

Understanding DYSLEXIA As a Positive Life Journey

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Seeking Information About Dyslexia?

2004-2024



Reading is NOT a natural process.

Typical Brain / Dyslexic Brain comparison

Typical



● Broca's area, Inferior frontal gyrus
(articulation/word analysis)

● Parieto-temporal
(word analysis)

● Occipito-temporal
(word form)

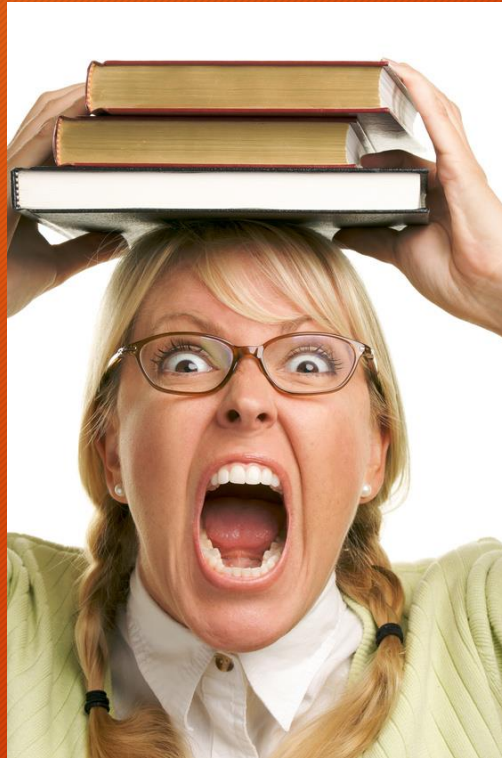
Dyslexic

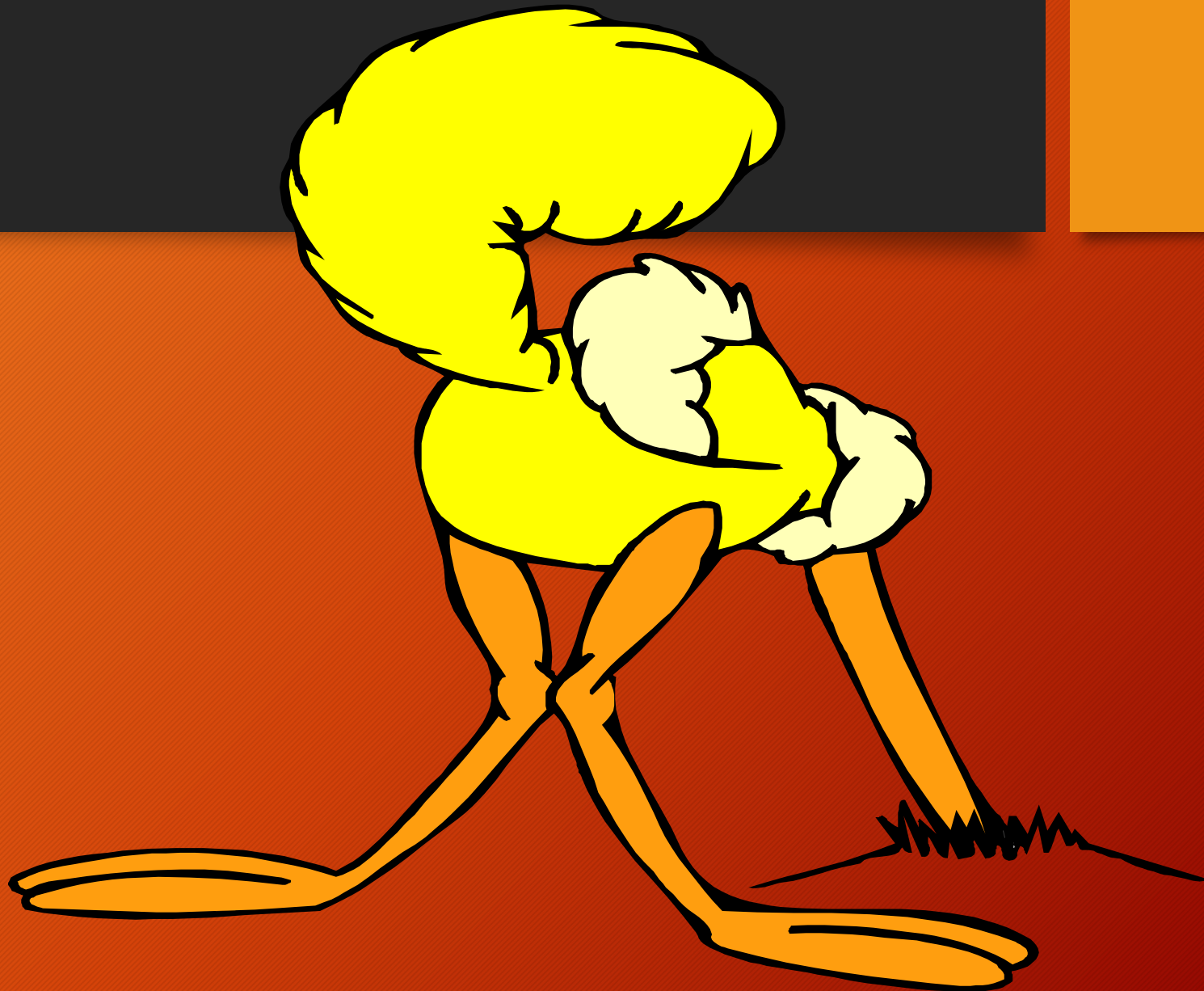


● Broca's area, Inferior frontal gyrus
(articulation/word analysis)



Don't make me leave my
comfort zone!





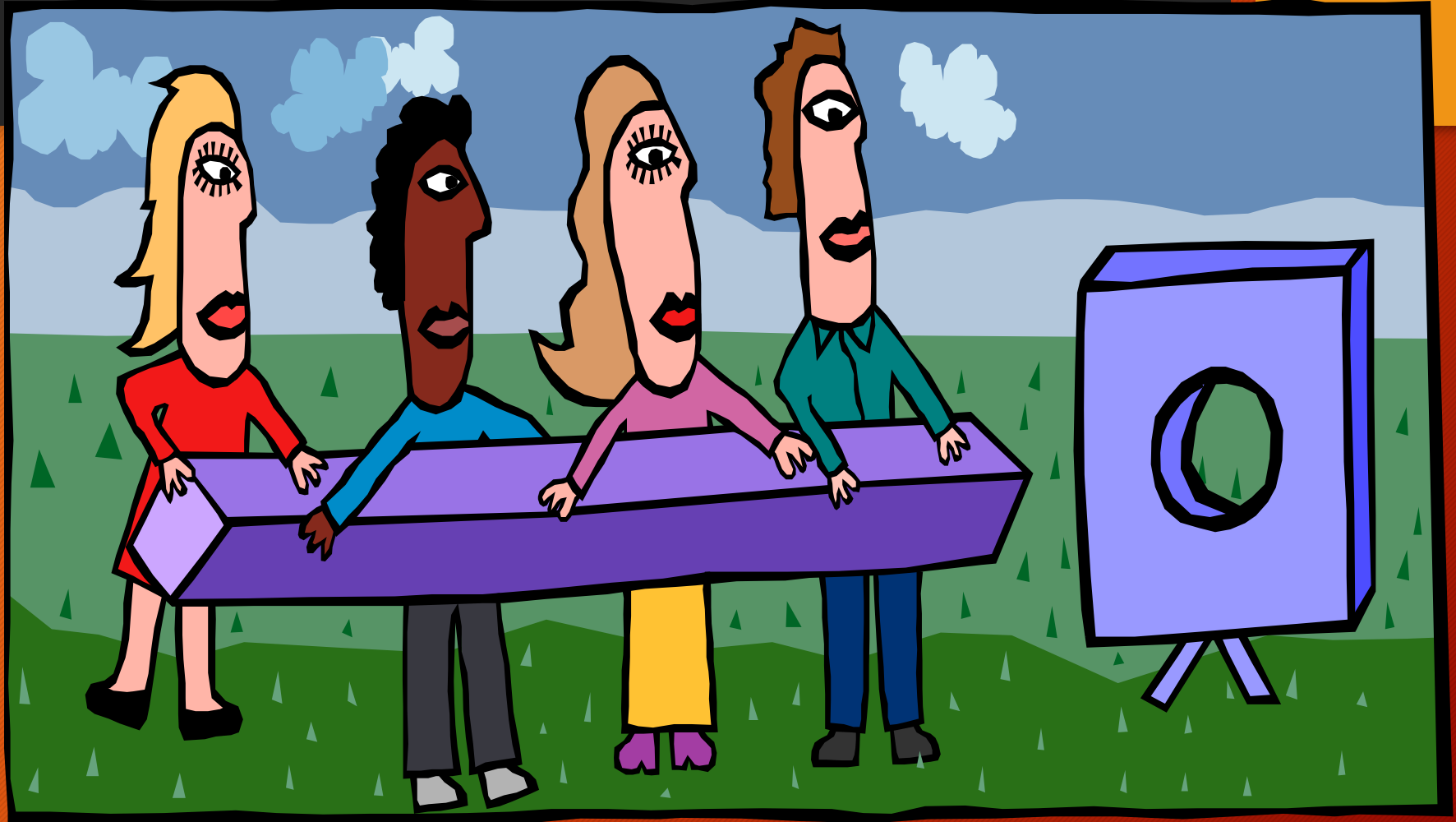


Not everything that is faced can be
changed.

But nothing can be changed until it is
faced.

- James Baldwin

Students with Dyslexia are Square Pegs



Dyslexia Is Not A New Disability

- 1895 – Dr. James Hinshelwood

Observed that children demonstrated difficulty with the memory of letters and words; however, their vision was not impaired.



- He was intrigued by the unexpected common characteristic demonstrated by all the children he studied. They were individuals who were cognitively capable of learning, but oddly unable to learn to read in spite of instruction (Hinshelwood, 1895).

At the turn of the twentieth century, Hinshelwood wrote,

- ‘It is a matter of the highest importance to recognize as early as possible the true nature of this defect, when it is met with in a child. It may prevent much waste of valuable time and may save the child from suffering and cruel treatment. The sooner the true nature of the defect is recognized, the better are chances of the child’s improvement’ (Hinshelwood, 1902).

Dr. Samuel Orton (1937) was one of the first researchers to
associate dyslexia with a language disorder that affects
phonological processing

Orton's work, in conjunction with his associate Anna Gillingham
formed the basis for the phonetically structured, direct, explicit,
multisensory language-based remedial programs that are used
today for students with developmental dyslexia (Uhry, Clark,
2004).

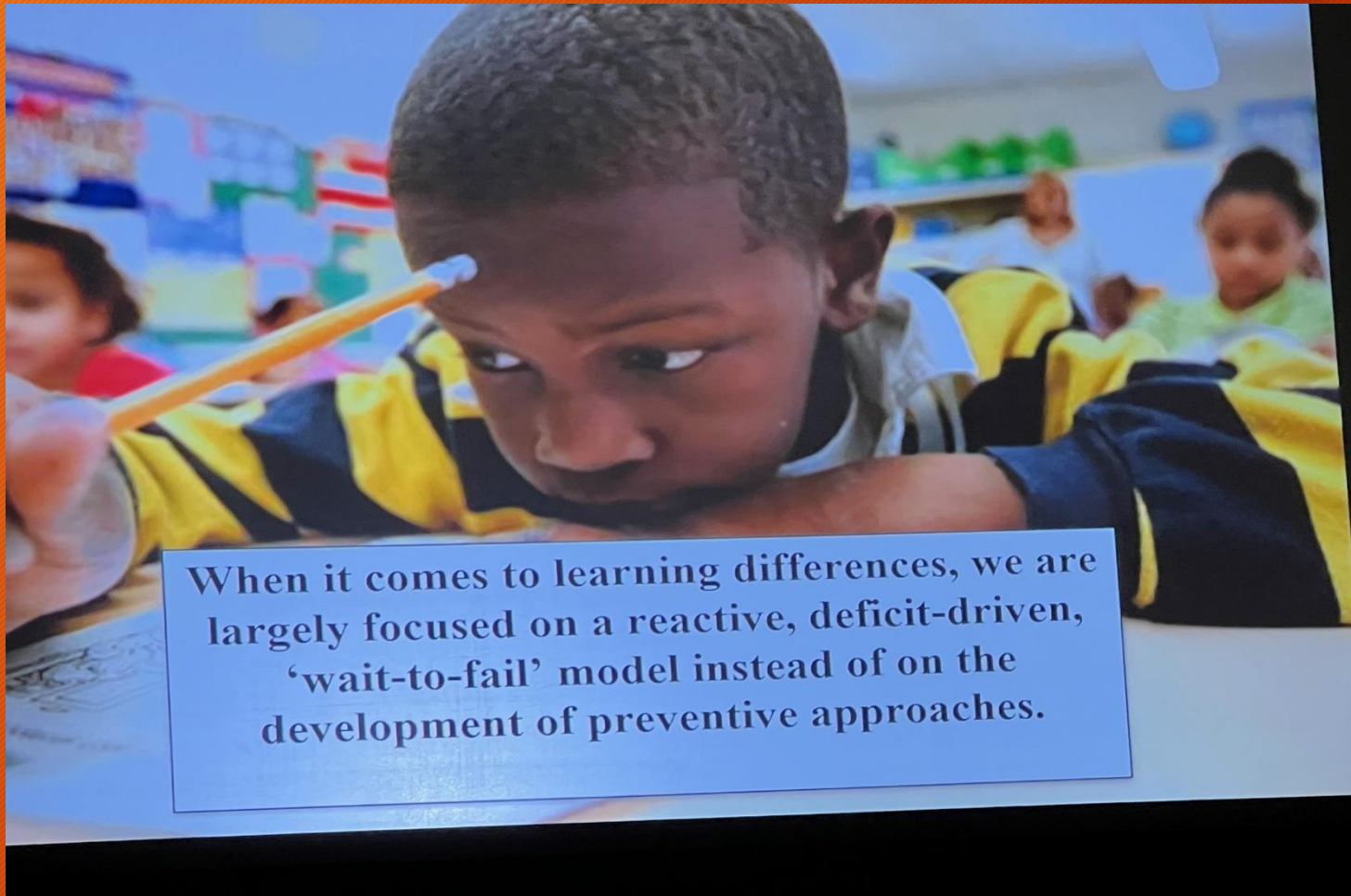
In the 21st Century



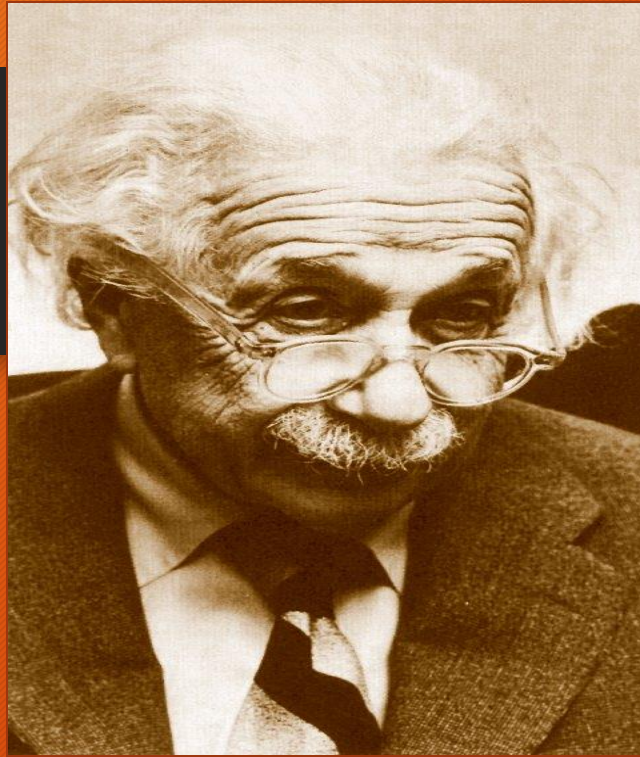
- If identified early, (kindergarten – 3rd grade) children can learn to read at or above grade level if provided with systematic, explicit, and intensive instruction.
- Failure to develop basic reading skills by age 9 predicts a lifetime of illiteracy.

Dr. Reid Lyon, (2000). NICHD Report to Congress.

Plan for Success. Not Failure!



When it comes to learning differences, we are largely focused on a reactive, deficit-driven, 'wait-to-fail' model instead of on the development of preventive approaches.



- Albert Einstein once said "*The definition of insanity is doing the same thing over and over again and expecting different results*".

Social Consequences

According to the NICHD (2000), approximately 27% of these children drop out of high school before graduation and as they move out into society they are more likely than their peers to interact with the justice system and less likely to obtain financially rewarding employment.

- Social consequences may include substance abuse, high school drop-outs, teenage pregnancies, and incarceration (Vail, 2000).

Academic Consequences

- Secondary consequences may include problems in reading comprehension and reduced reading experience that can impede growth of vocabulary and background knowledge.” (Annals of Dyslexia, Vol. 53, 2003)

Emotional Consequences

- Anxiety, depression, a lack of self confidence are common emotional disorders demonstrated by individuals with dyslexia.
(Michael Ryan M.D., 2004)



Myths About Dyslexia



- Does not exist – is merely a catch all term for learning problems
- Dyslexia cannot be diagnosed until a child is 8 to 11 years old.
- It's a visual problem – people see and write letters and words backward.
- Forcing a student to read every day will make him or her a better reader.



MORE MYTHS:

- More boys than girls are dyslexic
- Clumsy; trouble tying shoes, etc.
- Dyslexia affects only English speakers

FACT:

- Of the students with specific learning disabilities receiving special education services, 70-80% have deficits in reading (IDA, 2012).
- QUESTION? How many of these students have undiagnosed dyslexia?

Dys—*difficulty*

lex— *words*

DYSLEXIA - Difficulty with Words

- Dyslexia is a *specific learning disability* that is neurological in origin. It is characterized by difficulties with accurate and/or fluent word recognition and by poor spelling and decoding abilities. These difficulties typically result from a deficit in the phonological component of language that is often **unexpected** in relation to cognitive ability and the provision of traditional classroom instruction. (IDA,2002)

What Happens to Dyslexic Children?

Secondary consequences may include problems in reading comprehension and reduced reading experience that can impede growth of vocabulary and background knowledge.

DYSLEXICS DON'T READ VERY MUCH!

Dyslexia Simply Defined

- A brain difference that affects phonological processing,
- in an individual of average or above intelligence,
- with normal receptive (understands) language,
- who struggles to learn to read, write, and spell in spite of exposure to adequate instruction

Dyslexia is a “Written Language” disorder



DYSLEXIA IS
UNEXPECTED!

2008-2024







Dyslexia Should be Viewed as a Gift



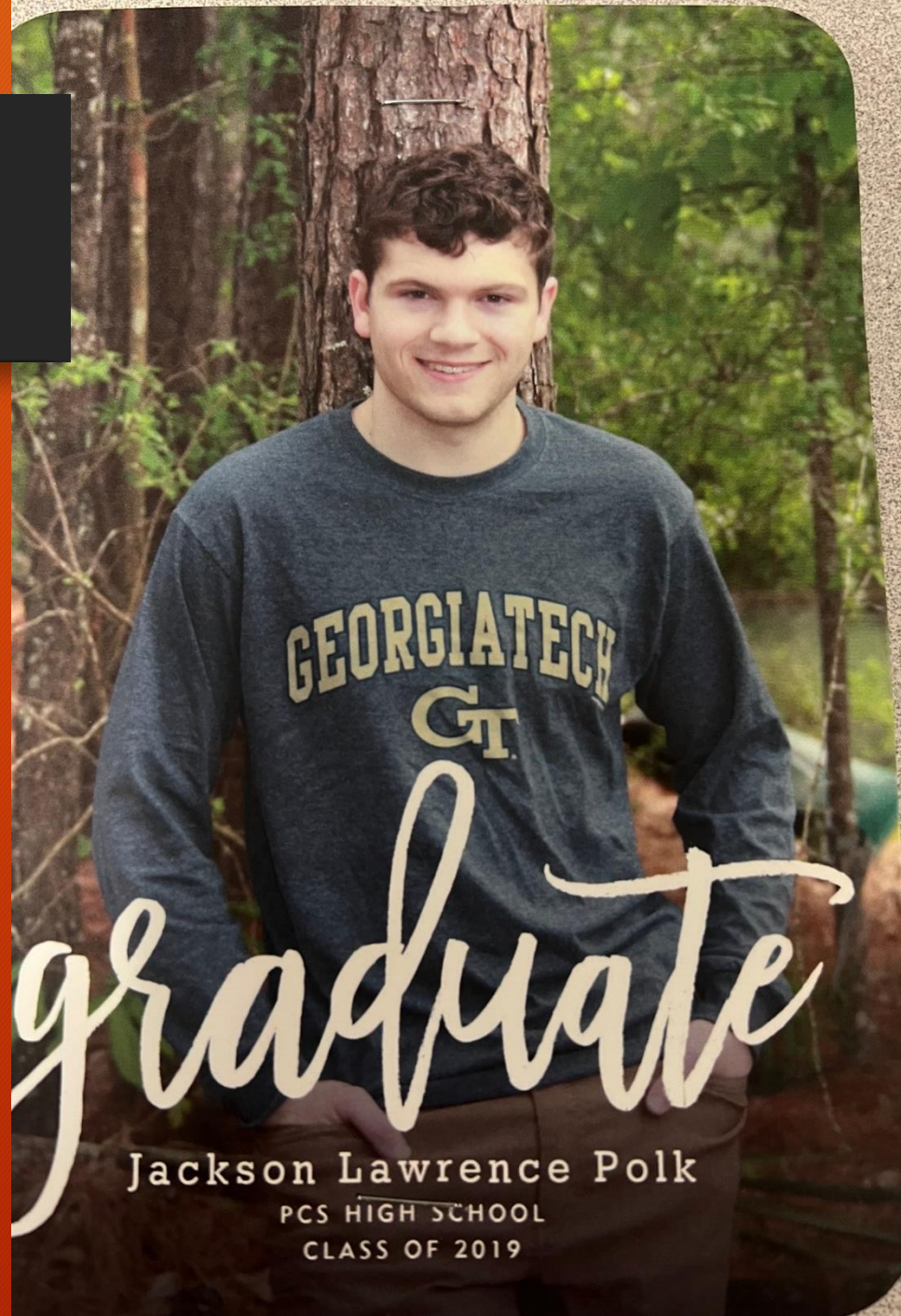
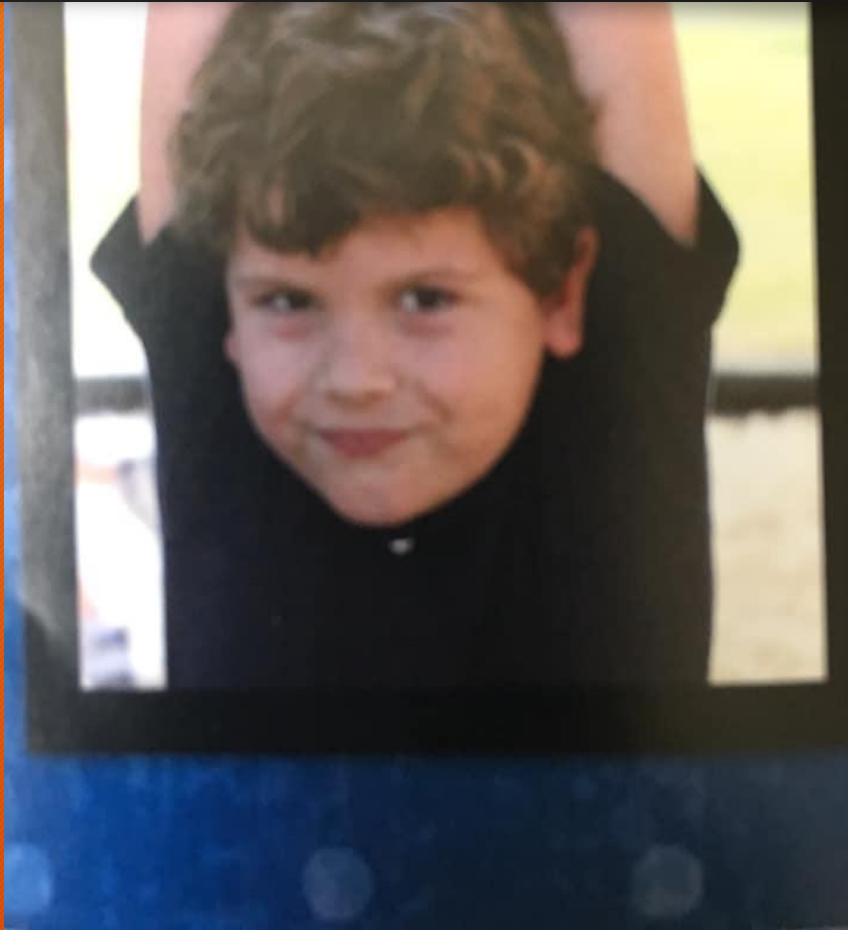
Many Dyslexics are talented in arts and music!



UNEXPECTED!



Jackson's Story



Dyslexia and Verbal Expression

Young children may demonstrate articulation errors

Slow to answer questions (processes slowly)

May sequence events incorrectly when retelling

Dyslexia and Auditory Processing

- Dyslexia affects phonological processing
- Students may not process the sounds accurately
- Multisensory phonological processing activities are imperative at early ages

<http://phonologicalawareness.org/>

Dyslexia and Dysgraphia

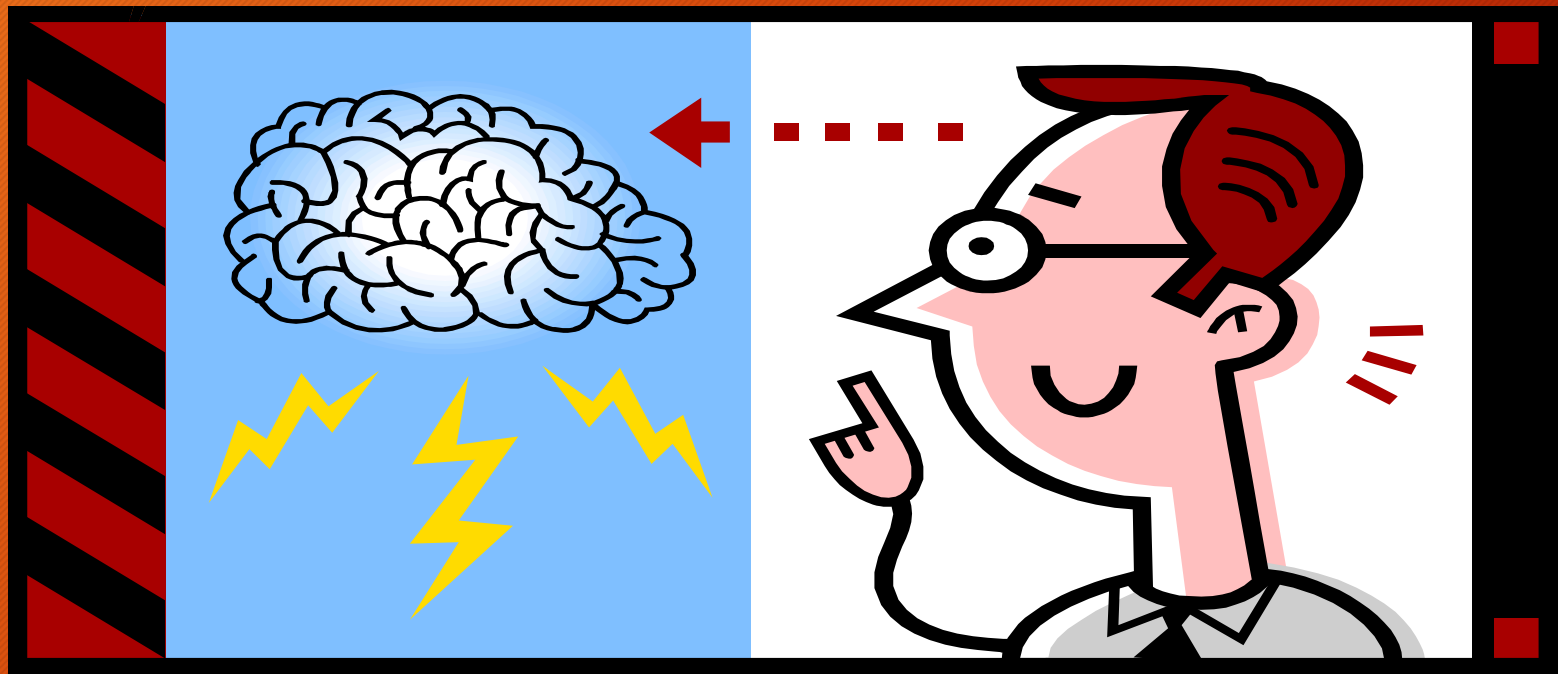
- Students may struggle with writing legibly
- Students may struggle putting thoughts into writing
- Struggle with fine motor skills

ADHD Is a Disability

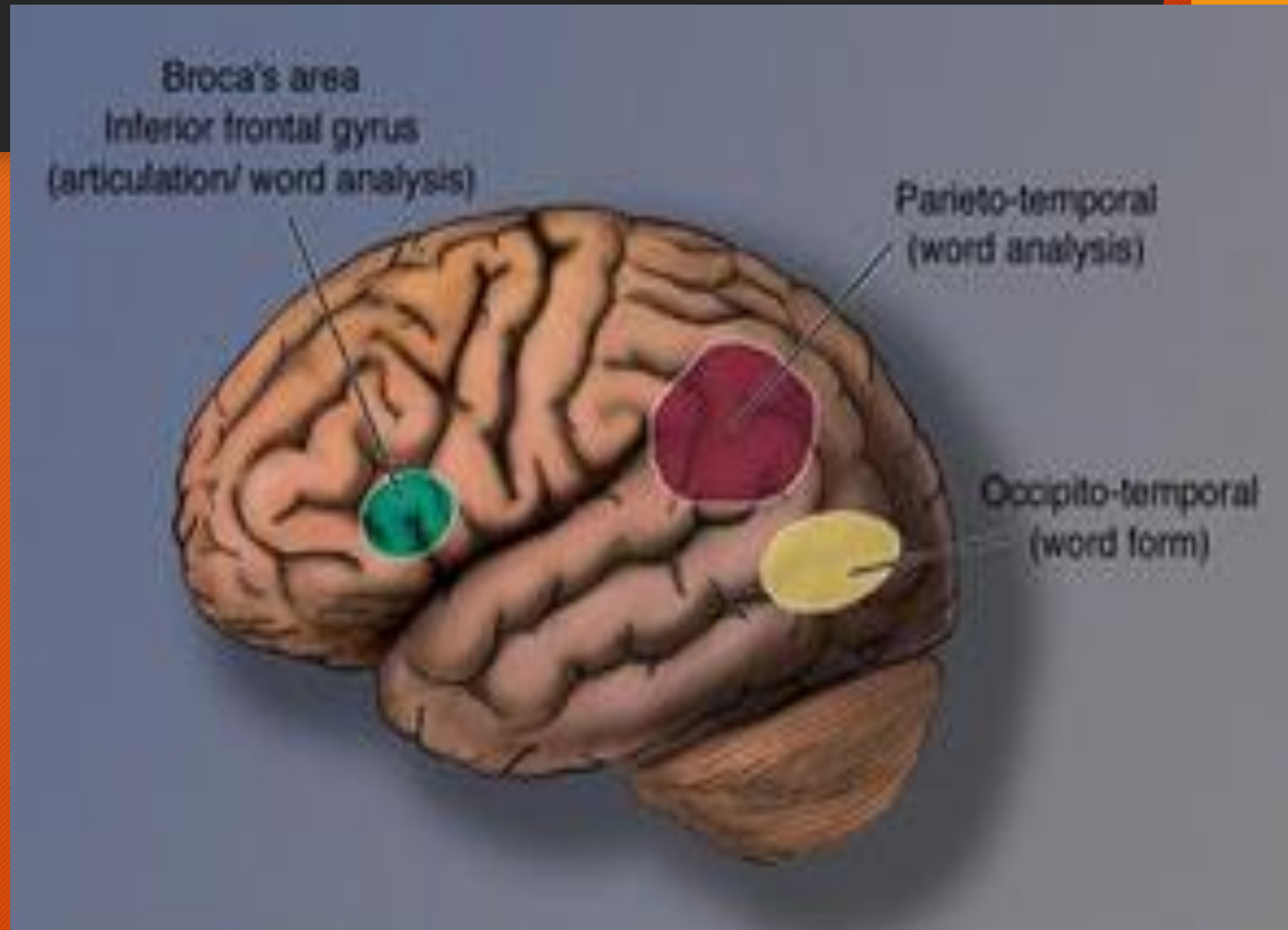
- Attention can affect memory and the receiving instruction.
- Instruction can be lost to an ADHD child.
- Not all ADHD students are dyslexic, but most dyslexics have ADHD/ADD.

- 15 to 20% of the population is dyslexic
- Dyslexia is the **MOST COMMON** learning disability
- Early identification and intervention is critical
- Many dyslexics do not qualify for special education services until after 3rd grade
- Most schools do not offer appropriate intervention services
- Intervention is evidence-based and works!

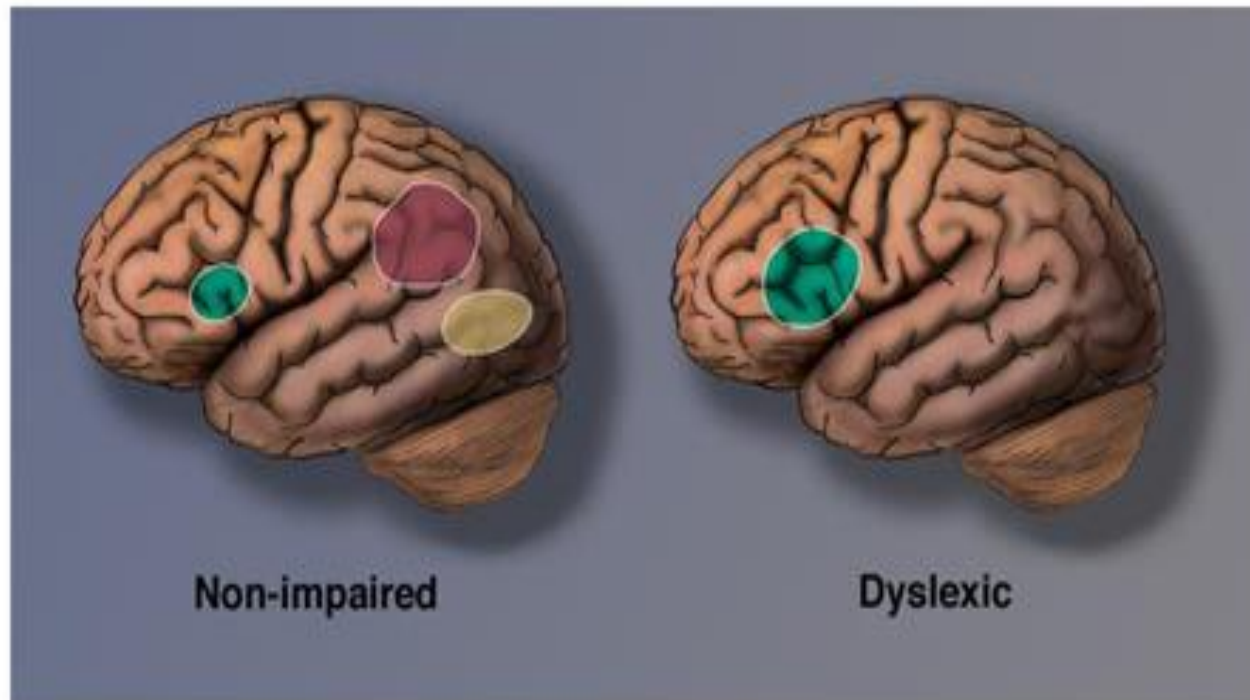
WHAT CAUSES DYSLEXIA?



How the Brain Reads



Neural Signature for Dyslexia: Disruption of Posterior Reading Systems

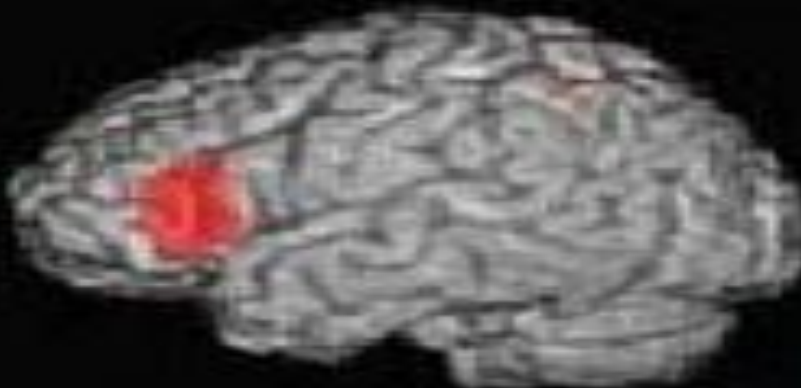


© Sally Shaywitz, *Overcoming Dyslexia*, 2003

Typical readers



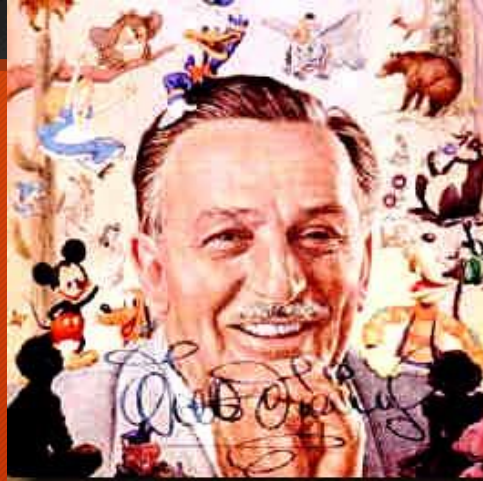
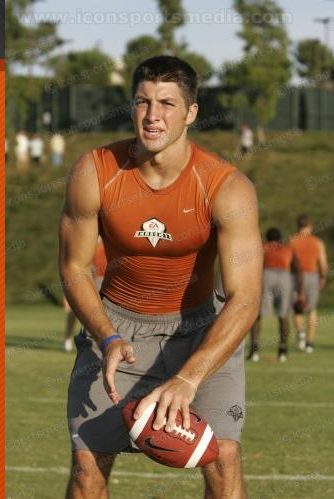
Dyslexic readers



Family History of Dyslexia



Designed For A Special Purpose



PRIMARY DISABILITY OF DYSLEXIA

Intelligence is average to above average

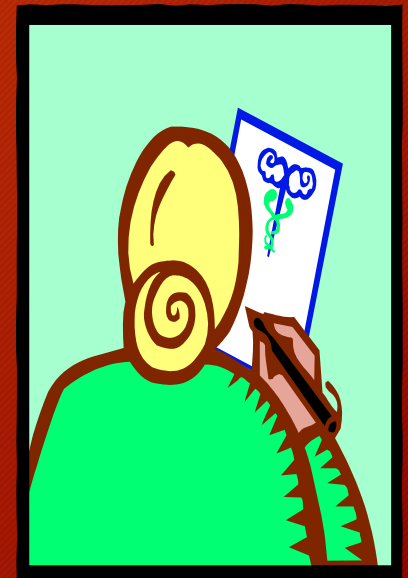
- Eyesight and hearing acuity is normal
- Spoken language falls within normal ranges
- Listening comprehension is normal
- Usually excel in one or more areas
- Family history of reading difficulties

DYSLEXIA IS A “DIAGNOSIS” NOT A “LABEL”

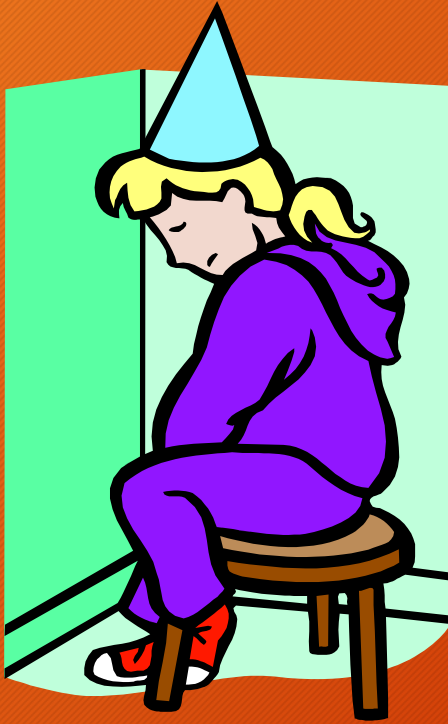
- Dyslexia is diagnosed through information attained from parents/teachers and a battery of tests administered by licensed diagnosticians.

EVALUATION FOR DYSLEXIA INCLUDES:

- IQ Test
- Achievement Test
- Phonological Processing Test
- Reading Accuracy, Rate, Fluency Test
- Language Test (Receptive / Expressive)
- Family and Health History
- Teacher and Parent Checklists



LABELS ARE GIVEN TO UNDIAGNOSED DYSLEXICS



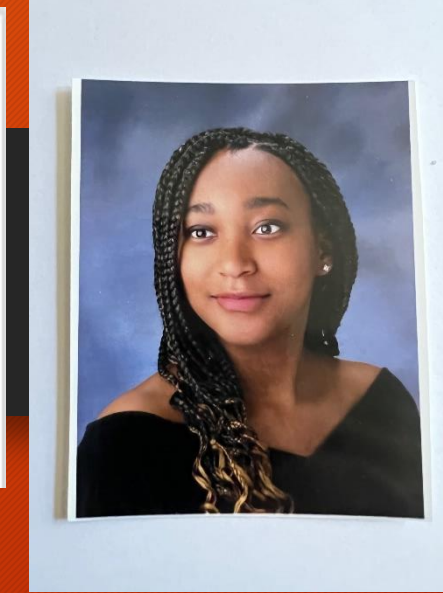
- **DUMB**
- **STUPID**
- **LAZY**





2008

“For the dyslexic child, identified early, with supportive parents and with a proper remedial program of sufficient length, the prognosis is very good”. Reid Lyon, Ph.D.



God Sent Us a Grandbaby Ben



Matthew Effect

“To all those who have, more will be given,
and they will have abundance; but those who
have nothing, even what they have will be
taken away”.

*The rich get richer, the poor get
poorer.*

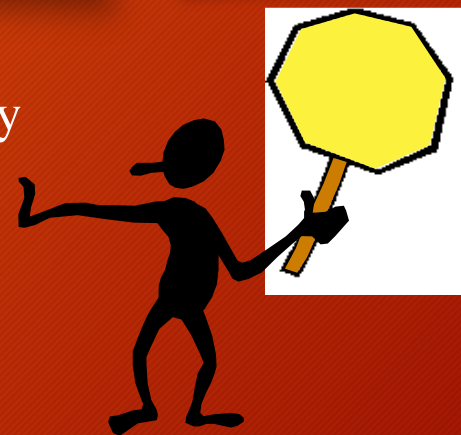
Ben Going to Pre-School



Warning Signs Pre-School

- May have delayed speech; slow to add new words; difficulty finding the right word
- Mixing up sounds or syllables in long words
- Poor memory for nursery rhymes
- Difficulty learning colors, days of week, numbers, shapes
- Difficulty learning how to spell or write name

Adapted from *Overcoming Dyslexia* by Sally Shaywitz





- Difficulty finding the right word when speaking
 - Vocabulary may be inadequate
- Dreads going to school
 - Complains of headaches, stomach aches

Adapted from *Overcoming Dyslexia* by Sally Shaywitz

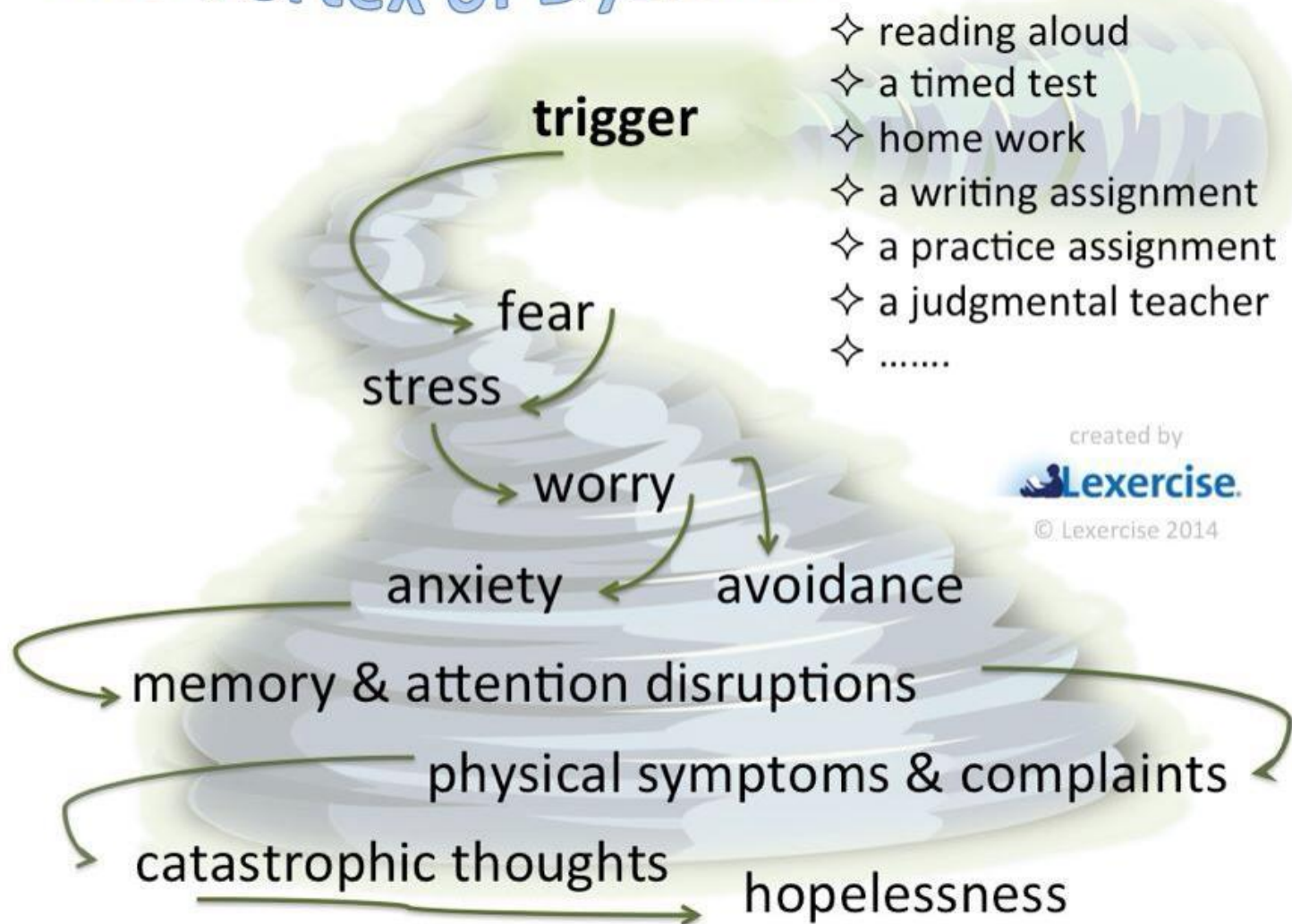
#1 INDICATOR OR READING SUCCESS OR FAILURE

the Research behind reading:

Phonological awareness
in Kindergarten is one of the
number one predictors of
student success 11 years later.

-National Reading Panel; GW MacDonald and A Cornwall

The Vortex of Dyslexia



Ben Starts Kindergarten



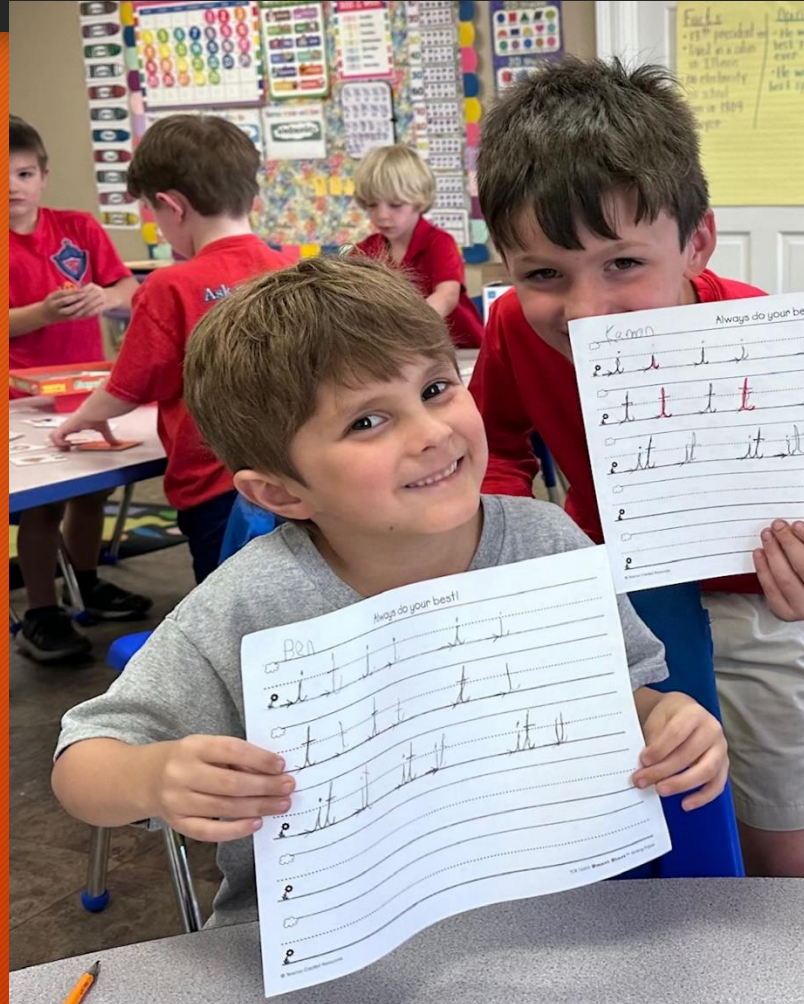
1st Day in Kindergarten July 2023



Kindergarten Drawing in May 2024

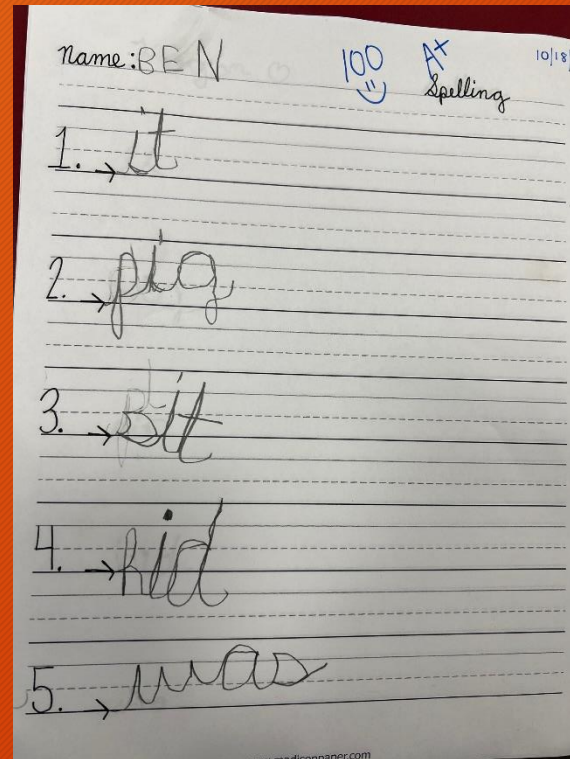


Learning Cursive in Spring of Kindergarten



Spelling Test 1st Grade

Oct. 18, 2024



Ben - 1st Grade Oct. 18, 2024





The most
dangerous thing
you can do if you
suspect a reading
problem is to do
nothing.

- Sally Shaywitz -

Buy now on
amazon

Listen on **audible**

@hacking.the.code



Interesting information....

- Some people with dyslexia may get by in early grades because they do not demonstrate “great” difficulty with early reading and spelling, but have difficulty when more complex language skills are required in the higher grades.
 - Grammar, understanding textbook material, and writing essays, etc.

Longitudinal Study

- “ Poor readers never catch up with their classmates who are good readers. If a child is dyslexic early on in school, that child will experience reading problems unless he is provided with a scientifically based, proven intervention. (pg 34)

Dr. Sally Shaywitz (2003) *Overcoming Dyslexia*

Longitudinal Study

“Data provided strong evidence that children who were poor readers in the early years remained poor readers. This is strong evidence that struggling children need help with their reading difficulties early on” (pg.34).

Shaywitz,2005

Longitudinal Study



- “About one-third of the children in the study were receiving special help, but this help was erratic, occurring sporadically and consisting of what might be described as a Band-Aid approach to a gushing wound. In general, we found that children received help for very limited periods of time, often from well meaning, but untrained teachers and with methods that did not reflect a state of the art, evidence based instructional strategies” (pg. 35).

Shaywitz,2005

What is Dyslexia Intervention?

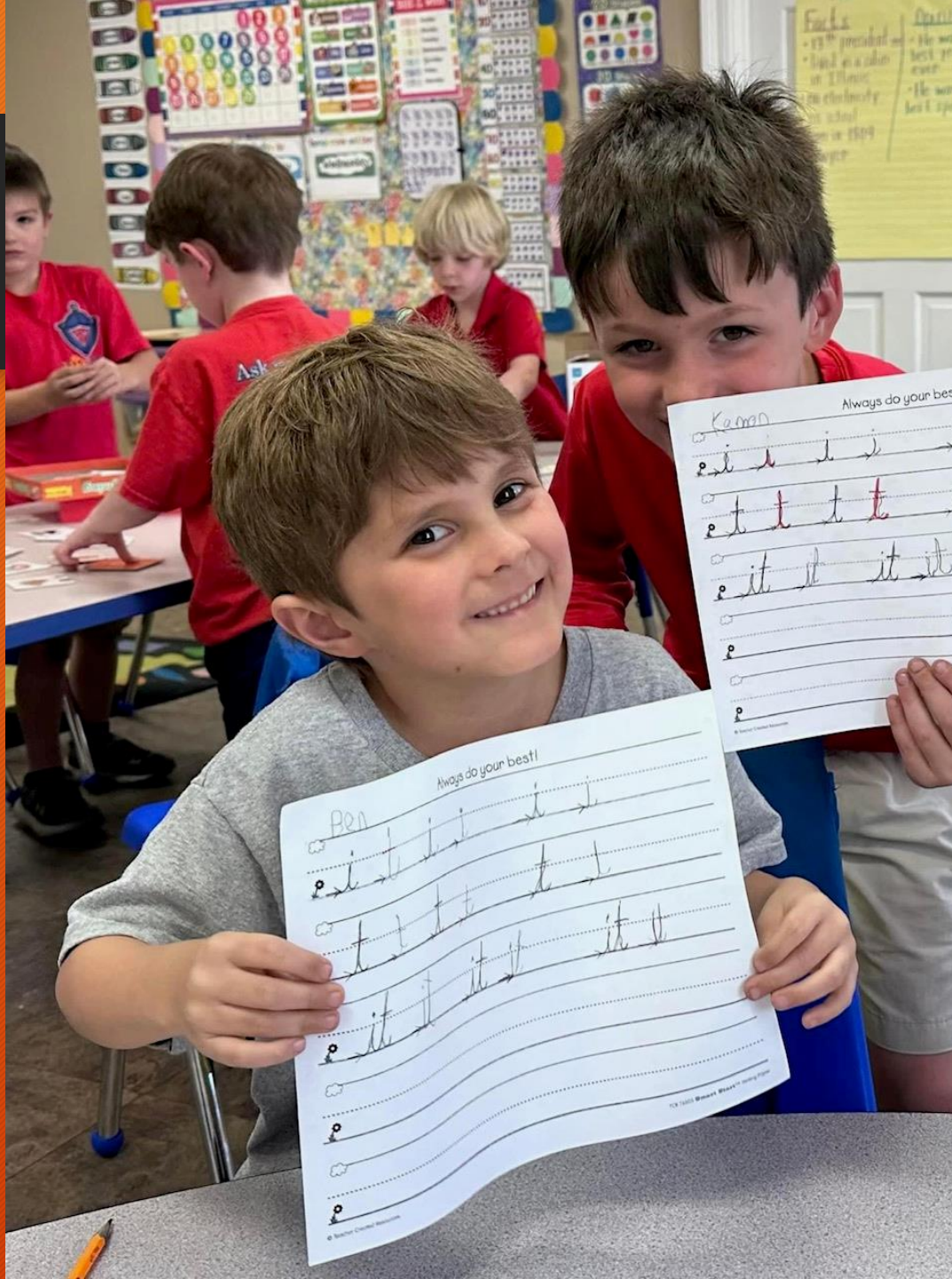
Attend Part II With Dr. Donna
George!



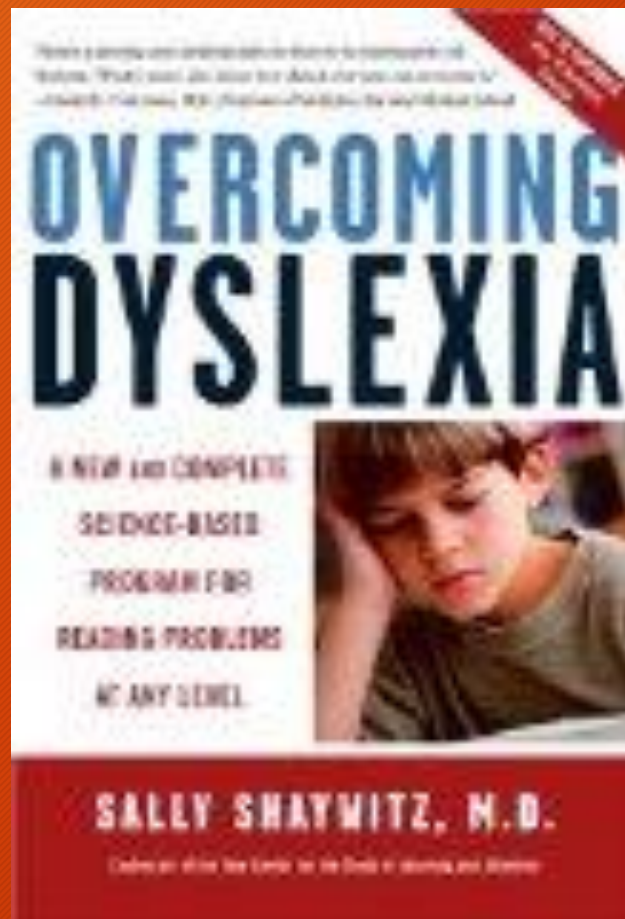
“Few would deny that teaching children to read, write, spell, listen, and speak is among the foremost responsibilities of educators”.

Louisa Moats





EDUCATE YOURSELF



Knowledge is Power!

- Seek professional help
- Diagnose the problem through evaluation
- Provide appropriate intervention for the disability





the3dschool.org
120 South George
Street, Petal
601-450-3333



The 3-D School

A Special Purpose School for Children with Dyslexia • Est. 2008

Celebrating 17 Years

Challenging Minds & Achieving Success

The 3-D School offers a full day research based academic program that is dynamically designed to meet the unique learning needs of young students with dyslexia in kindergarten – sixth grades.



Accredited: Mississippi Department of Education | Curriculum Affiliate: Neuhaus Education Center, Bellaire, TX – Science of Reading Research
| Center Curriculum Model: William Carey University Dyslexia Therapy Program | Member: Mississippi Arts Commission | Member: Petal
Chamber of Commerce | Member: Area Development Partnership (ADP) | Member: International Dyslexia Association (IDA)

References

- Birsch, J. (2005) *Multisensory Teaching of Basic Language Skills*, Brooks Publishing Co., Baltimore, Maryland.
- Moats, L., (2005) *Speech to Print; Language Essentials for Teachers*, Brooks Publishing Co., Baltimore, Maryland.
- Shaywitz, S. (2003). *Overcoming Dyslexia; a new and complete science-based program for reading problems at any level*, Random House, Inc., New York, New York.