

Steven Spielberg
Director



Carol Grieder,
Ph.D.,
Nobel Laureate

Richard Branson,
Virgin Air,
Virgin Records



Why am I here?

Session I: Characteristics of Dyslexia

Dyslexia Legislation Idaho Code 33-1811



Mountain West Associates
2022

<https://tinyurl.com/4m2ze7fp>

Mountain West Associates

Dyslexia Training

To meet the state requirements educators must:

- **Complete both days of the in person training (8:30-3:30 Monday and Tuesday)**
- **Three hours of independent study**
 - **Read at Social/Implications of Dyslexia + 2 others of your choice**
 - **Write at least one-page reflection that includes a summary of the article, why you selected it, and how you could use the information in your classroom**

NNU Credit



NORTHWEST
NAZARENE UNIVERSITY

Center for Professional Development

EDLT56723

Reading by Design (Dyslexia Training for Renewal)

Register online at pdlearn.nnu.edu

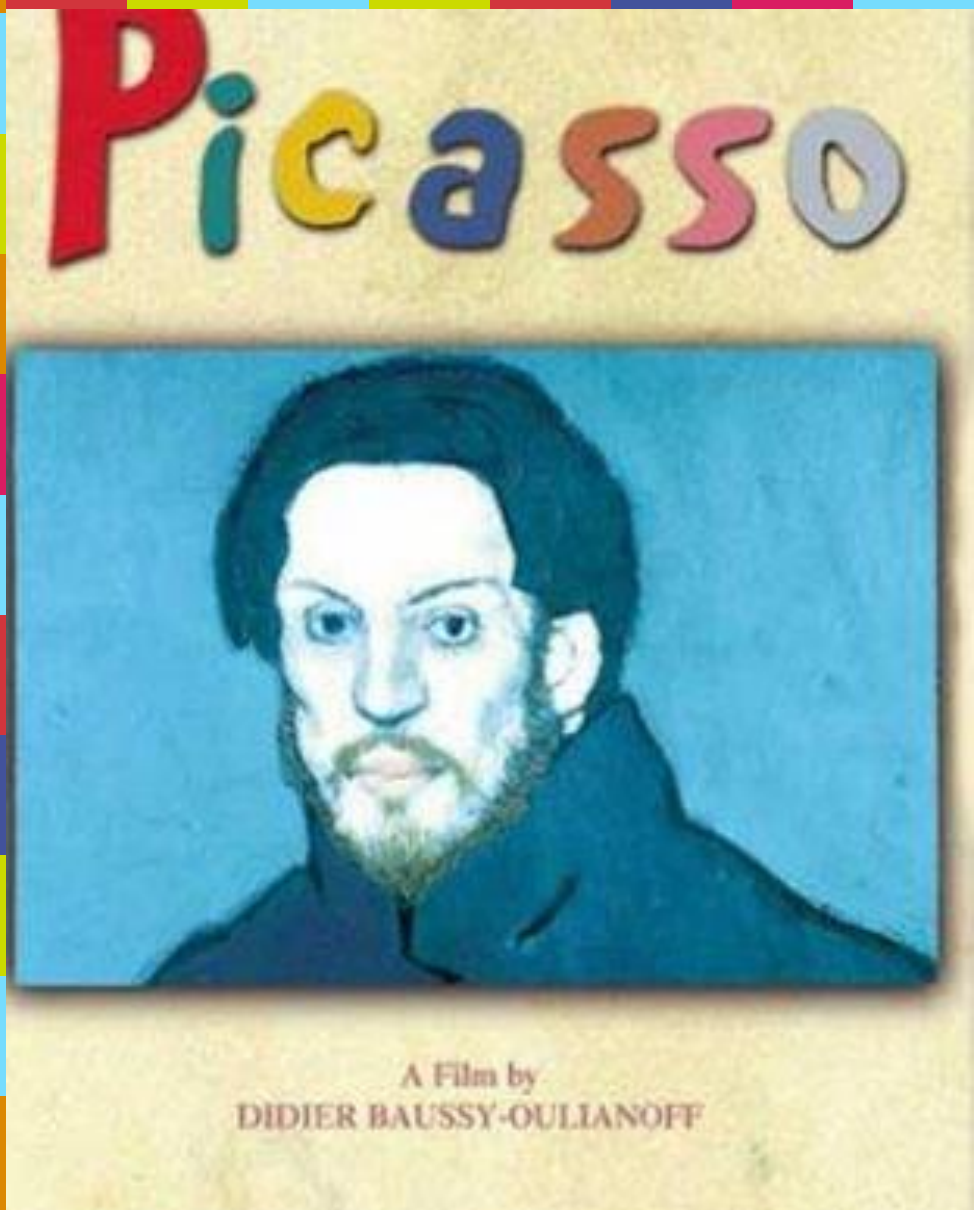
How did you learn to read?

What was your experience?

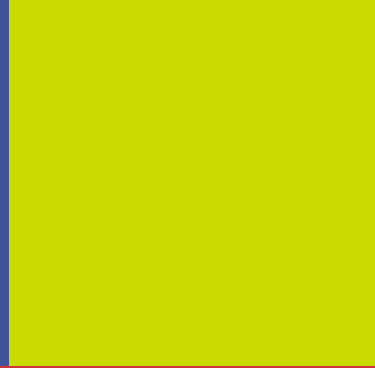
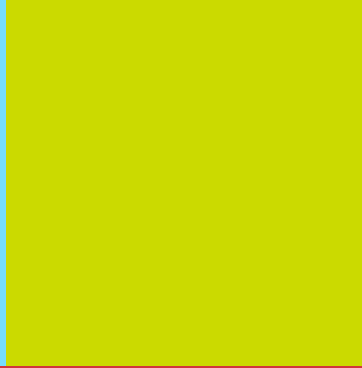
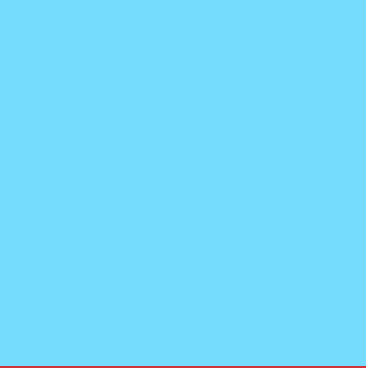
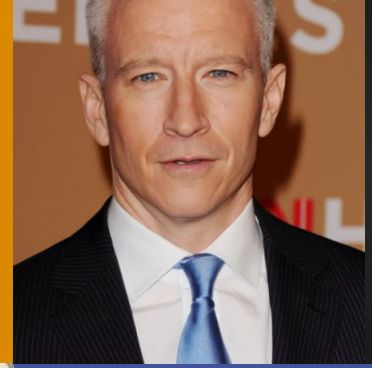
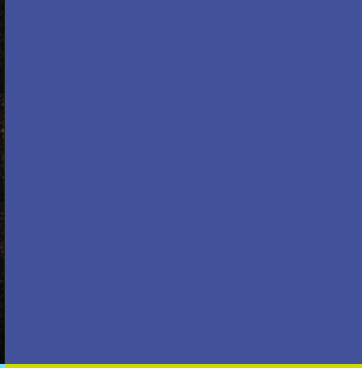
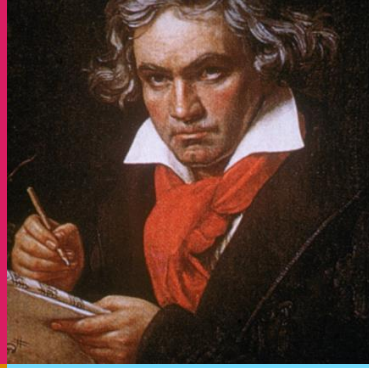
[www.menti.com 7615 9527](https://www.menti.com/76159527)



**What was your
experience learning
to read?**



Let's start with a quiz

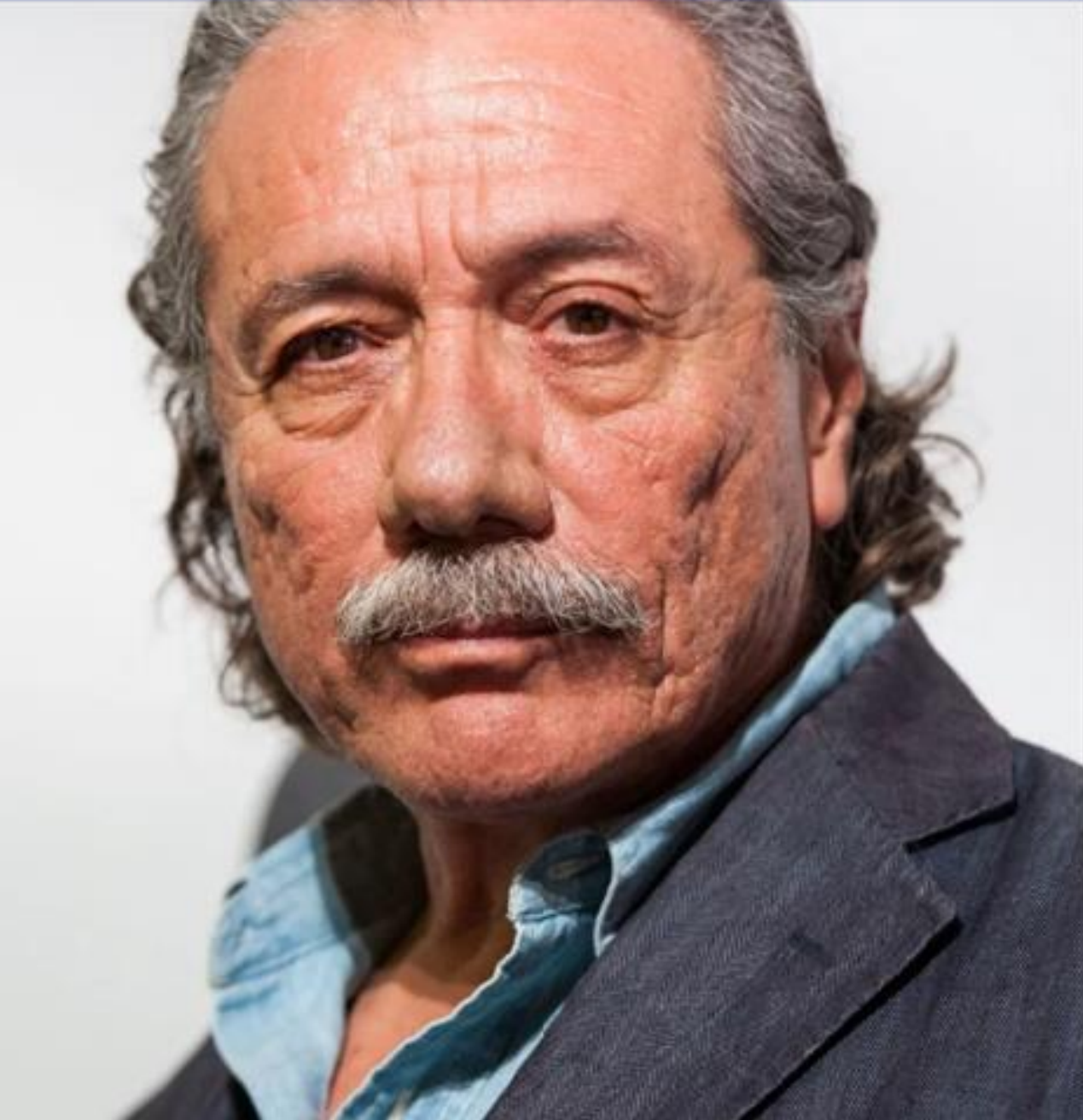
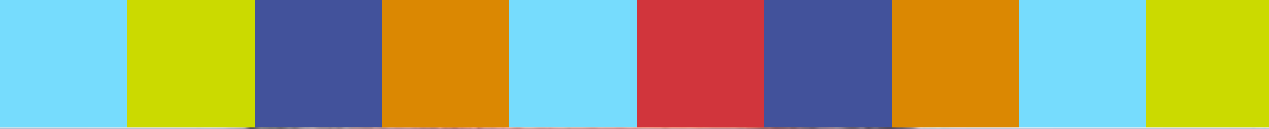


A key characteristic of dyslexia is reversals of letters when writing

True or False?



Dyslexia is an inherited trait?




**Dyslexia is a rare
learning disability**

School Population



About **13-14%** of the school population nationwide are identified as having a handicapping condition that qualifies for Special Education (SPED) services.

SPED Students



LD Students



One **half** of all students who are identified for special education are classified as having a learning disability (LD). About **85%** of those students have a primary learning disability in reading and language processing.

Population as a whole



Up to **15-20%** of the population as a whole may have symptoms of dyslexia, including slow or inaccurate reading, weak spelling, and poor writing. Not all will qualify for Special Education, but most benefit from systematic, explicit instruction in reading, writing, and language (AKA, Structured Literacy Instruction).

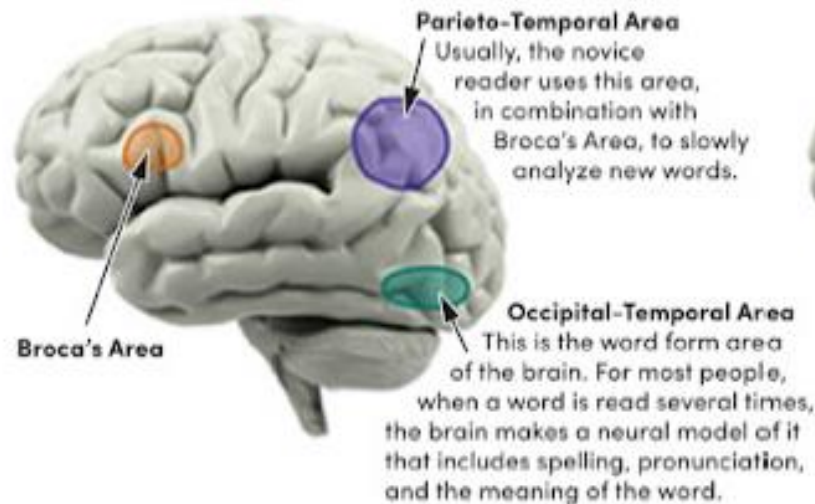


Dyslexia is neurological based

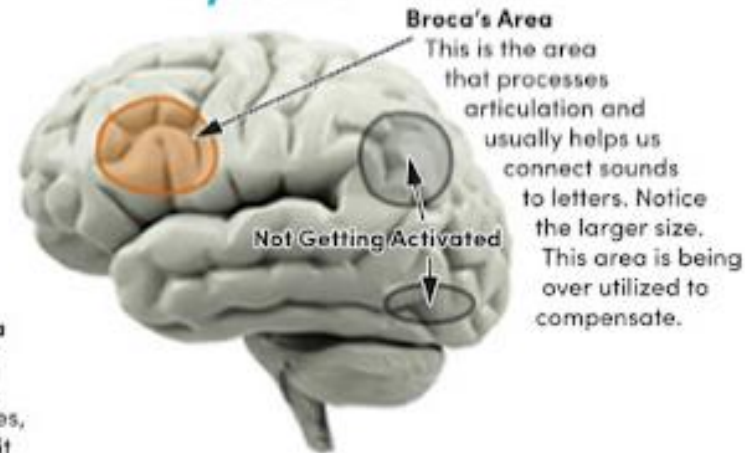
True/False

NON-DYSLEXIC BRAIN vs. DYSLEXIC BRAIN WHEN READING

Non-Dyslexic



Dyslexic



Research in neuroscience reveals that the brain functions differently in people with dyslexia than those without it. These structural and neural differences make it more difficult for people with dyslexia to read, spell and write. For example, in the left brain hemisphere, three dominant areas of the brain are usually activated for reading, but in those with dyslexia, only one area of the brain is being stimulated.

Retrieved from Understood.org, 10.4.22

Discussion



Temporo-parietal cortex

Less activity here reflects the trouble kids with dyslexia have with understanding the sound structure of language.

After reading intervention: In several studies, more activity is seen here.



Inferior frontal cortex

Some studies show more activity in this area in kids with dyslexia compared to skilled readers. Other studies show less activity.

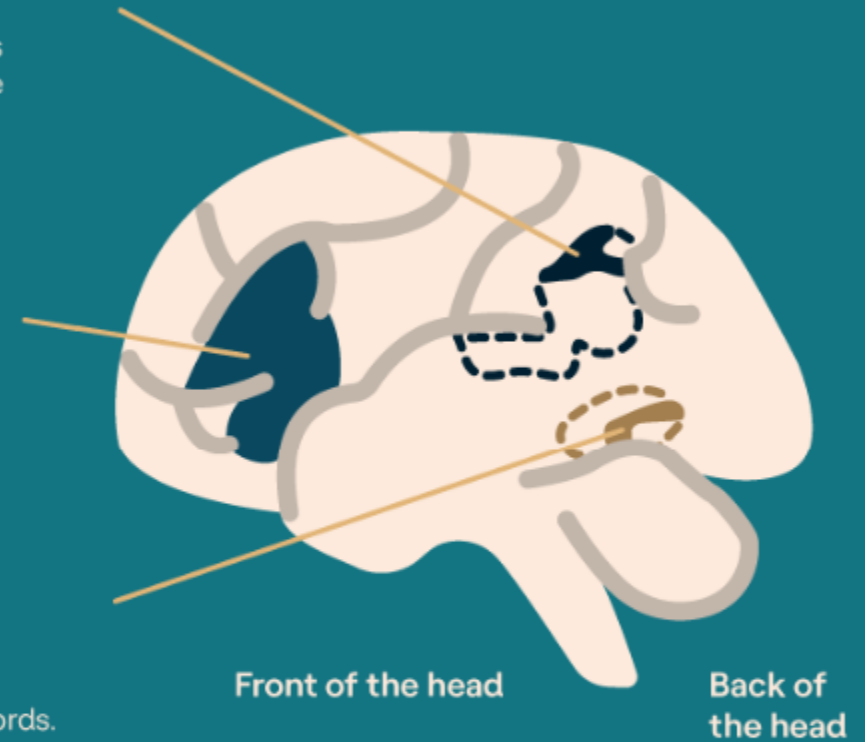
After reading intervention: Some studies show increased activity here.



Occipito-temporal cortex

This area supports recognition of sight words. It shows less activity in kids with dyslexia.

After reading intervention: More activity is seen in some studies but not in others. Mastering sight words is an ongoing process that takes time and effort.



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Dyslexia is limited to issues related
to decoding and spelling

May Struggle With

Language Comprehension

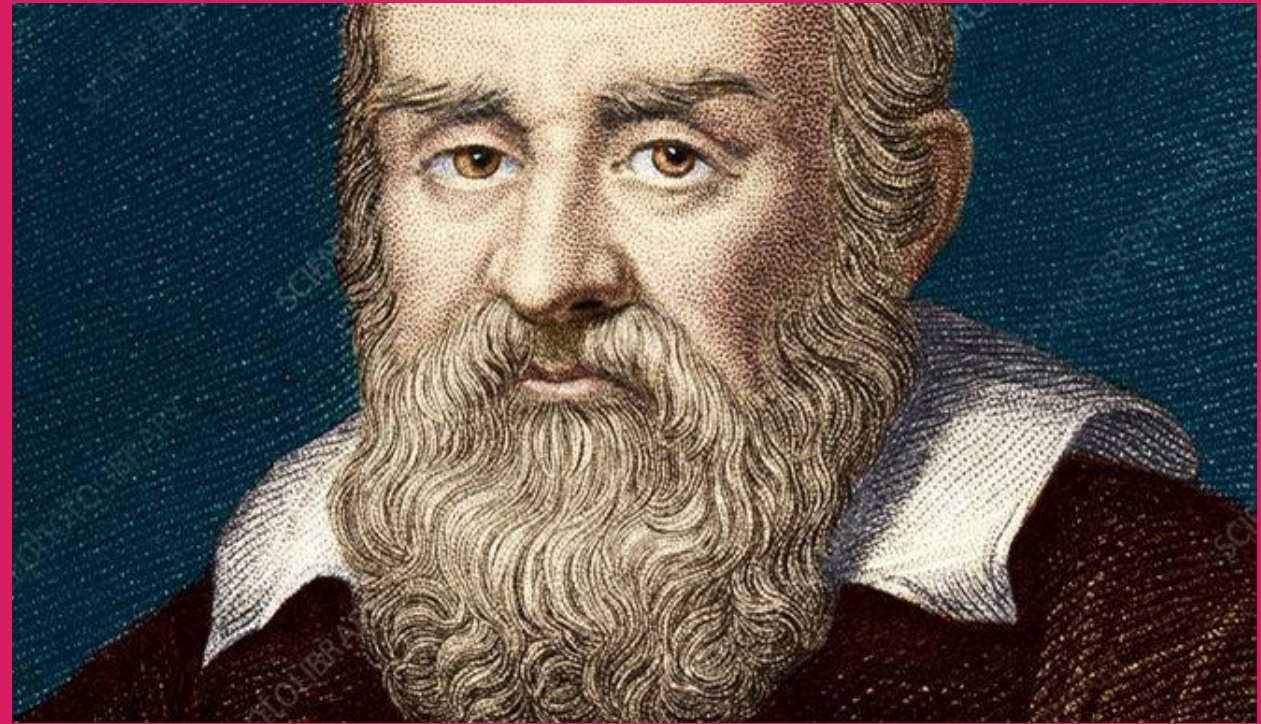
Short term auditory sequential memory

Executive function (ability to plan)

Working memory (ability to store information for immediate retrieval)

Rapid Automatic Naming

Attention Deficits



Early childhood



- Difficulty with rhyming
- Struggles to identify letters in their name

Primary grades

- Lack of understanding that a word can be broken into pieces
- Trouble associating letters with sounds
- Fatigue when reading
- Illogical reading errors
- Avoiding reading



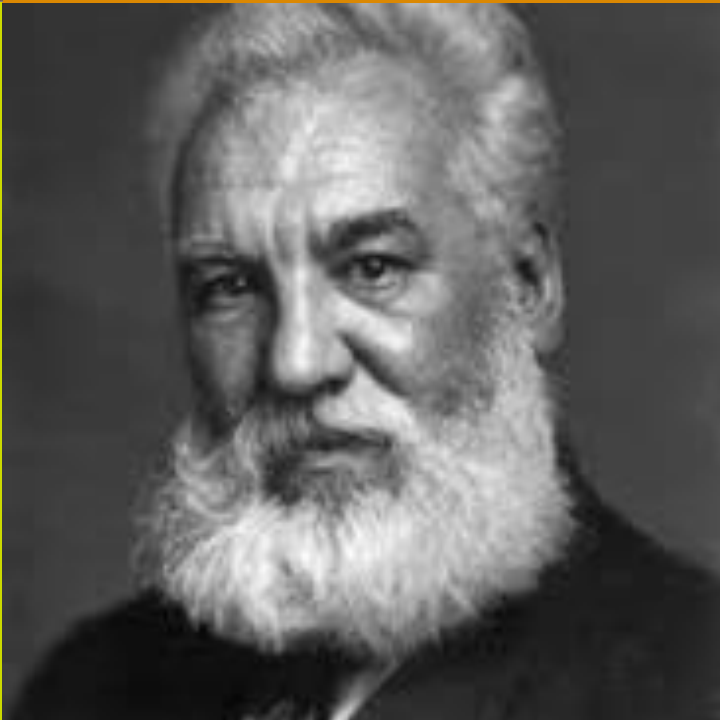


Intermediate grades

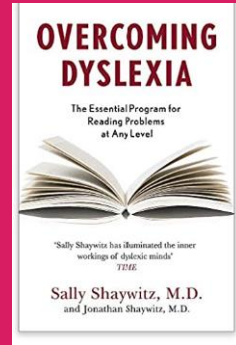
- Slow pace for the development of reading skills
- Trouble sounding out unfamiliar words
- Word substitutions/guessing
- More likely to read words in context than a list
- Poor spelling and written work



**Dyslexia is a sign of
cognitive weakness**



Dyslexia

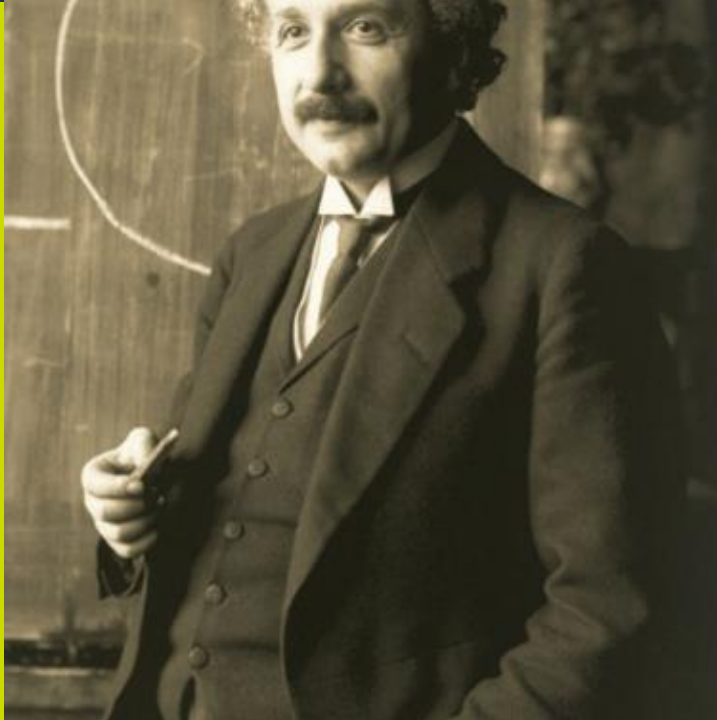
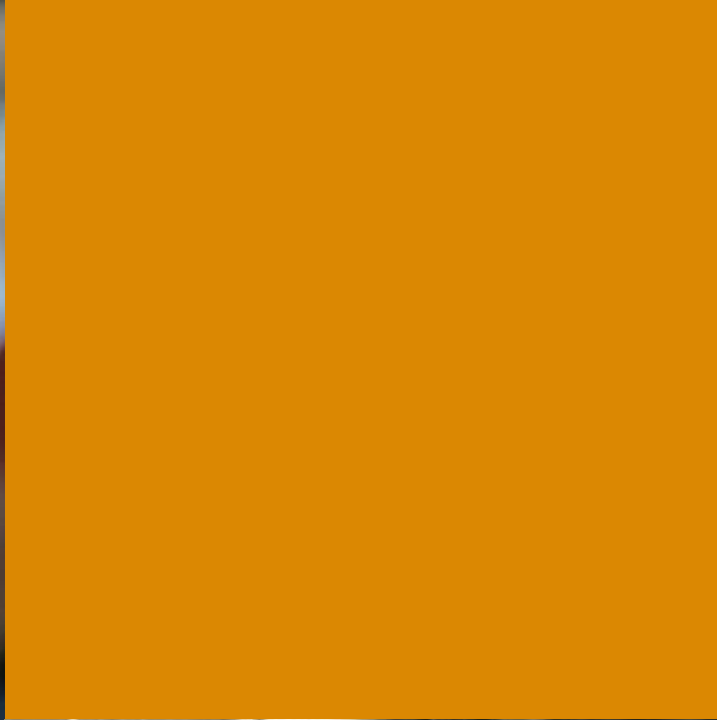


“An island of weakness amidst a sea of strengths”

Sally Shaywitz, MD

Overcoming Dyslexia 2nd Edition, 2020





Famous Dyslexics

Leonardo Da Vinci

Albert Einstein

Alexander Graham Bell

Charles Schwab

Steven Hawkins

Pablo Picasso

Mohammed Ali

Michael Phelps

Strengths

Strong visual spatial skills

Creative problem solvers

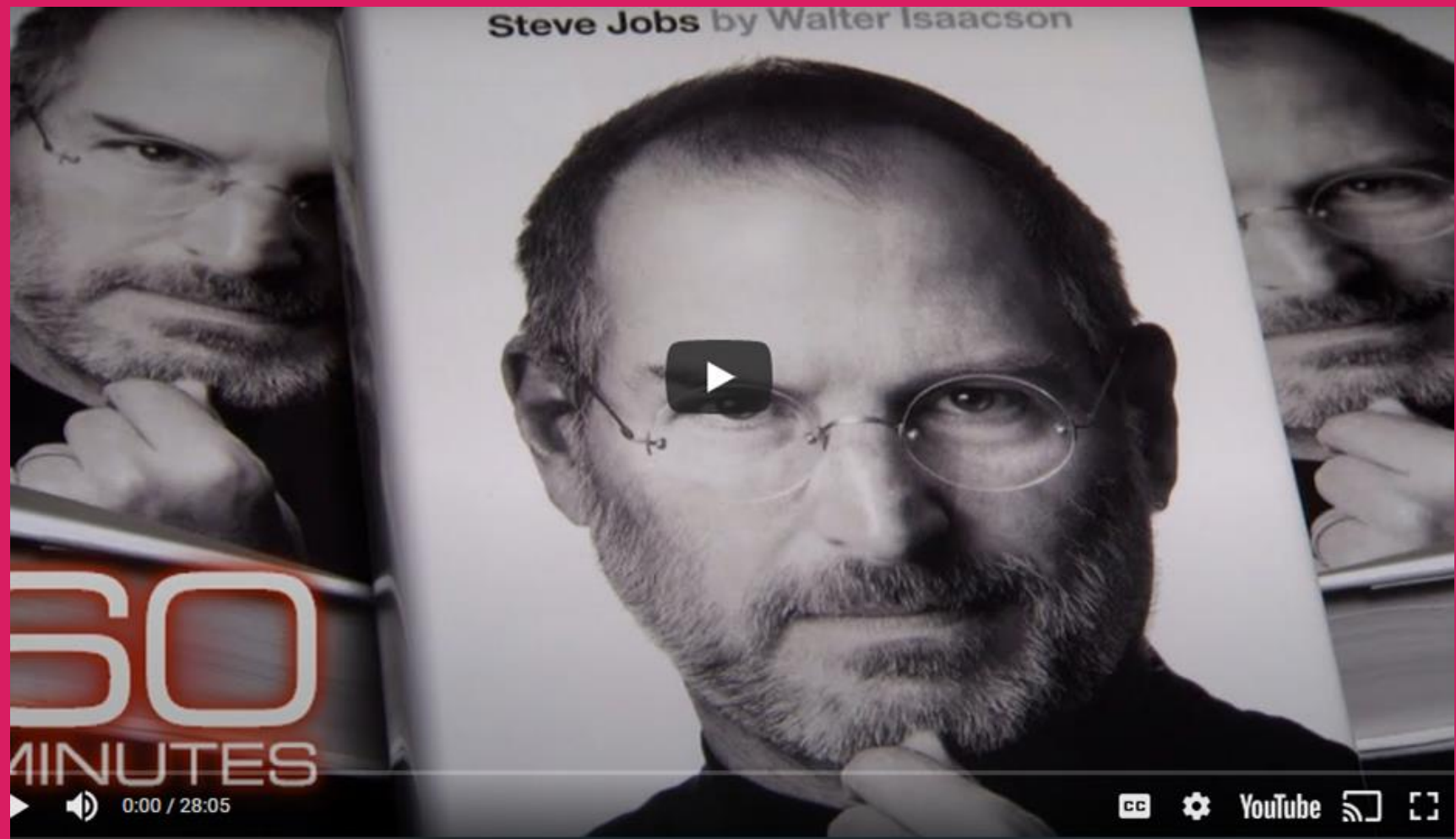
Ability to think holistically

Highly articulate

Good story tellers

Pattern Recognition (how things connect)

Determined





Break

