



Dyslexia for Classroom Teachers

Overview and Characteristics

Professional Learning Goals

- Develop a clear understanding of dyslexia
- Distinguish between the facts and the myths of dyslexia
- Recognize different characteristics of dyslexia at different ages

Overcoming Dyslexia

by Sally Shaywitz

“Reading is often the key to realizing a parent’s dream for their child. In the classroom, reading is king; it is essential for academic success. Reading problems have consequences all across development, including adult life. This is why it is important to be able to identify dyslexia accurately and precisely early on to ensure a child learns to read and to enjoy reading” (Shaywitz, p. 9).

If **reading** came naturally, teaching would be a much easier job. Children would learn to read as readily as they learn to speak. Teachers would only need to give students the chance to practice their skills. But children don't learn to read just from being exposed to books. Reading must be taught. For many children, reading must be taught explicitly and systematically, one small step at a time.

Historical Roots

1676 – The earliest case of reading difficulties similar to dyslexia was recorded by the German physician, Dr. Johann Schmidt.

1877 – Adolf Kussmaul coined the term “word-blindness”.

Historical Roots

1905 – The first U.S. report of childhood reading difficulties was described by Dr. W. E. Bruner, a Cleveland ophthalmologist.

1925 – Samuel T. Orton developed an educational intervention.

1970's – Dyslexia was linked to phonological awareness.

Experience Dyslexia

- When you see
- Pronounce as

➤ q

➤ d or t

➤ z

➤ m

➤ p

➤ b

➤ b

➤ p

➤ (ă)

➤ (ě)

➤ (ě)

➤ (ă)

Experience Dyslexia

We begin our qrib eq a faziliar blace, a poqy like yours enq zine. Iq conqains a hunqraq qrillion calls qheq work qograqhys py qasign. Enq wiqh in each one of qhese zany calls, each one qheq hes QNA, QHE QNA coqe is exacqly qhe saze, a zess-broquceq rasuze. So qhe coqe in each call is iqanqical, a razarkaple puq veliq claiz. Qhis zeans qheq qhe calls are nearly alike, puq noq axececqly qhe saze. Qake, for insqence, qhe calls of qhe inqasqines; qheq qhey're viqal is cysqainly blain. Now qhink apouq qhe way you woulq qhink if qhose calls wyse qhe calls in your prain.

- <http://www.pbs.org/wgbh/misunderstoodminds/experiences/readexp1a.html>

Translation

- We begin our trip at a familiar place, a body like yours and mine. It contains a hundred trillion cells that work together by design. And within each one of these many cells, each one has DNA. The DNA code is exactly the same, a mass-produced resume. So the code in each cell is identical, a remarkable but valid claim. This means that the cells are nearly alike, but not exactly the same. Take, for instance, the cells of the intestines; that they're vital is certainly plain. Now think about the way you would think if those cells were the cells in your brain.

Anticipation Guide

Dyslexia

Fact vs Myth

Dyslexia Myths

- Myth #1 Dyslexic children see letters and words backward, which causes reversals (ex: reading “saw” instead of “was”).
- Fact #1 Dyslexic children have trouble naming letters but not copying them. Backward writing and reversals of letters and numbers are COMMON in the early stages of writing development among all children.

(Shaywitz, p. 100)

Dyslexia Myths

- Myth #2 True Dyslexia is uncommon, affecting fewer than 5% of the population.
- Fact #2 According to the Connecticut Longitudinal Study, “reading disability affects approximately one child in five” up to 20% of the population.

(Shaywitz, p. 30)

Dyslexia Myths

- Myth #3 Dyslexia is more prevalent among boys than girls.
- Fact #3 Boys are more commonly diagnosed with dyslexia than are girls, but when tested in a research based manner, a comparable number of boys and girls were identified as reading disabled.

(Shaywitz, p. 32)

Dyslexia Myths

- Myth #4 Dyslexia is simply a developmental lag, and children will grow out of it over time.
- Fact #4 Based on the Connecticut Longitudinal Study, dyslexia is a chronic condition that does not represent a temporary lag in reading development.

(Shaywitz, p. 33)

Dyslexia Myths

- Myth #5 There is no way to truly diagnose or predict dyslexia.
- Fact #5 Dyslexia is a congenital condition that not only runs in families but appears to be carried as a genetic trait. Brain imagining maps have shown that people with dyslexia actually process words in a different part of the brain than non dyslexics.

(Shaywitz, p. 87, 99)

Misunderstandings

- Dyslexia does not exist – it is merely a catch-all term for learning problems.
- Dyslexia cannot be diagnosed until a child is 8 to 11 years old.
- There is a “test” for dyslexia.
- Dyslexia is a visual problem.

Misunderstandings

- Dyslexics are clumsy and have trouble tying shoes.
- People with dyslexia are unable to read.
- People who struggle to read are not very smart.
- Colored overlays/lenses are an effective treatment for dyslexia.

Arkansas Dyslexia LAW

“Dyslexia”
means a
specific
learning
disability
that is:

- A. Neurological in origin;
- B. Characterized by difficulties with accurate and fluent word recognition and poor spelling and decoding abilities that typically result from a deficit in the phonological component of language; and
- C. Often unexpected in relation to other cognitive abilities

What is dyslexia?

<https://youtu.be/zafiGBrFkRM>



Simply defined...

Dyslexia is a reading difficulty in a child or adult who otherwise has good intelligence, strong motivation, and adequate schooling.

Diagnosis of Dyslexia

reflects a reading difficulty that is unexpected for a person's age, intelligence, level of education, or profession. The diagnosis is based on a synthesis of information.

Phonological Awareness

“A young child *must* develop phonemic awareness if he is to become a reader. That is to say, he must understand that spoken words are made up of smaller units of speech sounds, phonemes.”

(Shaywitz, p. 51)

Reading Connection

“A preschooler’s phonological aptitude predicts his reading three years later.”

“Even in high school students, phonemic awareness was the best predictor of the ability to read words accurately or quickly.”

(Shaywitz, p. 55)

What Causes Dyslexia?

- **Genes and Heredity**

- ✧ 49% of dyslexic children's parents have dyslexia
- ✧ 40% of siblings of children with dyslexia have the same reading issues

- **Brain Anatomy**

- ✧ Many people with dyslexia have a high I.Q, but their brains look different.

- **Brain Activity**

- ✧ Typically the areas of the brain work together in a predictable way, however this is not the case with dyslexics.

Brain Anatomy

Many people with dyslexia have above-average intelligence, but their brain may look different from the brain of people without dyslexia.

Brain Activity

Typically the areas of our brains responsible for language skills work in a predictable way. With dyslexia, these areas don't work together in the same way. Children with reading issues compensate by using different areas of the brain.

Conditions Along with Dyslexia

- ADHD
- Auditory processing disorder
- Visual processing issues
- Dysgraphia
- Dyscalculia
- Executive functioning issues

Characteristics of Dyslexia

- Poor decoding
- Poor spelling
- Poor word recognition
- Slow and laborious reading

6. cat

7. in

8. bee be

9. game

10. fix

11. rare cake

12. ~~colder~~ colder cold

13. tall tall mother

14. ~~mass~~ mother

15. ~~nite~~ night

16. ~~both~~ both

17. ~~begn~~ began

18. ~~wide~~ windy camped

19. ~~cote~~ camp

21. _____

22. _____

23. _____

24. _____

25. _____

26. _____

27. _____

28. _____

29. _____

30. _____

31. _____

32. _____

33. _____

34. _____

- ___ 1. _____
- ___ 2. _____
- ___ 3. _____
- ___ 4. _____
- ___ 5. _____
- ___ 6. _____
- ___ 7. ~~nexs~~ next
- ___ 8. _____
- ___ 9. _____
- ___ 10. ~~shak~~ shake
- ___ 11. ~~ayt~~ eight
- ___ 12. ~~piyol~~ pile
- ___ 13. _____
- ___ 14. _____
- ___ 15. _____
- ___ 16. _____
- ___ 17. _____
- ___ 18. _____
- ___ 19. _____

- ___ 26. _____
- ___ 27. _____
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- ___ 31. _____
- ___ 32. _____
- ___ 33. _____
- ___ 34. _____
- ___ 35. _____
- ___ 36. _____
- ___ 37. _____
- ___ 38. _____
- ___ 39. _____
- ___ 40. _____
- ___ 41. _____
- ___ 42. _____
- ___ 43. _____
- ___ 44. _____

Frank, 7 years old, I.Q. 110

- 1. Aon pne aonepe pnde.**
- 2. Anso nano pend.**
- 3. Anso nano pend.**
- 4. Pson naope enpa nopo sona onen pnoa.**
- 5. Soma penp onan neoog.**

Ashley, 8 years old, I.Q. 107

- 1. Aen most grenk hir milk.**
- 2. Saven ants had a pick nick or my ham sumwich.**
- 3. What are you too doing hir?**
- 4. The flowrs have manny buds or them.**
- 5. Some piple come ever day too se my fhuwer.**

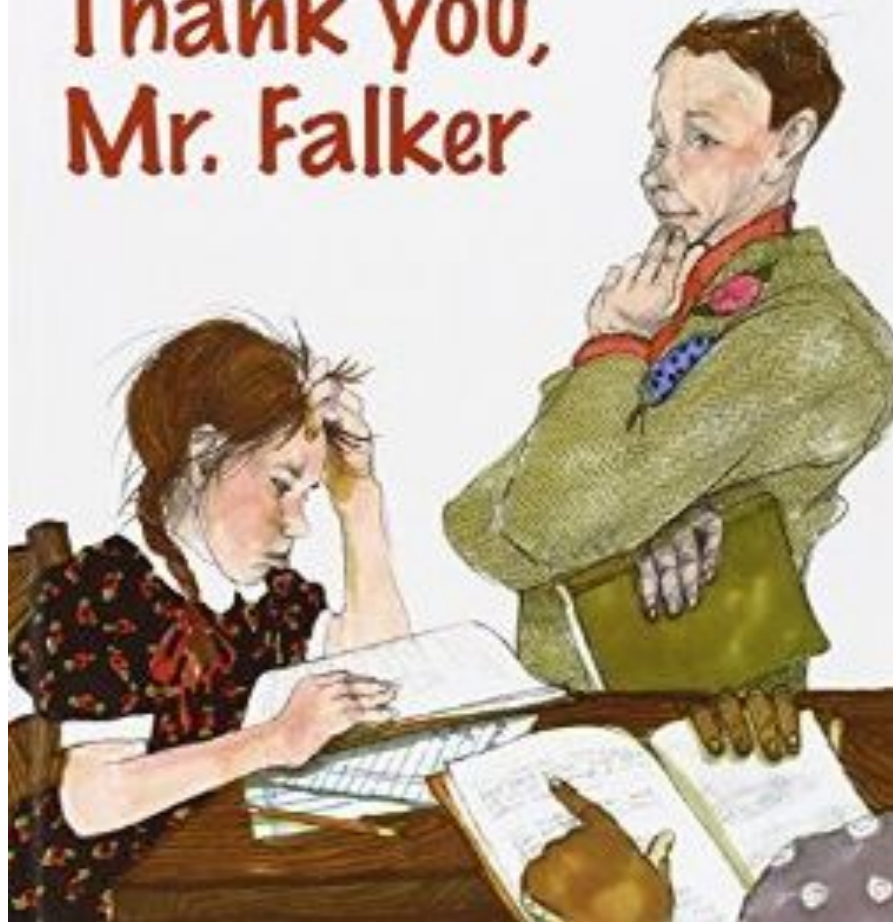
Grade 3

Rain is your fiend it sings to you win your glom It sas cheer up and wacth the dancers. They pot on a show. You git out a blanket and a glass of hot chocolate! you sit and wacth the magicl rain fall. As the fain folls to the ground it looks like ballerinas twirling around and around, You hear the pitter pattar of the rain on the roof top.

You see mother eart smieing at you. rain is the tol to all life. Without rain the trees and grass and oter plants would die and if the plants die you die. So cheer win the world takes a sawer and ingowe the trees grass and oter plants. And the singing rain and dancing rain. So say hi to the sun and helo to the rain.

PATRICIA POLACCO

Thank you, Mr. Falker



<http://www.storylineonline.net/books/thank-you-mr-falker/>

The Simple View of Reading

Gough & Tunmer, 1986

Decoding

X

D

x

Language

Comprehension

LC

Reading

Comprehension

RC

Indicators for Preschool

- Delayed speech
- Mixing up sounds or syllables in long words
- Insensitivity to rhyme
- Inability to retrieve certain words
- Difficulty learning names and sounds of letters
- Genetic/Family history

Indicators for Kindergarten & 1st Grade

- Inability to link letters with their sound
- Failure to understand that words come apart
- Small bank of sight/stored words
- Lack of fluency while reading
- Complaints about reading

Indicators for 2nd grade on

PROBLEMS IN SPEAKING

- Fracturing of words – mispronunciation of long, unfamiliar or complicated words
- Speech that is not fluent
- The use of imprecise language
- Not being able to find the exact word, confusing words
- The need for time to summon an oral response
- Difficulty in remembering isolated pieces of verbal information

Indicators for 2nd grade on

PROBLEMS IN READING

- Very slow progress in acquiring reading skills
- Trouble reading unknown words that must be sounded out
- Inability to read small “function” words
- Stumbling on reading multisyllable words
- Omitting part of words when reading
- Fear of reading out loud
- Oral reading filled errors and problems

PROBLEMS IN READING Continued

- Poor performance on multiple choice tests
- Substitution for words that cannot be pronounced
- Disastrous spelling
- Long hours spent on homework
- Messy handwriting
- No joy in reading for fun or pleasure
- Lowered self-esteem

S. N. A. P.



Have you seen any of these indicators
in your classroom?

Share your observations with an elbow
partner.....

Indicators for Adults

PROBLEMS IN SPEAKING

- Persistence of earlier oral language difficulties
- Mispronunciation of words
- A struggle to retrieve words
- Difficulty remember names
- Lack of glibness
- Listening vocabulary larger than spoken

Indicators for Adults

PROBLEMS IN READING

- A childhood history of difficulties
- Word reading becomes more accurate over time but continues to require effort
- Lack of fluency
- Embarrassed to read orally
- Trouble reading & pronouncing words

PROBLEMS IN READING Continued

- Preference for books with figures and charts, fewer words per page
- Does not enjoy reading for pleasure
- Spelling that remains disastrous
- Substitution of made-up words to replace unknown words

Diversities in Dyslexia

Dyslexia affects some people more severely than others, so one child's symptoms may look different from those in another child.

Many children have one or two of the characteristics on occasion, but children with dyslexia have several of the characteristics, and they don't go away.

Dyslexia in the Classroom



- Difficulty with sequence
- May fall apart under time limits and pressure
- Working very slowly
- May skip punctuation cues in reading
- Unusual difficulty remembering multiplication facts
- Difficulty in following oral and written directions
- Problems when copying from the board
- Need constant reminders of what to do

Dyslexia in the Classroom



- Problems with word retrieval
- Slow and deliberate reading
- Poor spelling
- Confuses steps in solving math problems
- Papers look like “bird-scratching”
- May use avoidance tactics
- May act out – class clown, noisy, squirmy
- Poor recall of facts
- Difficulty with open-ended questions on tests
- Problems with summarizing or outlining

Beyond the Classroom

- Diminished self-image or self-esteem
- Feelings of being “dumb” or different
- Impressions of being a total failure
- Depression due to feelings of being less capable
- Stress due to academic and/or social problems
- Discouraged about continuing in school
- Frustration due to inability to cope with inadequacies

Sea of Strengths

- Creativity
- Athletic abilities
- Math skills
- Reasoning skills
- Analytical skills
- Empathy
- Visualization
- Imagination

Evidence of Strengths

- High learning capabilities
- Ability to focus in highly specialized areas
- Excellence in writing (if spelling is not important)
- Ability to articulate ideas and feelings
- Success in areas not dependent on rote memory
- Ability to come up with original insights/ideas
- Resilience and adaptability

Anticipation Guide

THINK

PAIR

SHARE

The Power of Dyslexia

https://youtu.be/l_qGJ9svUbM

Dyslexia

It is important to remember that students with dyslexia can learn. They just learn in a different way. Dyslexia is not a disease or a result of an accident or injury; but rather a different kind of mind. Often, it is a gifted and productive mind that learns differently.

How can we help?

❑ INSTRUCTIONAL STRATEGIES:

Multisensory activities – any learning activity that includes the use of two or more sensory modalities (vision, auditory, kinesthetic/tactile) linking eye, ear, and hand in symbolic learning

- ❑ The dyslexic student needs help from a specially trained professional in using a multisensory, structured language approach to instruction.
- ❑ Older students may need help with emotional issues that have developed as a consequence of difficulties.



GOOD NEWS!!!

Students with dyslexia can be successful.
Early diagnosis and effective instruction are key components.

Most can learn to cope with their difficulties if they are taught appropriately.

Using multisensory educational approaches, students can improve reading, writing, and spelling.

TIMEBOMB

The Cost of Dropping Out



**YOUR KIDS
NEED YOU
NOW MORE
THAN EVER!!**

MIKE MATTOS

Website Resources

<https://eida.org/>

<http://thebigpicturemovie.com/>

<https://www.altaread.org/>