do you dislike reading aloud?		
4. Do you take longer than you should to read a page of a book?		
5. Do you find it difficult to remember the sense of what you have read?		
6. Do you dislike reading long books?		
7. Is your spelling poor?		
8. Is your writing difficult to read?		
9. Do you get confused if you have to speak in public?		
10. Do you find it difficult to take messages on the telephone and pass them on correctly?		
11. When you say a long word, do you sometimes find it difficult to get all the sounds in the right order?		
12. Do you find it difficult to do sums in your head without using your fingers or paper?		
13. When using the telephone, do you tend to get the numbers mixed up when you dial?		
14. Do you find it difficult to say the months of the year forwards in a fluent manner?		
15. Do you find it difficult to say the months of the year backwards?		
16. Do you mix up dates and times and miss appointments?		
17. When writing checks do you frequently find yourself making mistakes?		
18. Do you find forms difficult and confusing?		
19. Do you mix up bus numbers like 95 and 59?		
20. Did you find it hard to learn your multiplication tables at school?		

Nine or more YES responses on the questionnaire, as a whole is therefore a powerful indicator of a difficulty. The items picked should be compared with the 'best twelve' shown above.

Reference:

Michael Vinegrad: A revised Dyslexia Checklist. Educare, No 48 March 1994. Issued with permission from Michael Vinegrad.

Effects of a Reading Disorder/ Dyslexia on a student:

- Individual might have problem expressing themselves or understanding others as they have difficulty with language.
- Student may become frustrated with schoolwork.



- Student can have a lower self-esteem.
- Dyslexia is a problem, which cannot go away, but with practice and help, a student can live life to the fullest. (7)



What a teacher should do if they believe a student might have a reading/disorder or dyslexia:

- Talk to your school and find out if they have someone who can identify the problem as only a trained professional can do an evaluation to identify it. (3)
(Trained professionals vary depending on schools and location, an example of trained professionals includes school psychologist and reading specialist.)
- Try to notice the problem as early as possible, as after the age of nine, the student is going to need continual help for the problem. (7)



How to help a student with dyslexia:

- Have them read different kinds of reading material, especially material they find interesting, as it will positively enforce reading.
- Have the student use multi-sensory, follow a structured language instruction and practice using sight, sound and touch when introducing new ideas.
- Give student extra time to complete work.
- Aid with note taking by giving students a fill in the blank or structured outline.
- Help with oral testing and other assessments.
- Use books on tape and other assistive technology.
- Have other ways of assessments besides reading and writing as student might have strength in other areas.
- Help with emotional issues that might arise (3)
- Provide positive and corrective feedback.
- Introduce important vocabulary before the student reads a section.
- Put daily assignments on the board as the earlier it is in the day, the easier time a dyslexic students seems to have.
- Try not to have extra information on the board. Only have that day's information on the board.
- Leave assignments on the board for the entire day.
- Write in large letters.
- Put assignments in the same place every day on the board.
- Make sure the student is writing down assignments correctly and reward student for writing down the assignment.
- Have student located close to the board. (5)

Some quotes from famous individuals who had dyslexia.

I was, on the whole, considerably discouraged by my school days. It was not pleasant to feel oneself so completely outclassed and left behind at the beginning of the race. **Winston Churchill**

He told me that his teachers reported that . . . he was mentally slow, unsociable, and adrift forever in his foolish dreams.-Hans Albert Einstein, on his father, **Albert Einstein**

I, myself, was always recognized . . . as the "slow one" in the family. It was quite true, and I knew it and accepted it. Writing and spelling were always terribly difficult for me. My letters were without originality. I was . . . an extraordinarily bad speller and have remained so until this day. **Agatha Christie**

My teachers say I'm addled . . . my father thought I was stupid, and I almost decided I must be a dunce. **Thomas Edison**

Young George . . . although he was bright and intelligent and bursting with energy, he was unable to read and write. Patton's wife corrected his spelling, his punctuation, and his grammar.-Biographer Martin Blumenson on **General George Patton**

My problem was reading very slowly. My parents said "Take as long as you need. As long as you're going to read, just keep at it." We didn't know about learning disabilities back then.-**Roger Wilkins**, Head of the Pulitzer Prize Board

I was one of the 'puzzle children' myself -- a dyslexic . . . And I still have a hard time reading today. Accept the fact that you have a problem. Refuse to feel sorry for yourself. You have a challenge; never quit!. **Nelson Rockefeller**

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Additional Resources can be found by the following links:

http://www.dyslexiamylife.org/wb_resour2.htm

This website lets you choose a state and will give you a list of local dyslexia resources.

<http://www.athealth.com/Consumer/Disorders/reading.html>

This website is a health-based website, which gives information on disorders including reading.

http://www.ld.org/LDInfoZone/InfoZone_FactSheet_Dyslexia.cfm

This website is the National Center for Learning Disabilities and gives information on dyslexia as well as many other forms of learning disabilities. It gives information from people in the health care profession.

<http://www.dyslexia-teacher.com/>

This is a dyslexia website for teachers (link also for parents and students) to answer teacher's questions about dyslexia and to keep them updated with what they can do to help their students.

<http://81.89.134.99/main/home/index.asp>

This link takes one to the British Dyslexia Association webpage, which includes source to find out if one has dyslexia as well as give some information to teacher.

<http://web.seru.sa.edu.au/dysllink.htm>

This link is from a special education department, which gives sources on websites dealing with dyslexia.

<http://discovertechnology.com/Links/DysInfo.html#Adaptive>

This link gives some adaptive technology a teacher can use in the classroom.

Works Cited

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- "Dyslexia: Science Tracer Bullets Online" *The Library of Congress: Especially for Researchers: Research Centers* <http://www.loc.gov/rr/scitech/tracerbullets/dyslexiatb.html> (accessed March 2, 2005). **(4)**
- "Giving Homework" *Dyslexia Teacher* <http://www.dyslexia-teacher.com/t63.html> (Assessed April 5, 2005). **(5)**
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* The last item from a source is the item with the number next to it.