

# READING:

**Why Johnny Can't Read**

## The Puzzle of Dyslexia



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# What Research says

- In 1994, the National Institutes of Health (NIH) released the results of their **14-year longitudinal study** and specific research projects. The research projects
  - ❑ have been independently replicated,
  - ❑ have yielded the same results, and
  - ❑ the results from these 18 university-based research centers are converging into a consistent model of dyslexia.

*Most people are unaware of these results.*



# Definition Adopted by the International Dyslexia Association and the NIH 2002

Dyslexia is a specific learning disability that is neurobiological in origin. It is characterized 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 other cognitive abilities...Secondary consequences may include problems in reading comprehension and reduced reading experience that can impede the growth of vocabulary and background knowledge. (Lyon, Shaywitz, and Shaywitz, 2003)

# The new **Dyslexia Law**...

In August 2013, Governor Christie signed into law  
Bills A3608, A3606, A3607

based upon recommendations from:

## **NJ Task Force on Reading Disabilities**

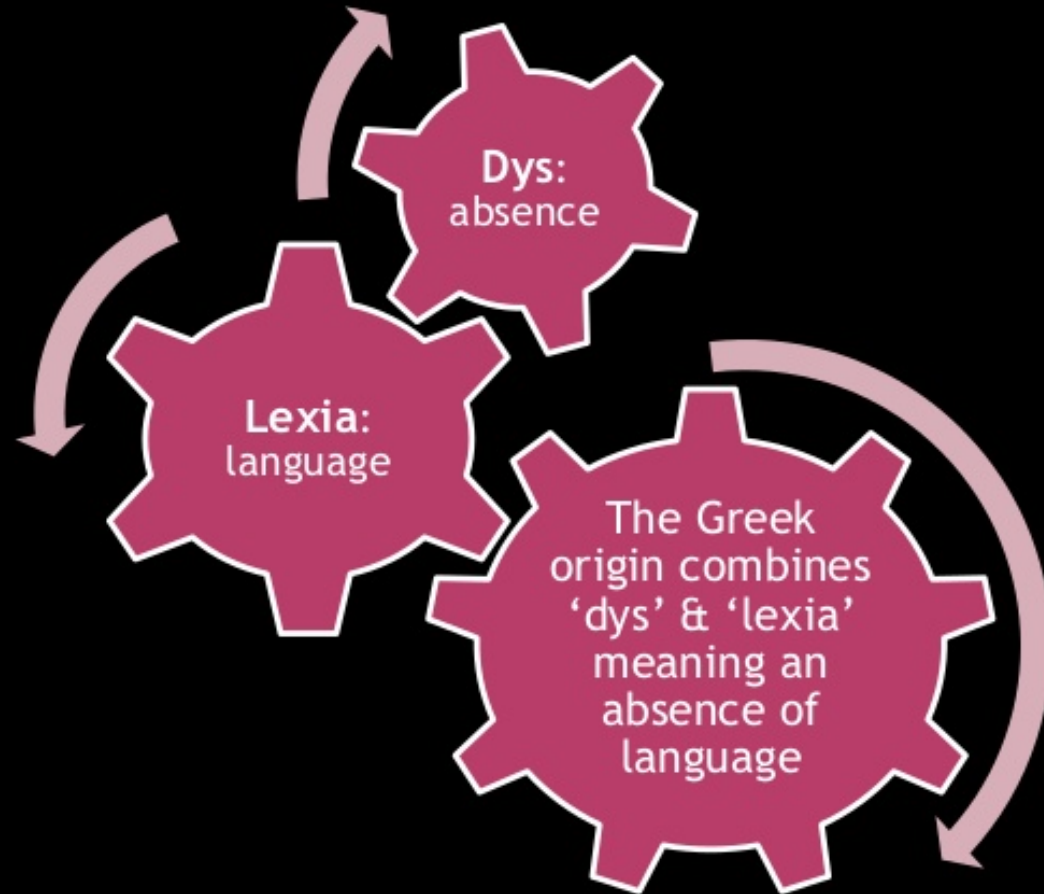
*\*\*\*The legislative goal is to improve the  
identification and remediation of reading  
disabilities\*\*\**



# Professional Development must include:

1. Screening
2. Intervention
3. Accommodation
4. Use of Technology

# MEANING OF DYSLEXIA?



# Other related disorders:

- **Dysgraphia** (*affects handwriting, motor and information processing skills*)
- **Dyscalculia** (*affects math and spatial concepts*)
- **ADHD** Attention-Deficit/Hyperactivity Disorder (*affects Attention*)
- **Dyspraxia** (*affects motor skill development*)
- **Executive Function** (*affects planning, organizing, strategizing, paying attention to and remembering details, and managing time and space*)

# Common characteristics of other related learning disorders

- **Dysgraphia** (*handwriting*)
  - Unsure of handedness
  - Poor or slow handwriting
  - Messy and unorganized papers
  - Difficulty copying
  - Poor fine motor skills
  - Difficulty remembering the kinesthetic movements to form letters correctly



# Common characteristics of other related learning disorders

- **Dyscalculia** (*math*)
  - Difficulty counting accurately
  - May misread numbers
  - Difficulty memorizing and retrieving math facts
  - Difficulty copying math problems and organizing written work
  - Many calculation errors
  - Difficulty retaining math vocabulary and concepts

# Common characteristics of other related learning disorders

- **ADHD—Attention-Deficit/Hyperactivity Disorder** (*attention*)
  - Inattention
  - Variable attention
  - Distractibility
  - Impulsivity
  - Hyperactivity

# Common characteristics of other related learning disorders

- **Dyspraxia** (*motor skills*)
  - Difficulty planning and coordinating body movements
  - Difficulty coordinating facial muscles to produce sounds

# Common characteristics of other related learning disorders

- **Executive Function** (organization and planning)
  - Loses papers
  - Poor sense of time
  - Forgets homework
  - Messy desk
  - Overwhelmed by too much input
  - Works slowly

# What it looks and sounds like

- *No two people with dyslexia are exactly alike*
- *No one has every symptom, but most have several*
- *Continuum of severity*

*Mild   Moderate   Severe   Profound*

- *Difficulty with:*
  - ❑ pronouncing words correctly (e.g., “aminal” for animal, “hangaburg” for hamburger, “Bisghetti” for spaghetti)
  - ❑ rhyming
  - ❑ coloring, writing, and tying shoes
  - ❑ learning letter names and sounds
  - ❑ separating and blending word parts orally and while reading
  - ❑ reading at a ‘normal’ pace, fluency (which impacts comprehension)
  - ❑ spelling

# Other common symptoms that occur with dyslexia:

- **Difficulty naming colors, objects, and letters rapidly, in a sequence (*rapid automatized naming*)**
- **Weak memory for lists, directions, or facts**
- **Needs to see or hear concepts many times to learn them**
- **Distracted by visual or auditory stimuli**
- **Downward trend in achievement test scores or school performance**
- **Inconsistent school work**
- **Teacher says, “If only she would try harder,” or “He’s lazy.”**
- **Relatives may have similar problems**

# A Quick Review

## LEFT BRAIN

ANALYTIC THOUGHT

LANGUAGE

SCIENCE

LOGIC

MATH



## RIGHT BRAIN

HOLISTIC THOUGHT

CREATIVITY

INTUITION

MUSIC

ART



## DYSLEXIA: A HIDDEN DISABILITY

- *Click* on the icon on the left to be directed to a short informational documentary.
- The documentary includes both adults and children with the dyslexia and the difficulties that they face.





# Experience Dyslexia



Watch video



Experience it!

misunderstood  
minds

When you see:	Pronounce as:
q	d or t
z	m
p	b
b	p
ys	er
a, as in bat	e as in pet
e, as in pet	a, as in bat

We begin our qrib eq a faziliar blace, a poqy like yours enq zine. Iq conqains a hunqraq qrillion calls qheq work qogaqhys py qasign. Enq wiqh in each one of qhese zany calls, each one qhaq hes QNA. Qhe QNA coqe is axecqly qhe saze, a zess-broqueq rasuze. So qhe coqe in each call is iqanqical, a razarkaple puq veliq claiz. Qhis zeans qheq qhe calls are nearly alike, puq noq axecqly qhe saze. Qake, for insqence, qhe calls of ghe 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.

# Dyslexia...



- Dyslexia is the most common problems affecting children and adults.
- The prevalence in the United States is estimated to be 5% to 17% of school-age children, with as many as 40% reading below grade level.
- Dyslexia (or specific reading disability) is the most common and most carefully studied of the learning disabilities, affecting at least 80% of all individuals identified as being learning disabled.
- Like hypertension and obesity, dyslexia fits a dimensional model. Within the population, reading ability and reading disability occur along a continuum, with reading disability representing the lower tail of a normal distribution of reading ability.

# Famous Dyslexics

Walt Disney



Whoopi  
Goldberg



Hans Christian Anderson



George Washington



JFK



Steven  
Spielberg



Steve Jobs



Henry Ford



Tom Cruise

# What Dyslexia isn't!

- Dyslexia is not seeing things backwards



- Dyslexia is not "mirror writing" or reversing letters and numbers



- Dyslexia is not a visual problem

# Myths about Dyslexia

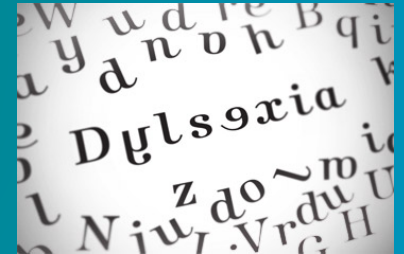


# Myths about Dyslexia

- Dyslexia cannot be diagnosed until a child is 8 to 11 years old
- If a dyslexic child doesn't read by age 12, it is too late. They won't be able to learn to read.
- Many children who experience reading and writing problems in kindergarten through third grade will outgrow those problems  
Irresponsible to wait! **Red Flag!**
- Children with dyslexia are just developmentally delayed

# Myths about Dyslexia

- Dyslexia affects four times more boys than girls
- **All** children who reverse b's and d's or p's and q's have dyslexia
- Dyslexia is rare (5% or less)
- Repeating a grade will often help children gain skills because it allows them to mature and become developmentally ready to read





# Myths about Dyslexia

- Intelligence and learning how to read are related. Therefore if someone doesn't read well, they can't be smart.
- Gifted children cannot be dyslexic or have other learning disabilities.



# Facts about Dyslexia

- Affects at least 1 out of 5 children in the United States



NIH, 1994

# Facts about Dyslexia

- Affects as many girls as boys
- Early intervention is essential



# Facts about Dyslexia

- Due to difficulty processing language



- Children are born with Dyslexia and do not outgrow it



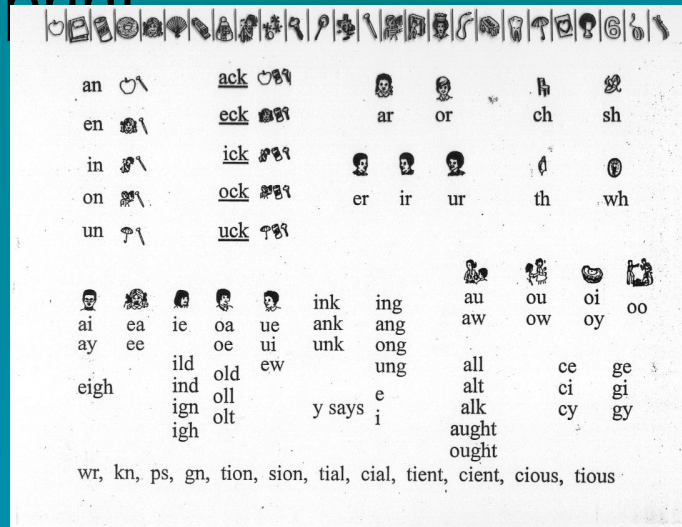
# Facts about Dyslexia

- Of children who display reading problems in first grade, 74% will be struggling readers in ninth grade and into adulthood unless they receive informed and explicit instruction in phonemic awareness



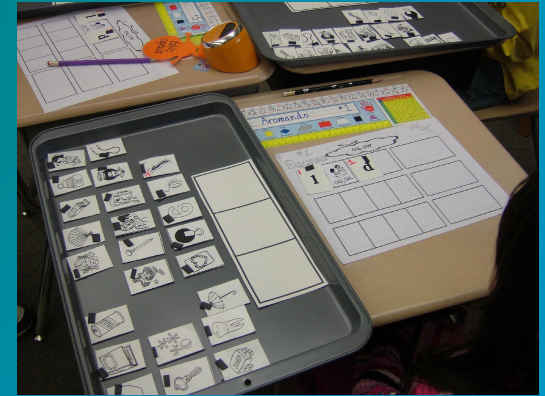
# Facts about Dyslexia

- Dyslexic readers must be provided highly structured programs that explicitly teach how to apply speech sounds to print



# Facts about Dyslexia

- Reading failure caused by dyslexia is highly preventable through *direct, explicit*, instruction in **Phonemic Awareness**



# What it is!

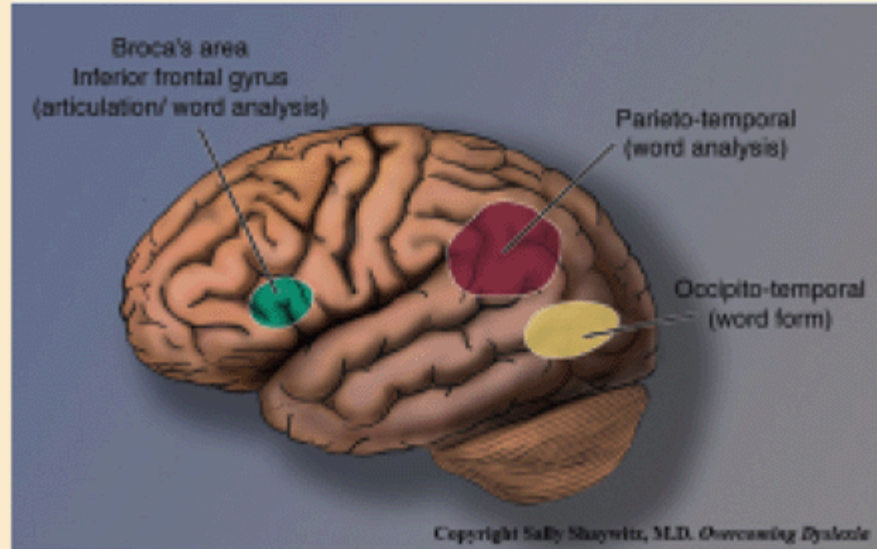
## Definition

- Dyslexia is a life-long *language processing* difficulty that is neurobiological in origin



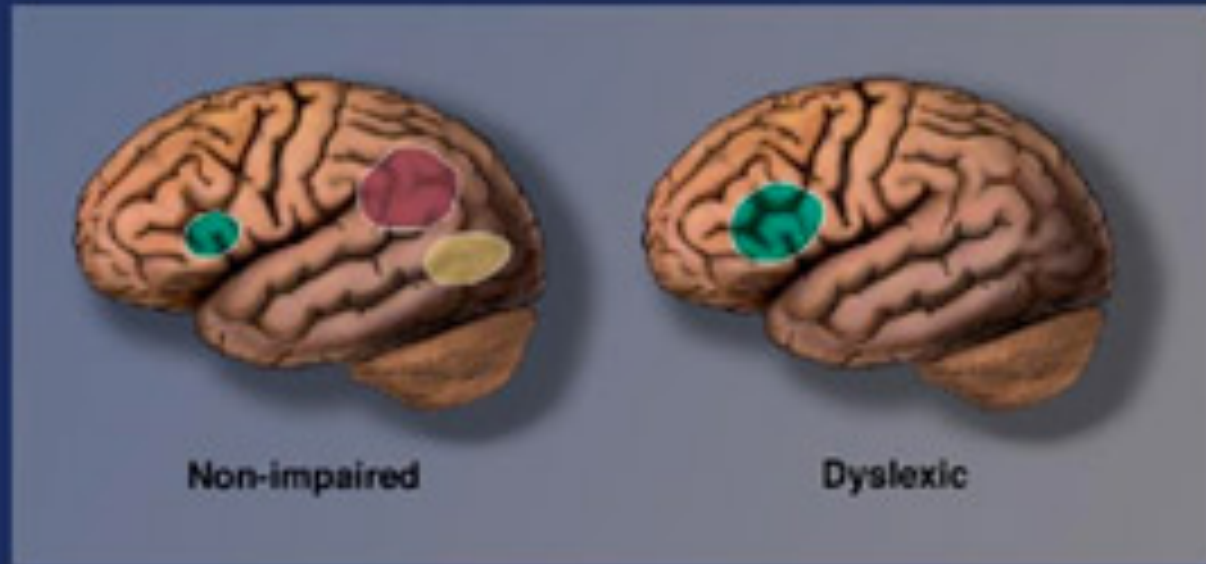


video

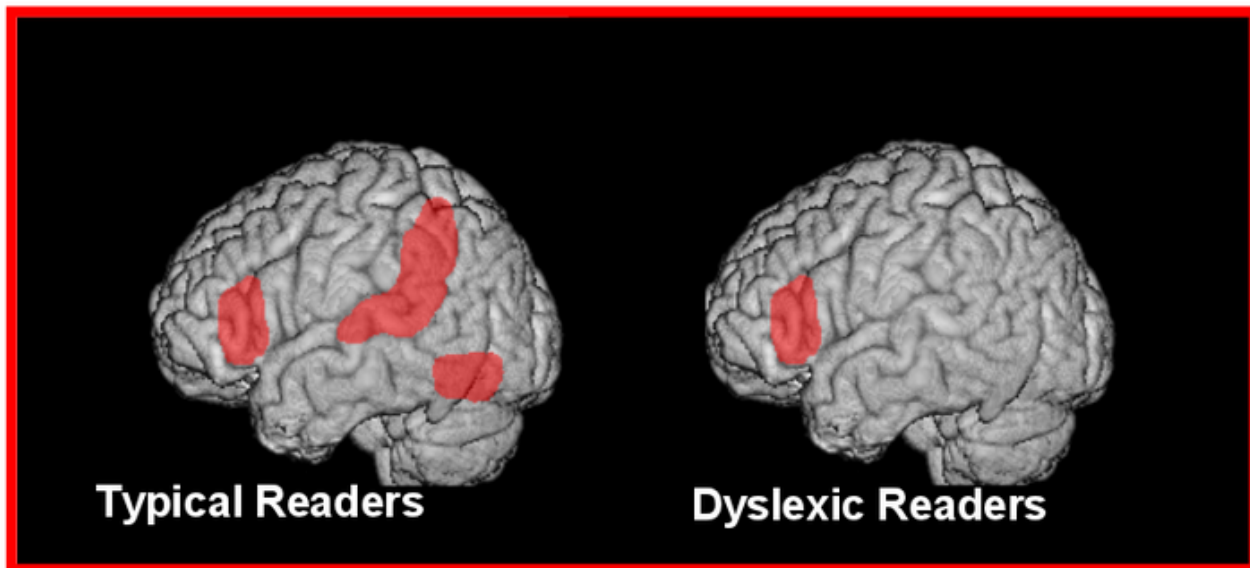


Three neural systems for reading exist in the brain's left hemisphere: an anterior system in the region of the inferior frontal gyrus (Broca's area) believed to serve articulation and word analysis; two posterior systems, one in the parieto-temporal region believed to serve word analysis, and a second in the occipito-temporal region (termed the word-form area) and believed to serve for the rapid, automatic, fluent identification of words.

# Neural Signature for Dyslexia: Disruption of Posterior Reading Systems

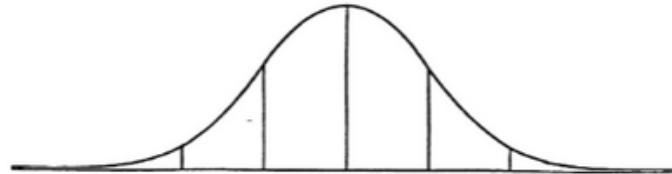


# Neurobiological Basis of Dyslexia



Eden et al., *Neuron*, 2004

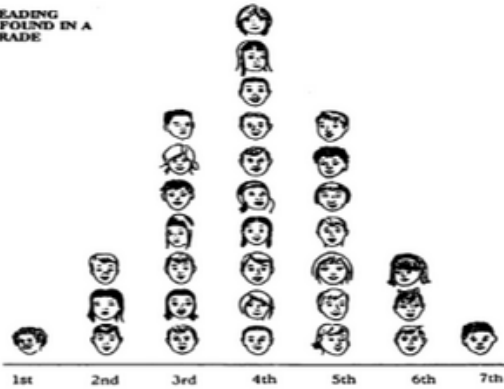
### 150. The Normal Distribution Curve



PERCENTILE	3%	16%	50%	84%	97%
READING ACHIEVEMENT NINTH GRADE	3rd	6th	9th	12th	15th
IQ	70	85	100	115	130

There is a strong but far from perfect correlation between Reading Achievement scores and IQ. In other words, on average a ninth grader with an IQ of 85 tends to read about at the sixth-grade level.

TYPICAL READING ABILITIES FOUND IN A FOURTH-GRADE CLASS

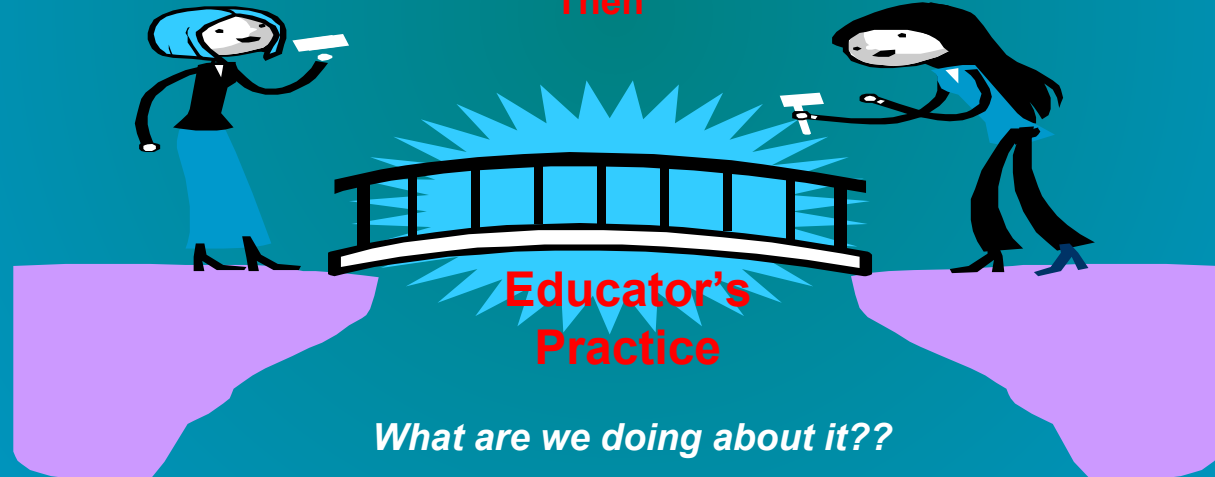


# Chasm between research and practice

Researchers'  
Findings

Knowledge/ ID of  
struggling readers

If....  
Then



# READING:

**Why Johnny Can't Read**



## The Puzzle of Dyslexia

### Dyslexia Defined

- Specific learning disability
- Neurobiological in origin
- Inaccurate or non-fluent word recognition
- Deficit in spelling and decoding abilities
- Deficit in phonological component
- Often unexpected
- Secondary consequences

# What to do about it?

TO BE CONTINUED:

In grade level break out sessions:

Grades K-2 room G&T

Grades 3-5 room 5

Grades 6-8 room 324

# Late Bloomers



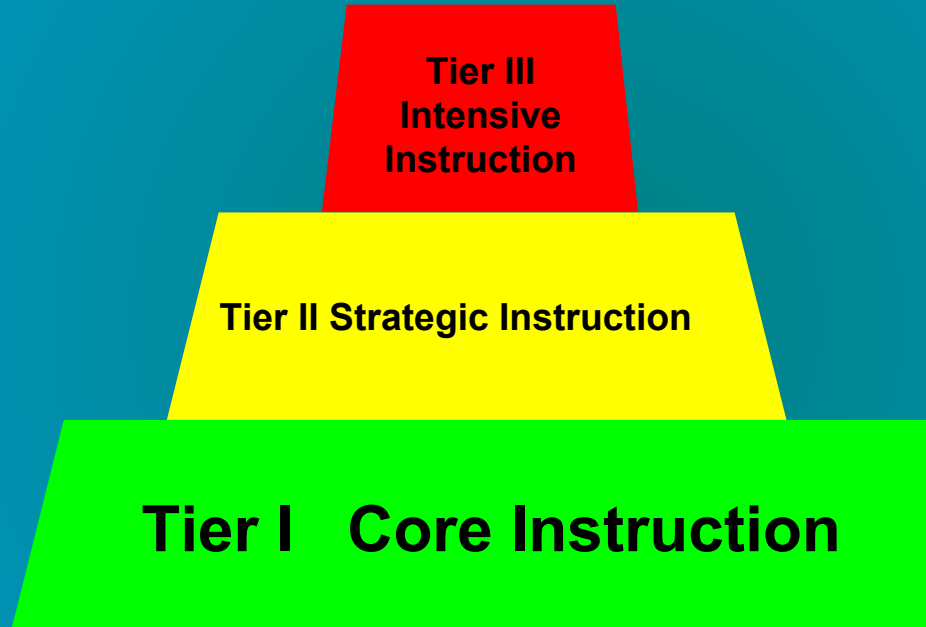
Do struggling readers catch up?

- ❑ *Late bloomers are rare*
- ❑ ***Skill weaknesses*** are almost always what prevent children from blooming as readers
- ❑ *Statistically, nearly 90% of poor readers in first grade remain poor readers*

Source: Joseph K. Torgesen, 2004



# Three Tiers of Instruction



# What to do about it

- Provide **structured, explicit, direct instruction**
- Provide **multi-sensory**, structured language instruction

✓ *See it*



✓ *Hear it*



✓ *Say it*



✓ *Touch it*



# What to do about it

- ***Greater intensity of instruction***  
Explicit, systematic, direct with scaffolded support
- ***Increased frequency and duration of instruction***  
Follow program sequence with integrity
- ***Research-based instruction in the five components of reading (phonemic awareness, phonics, fluency, vocabulary, comprehension), as well as writing, and spelling***



# Five Critical Components of Reading

1. Phonemic Awareness
2. Phonics
3. Fluency
4. Vocabulary
5. Comprehension

Each is necessary, but none is sufficient by itself to learn to read.

# Phonemic Awareness is...

The ability to recognize and manipulate phonemes (sounds) in spoken words by orally blending, segmenting, adding, and deleting them.

*Research-Based Methods of Reading Instruction: Grades K-3*

*~ Sharon Vaughn*

*and Sylvia Linan-Thompson*

# Phonemic “Phacts”

- It is a more highly related to learning to read (decode) than general intelligence, reading readiness, or listening comprehension.
- It is a necessary, but not sufficient condition for learning to read.
- It can be directly taught.

# Phonemic “Phacts”

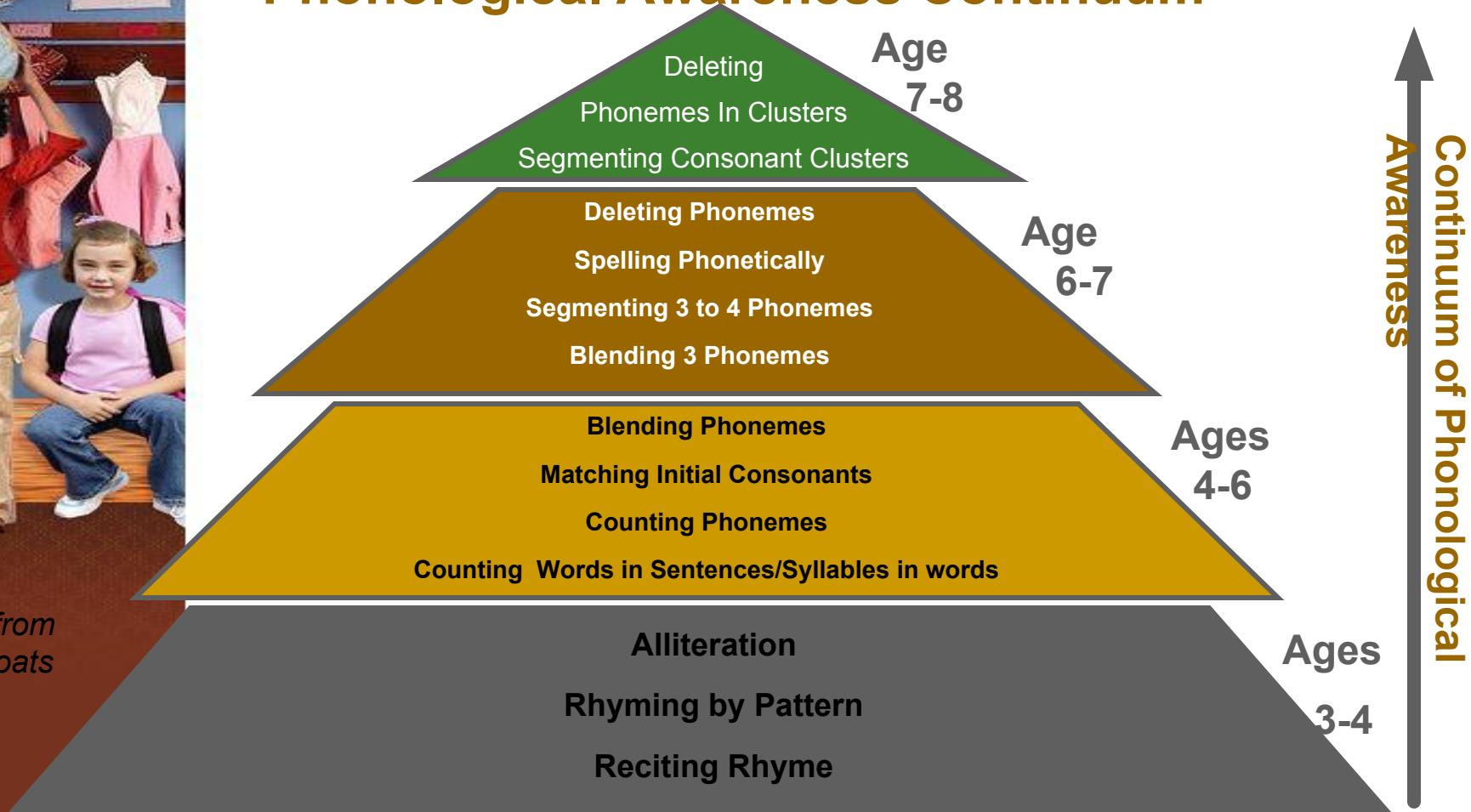
How important is it?

- *It is the single most powerful predictor of reading success*
- *It is the most important core and causal factor separating normal and disabled readers*
- *It is equally important to learning to spell*

# Phonological Awareness Continuum



*Adapted from  
Louisa Moats*

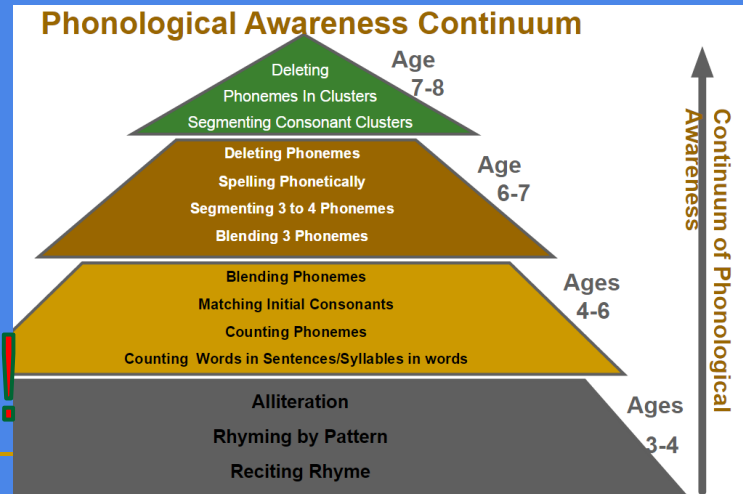




# Intervention Strategies

## *Teacher Interview for Students At-risk for Dyslexia Screening checklist:*

- Look at the checklist traits under number 2 and 3
- How does do the instructional practices that we use and the Action Reading exercises (when taught with integrity) provide intervention for children who are at risk?



**Action Reading Works!**

# Making Words with Large Action Reading Cards



**Grades K-2**  
**“chunks” or**  
**vowel patterns**  
**are practiced**  
**daily.**

# Elkonin Box



Students are taught  
to isolate sounds  
and build words



# Gradual Release Instructional Practices



From Phonological  
(concrete)  
To Phonics  
(print)

# Phonemic Awareness

... Impacts decoding and encoding with phonics

- *It allows readers to map speech to print*
- *“It is the Velcro on the brain that makes the phonics stick”*

# Pronouncing/Spelling Confusing English Sounds

*The van kept us gool in the heat.*

*The fan kept us cool in the heat.*

*The toc was going town the steb.*

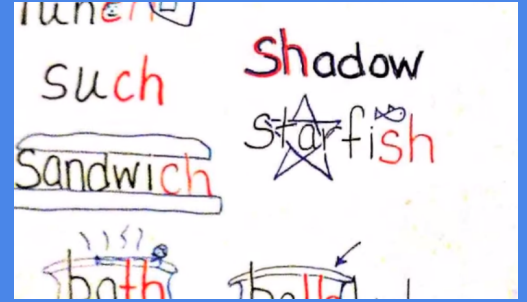
*The dog was going down the step.*

*I will infite you to my bardy.*

*I will invite you to my party.*

Confusing sounds for readers/spellers  
with underdeveloped phonemic awareness

# Other Confusing English Sound/Spellings



/ch/ — /j/

/dr/ — /jr/

/tr/ — /chr/

Confusing sounds for readers/spellers  
with underdeveloped phonemic awareness

## ***Omitting preconsonantal nasal sounds***

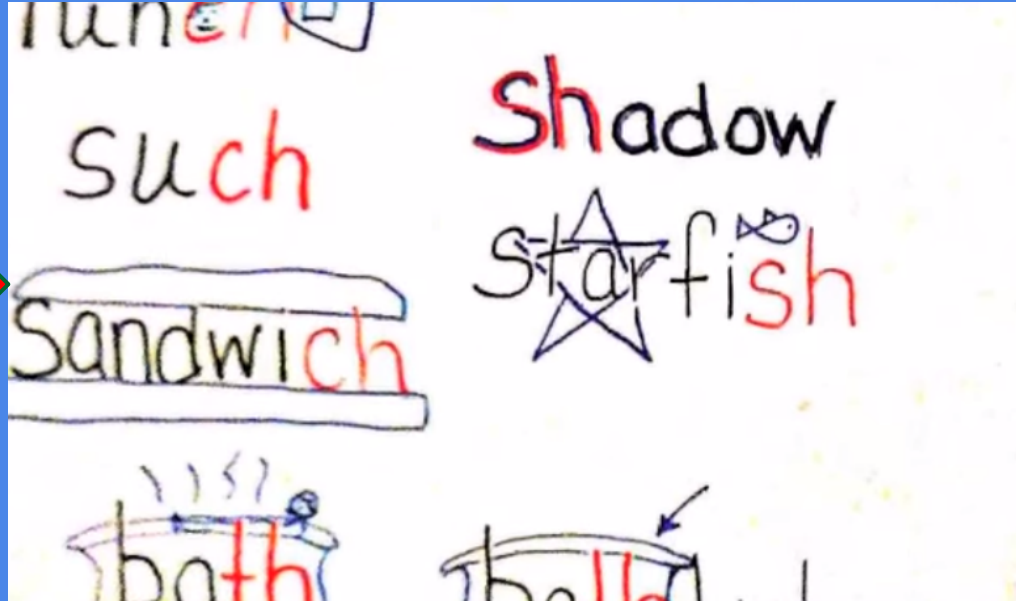
*(nasal sounds that occur before a consonant that usually ends of a syllable)*

Jump \_\_\_\_\_ Jup

Stomp \_\_\_\_\_ Stop

\_\_\_\_\_

# How to teach and practice spelling





# Fluency

The Bridge from Phonics to  
Comprehension:  
Three Components of Fluency

1. Accuracy in word recognition  
(word decoding)
2. Automaticity in word  
recognition
3. Interpretive and meaningful  
reading

## A Model of Reading Instruction

*Accurate Word Knowledge*  
(Phonics, Spelling, Vocabulary)

*Fluency*

*Automaticity in Word Recognition*  
(decoding and meaning)

*Prosody*

*Surface level*  
*Deep level*

---

*Comprehension*

# Two major components of reading fluency

## Automaticity

Once students achieve automaticity, they are able to focus on comprehending text rather than trying to decode words. It's difficult to remember what you've read and to relate the ideas to your own background knowledge if the act of reading itself is laborious.

## Prosody

Prosody is comprised of features such as pitch, tone, expression, stress, and rhythm. This component is what brings joy to reading aloud: It includes using different voices for different characters, whispering scary stories, emphasizing groups of funny words, and creating moods with tone and cadence. Reading with expression brings texts to life because these texts begin to sound more like natural speech or storytelling. Students who read with prosody are motivated to read more often and enjoy reading aloud. As a result, these students increase their fluency.

# Lets eat Grandma



# Components of Effective Fluency Instruction

- Accuracy in Word Recognition
- Model Fluent Expressive Oral Reading for Students
- Repeated (Practiced) Reading of Authentic Texts
- Performance – Poetry, Scripts (Readers Theater), etc.
- Assisted (Scaffolded) Reading
- Focus on Phrased Reading
- Be Sensitive to Text Difficulty.
- Create Synergistic Instructional Reading



improving  
fluency in  
young readers  
resources

## Fluency Impacts Comprehension

# Listening to Reading



## Interventions

- Books on tape
- Read Aloud
- Choral Reading
- Listening to ebooks (Razkids, Stories online, etc.)
- Echo Reading
- I read, we read, you read

# WPM with percentile

More detail allows for progress monitoring and data collection for I&RS

Grade	Percentile	Fall WCPM*	Winter WCPM*	Spring WCPM*	Avg. Weekly Improvement**
1	90		81	111	1.9
	75		47	82	2.2
	50		23	53	1.9
	25		12	28	1.0
	10		6	15	0.6
2	90	106	125	142	1.1
	75	79	100	117	1.2
	50	51	72	89	1.2
	25	25	42	61	1.1
	10	11	18	31	0.6

\*WCPM = Words Correct Per Minute

www.read

Grade	Percentile	Fall WCPM*	Winter WCPM*	Spring WCPM*	Avg. Weekly Improvement**
3	90	128	146	162	1.1
	75	99	120	137	1.2
	50	71	92	107	1.1
	25	44	62	78	1.1
	10	21	36	48	0.8
4	90	145	166	180	1.1
	75	119	139	152	1.0
	50	94	112	123	0.9
	25	68	87	98	0.9
	10	45	61	72	0.8
5	90	166	182	194	0.9
	75	139	156	168	0.9
	50	110	127	139	0.9
	25	85	99	109	0.8
	10	61	74	83	0.7
6	90	177	195	204	0.8
	75	153	167	177	0.8
	50	127	140	150	0.7
	25	98	111	122	0.8
	10	68	82	93	0.8
7	90	180	192	202	0.7
	75	156	165	177	0.7
	50	128	136	150	0.7
	25	102	109	123	0.7
	10	79	88	98	0.6
8	90	185	199	199	0.4
	75	161	173	177	0.5
	50	133	146	151	0.6
	25	106	115	124	0.6
	10	77	84	97	0.6

\*\*Average words per week growth

# Passages for Promoting Fluency

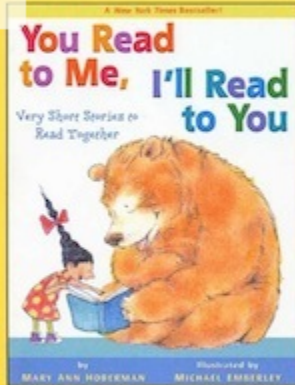
click here



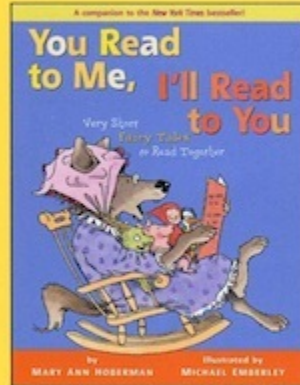
# You Read to Me, I'll Read to You

Read all the books in the award-winning series!

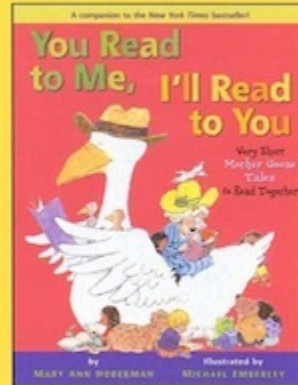
PREV



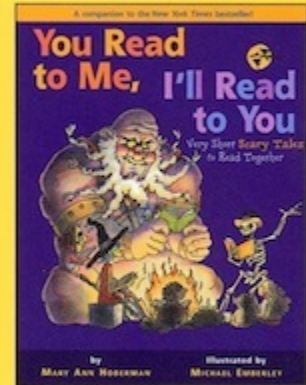
Short Stories



Fairy Tales



Mother Goose Tales



Scary Tales

CLOSEX

# Let's Try it!



## The Hare and the Tortoise

I'm a tortoise.

I'm a hare.  
You're a slowpoke.

I don't care.

You don't care  
That you are slow?

I get where  
I want to go.

I get places  
Really fast.

If we raced,  
You'd come in last.

Come in last?  
I'd lose to you?  
That is silly!

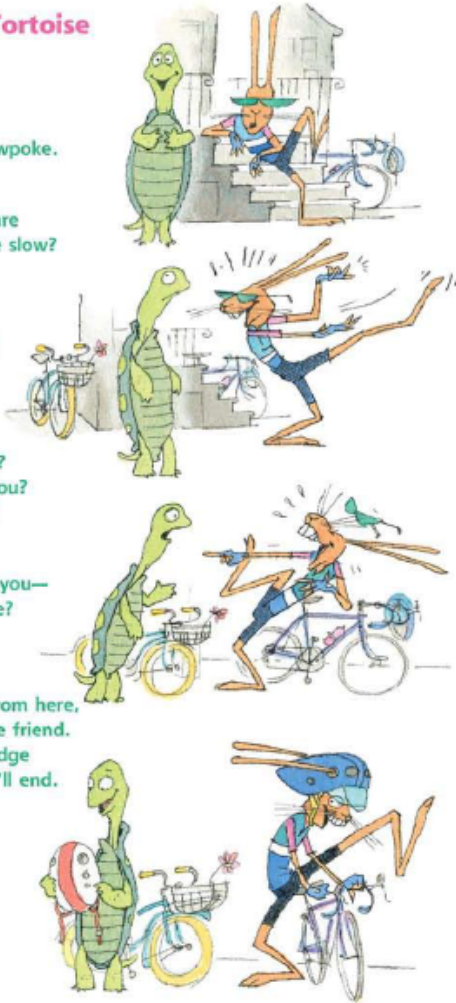
But it's true.

Well, I dare you—  
Shall we race?

Fine with me.  
You choose the place.

We'll start from here,  
My slowpoke friend.  
The river bridge  
Is where we'll end.

That's fine with me,  
My haughty hare.  
When you arrive,  
You'll find me there.



Off I go—  
Just watch my speed!  
I must be miles  
Into the lead!

One foot, two feet,  
Three feet, four—  
Keep on going—  
Not much more.

Tortoise is  
So slow a chap.  
I'll just take  
A little nap.

Look at Hare—  
He's fast asleep!  
I'll slip by  
Without a peep.

Oh, dear, I fear  
That something's wrong!  
I bet I slept  
A bit too long.

Here comes Hare!  
He's drawing near,  
But I don't care  
Since I am here.

How can this be?  
It can't be true!  
I am much speedier  
Than you!

I know you are,  
My silly friend;  
But still I beat you  
In the end!

**Moral: Just keep up an even pace.  
Slow and steady wins the race.**



# Constructing Meaning from Text

## A Model of Reading Instruction

*Accurate Word Knowledge*  
(Phonics, Spelling, Vocabulary)

*Fluency*

Automaticity in Word Recognition  
(decoding and meaning)

Prosody

*Surface level*  
*Deep level*

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*Comprehension*

Reading is all  
about ...  
the meaning

# Reading Comprehension

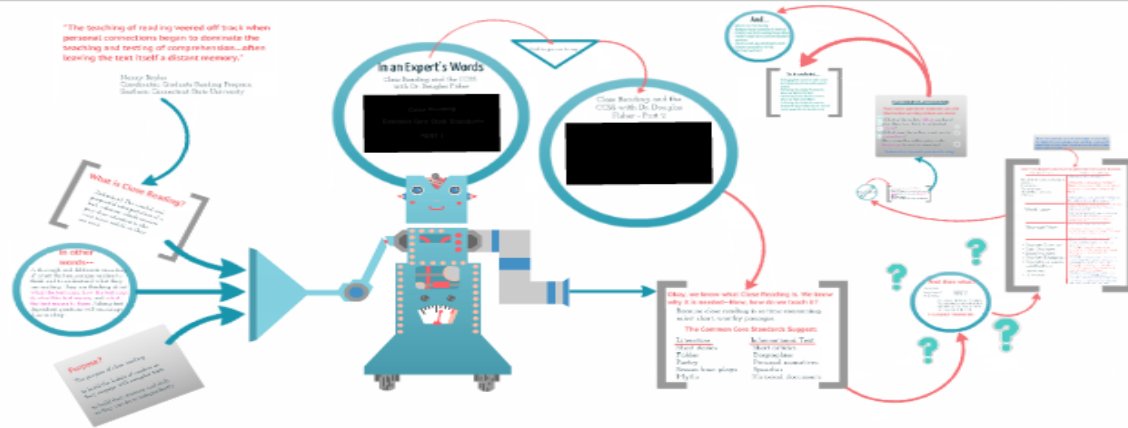


FAT City Series  
Dr. Richard  
Lavoie, Educator

Now for a little fun.....



# WHAT IS CLOSE READING?



## Close Reading and The Common Core

What is it?  
Why do we need to do it?  
How do we teach it?

**CLICK TO WATCH  
PREZI**

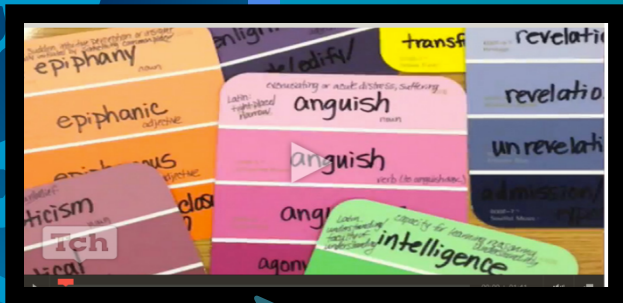


# VOCABULARY INSTRUCTION

6-8

vocabulary  
MEANING  
comprehension  
COMPREHENSION  
meaning  
WORDS  
Words  
words

VOCABULARY  
Comprehension  
Vocabulary  
Meaning



Click on each to link to website or video



# VOCABULARY INSTRUCTION



**V**OCABULARY.CO.IL  
Vocabulary Can Be Fun!

K-5


The New York Times  
Sunday, February 10, 2013

## Education

WORLD U.S. N.Y. / REGION BUSINESS TECHNOLOGY SCIENCE HEALTH SPORTS OPINION  
POLITICS EDUCATION TEXAS

### The Learning Network

Teaching & Learning With The New York Times



WORD OF THE DAY  
A daily word, its definition, and an example of its usage in a recent Times article.

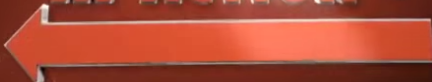
3-8

6-8



Teaching Channel

WORD STUDY  
IN ACTION



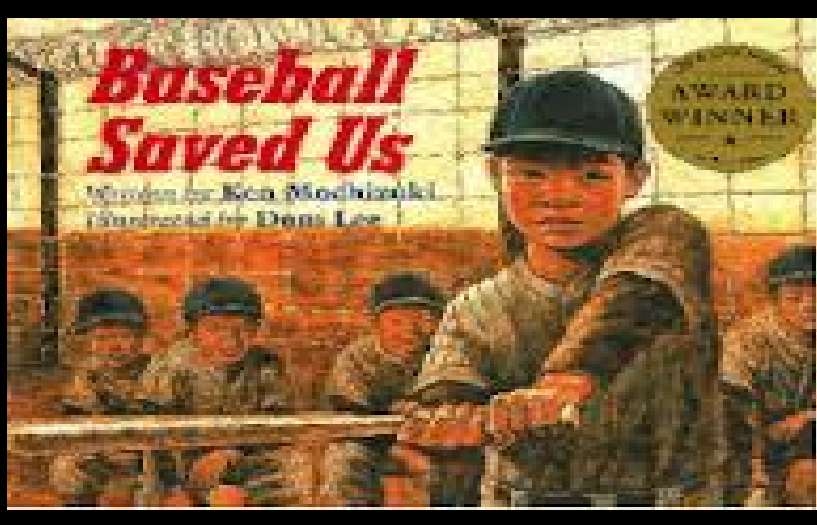
Click each link!



READING WITH A  
**PENCIL**  
 HELPS STUDENTS  
 GO BACK INTO  
 THE TEXT  
 OVER & OVER  
 TO GET A STRONG SENSE  
 OF WHAT THE **AUTHOR**  
 IS TRYING TO SAY

## NARROWING WHILE ANNOTATING TEXT

...SOMEBODY.. WANTED.. BUT.. SO.. THEN



Baseball Saved Us

I wonder how baseball saved these people ("us")

I wonder if it's a boy or girl speaking

dry flat land

why is this capital? it must be a special place

One day, my dad looked out at the endless desert and decided then and there to build a baseball field.

He said people needed something to do in Camp. We weren't in a camp that was fun, like summer camp. Ours was in the middle of nowhere, and were behind a barbed wire fence. Soldiers with guns made sure we stayed there, and the man in the tower saw everything we did, no matter where we were.

As Dad began walking over dry, cracked dirt, I asked him again why we were here.

keelshe feels it's unfair

dad sounds frustrated too

during a war

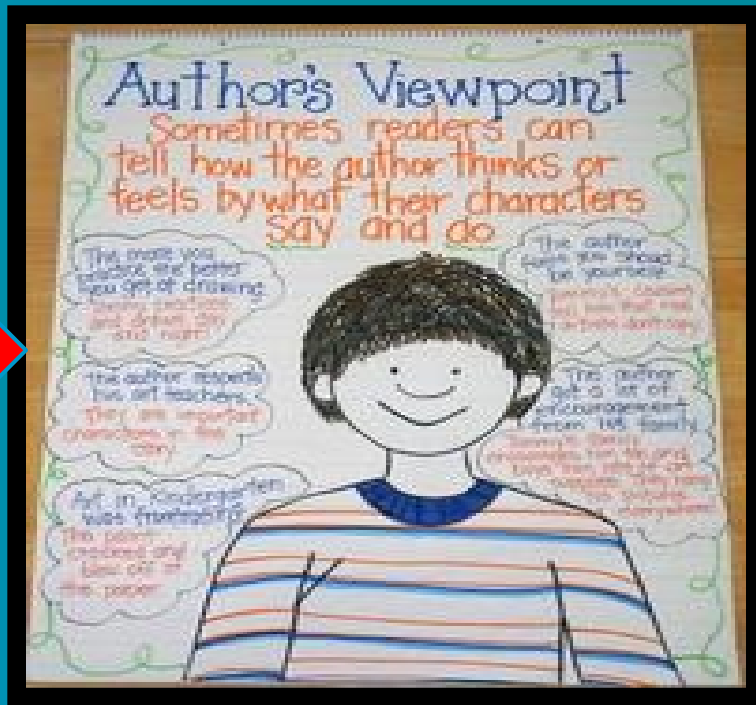
"Because," he said, "America is at war with Japan, and the government thinks that Japanese Americans can't be trusted. But it's wrong that we're in here. We're Americans too!" Then he made a mark in the dirt and mumbled something about where the infield bases should be.

Japanese people must have been in some kind of Prison when Japan was at war with America.

I wonder what the importance of the baseball field is. Maybe it will be the only good thing there.

# AUTHOR'S PERSPECTIVE

video



# HOW CAN YOU SUPPORT COMPREHENSION

## Strategy

### Determining Importance

- Gradual Release from concrete to text
- Mini lessons with anchor charts
- Conventions, text, features, captions
- Use common text and closely read modeling how you determine importance and main idea

## Intervention

How can you help students figure out what is really important?

- What is repeated over and over: (Again and Again)
- Circle the words most often seen
- This is mostly about \_\_\_\_\_.
- Collect three to five details, go back to text
- So now I know the main idea is \_\_\_\_\_.

# Good Websites

- The International Dyslexia Association
  - <http://www.interdys.org/>
- Dyslexia Parents Resource
  - <http://www.dyslexia-parent.com/>
- Learning Disabilities Association of America
  - <http://www.ldanatl.org/>
- Bright Solutions for Dyslexia
  - <http://www.dys-add.com/>
- Jennifer Slaight Certified Dyslexia Specialist
  - <http://www.dyslexiacoachnj.com/>
- Timothy Rasinski, Ph. D.
  - <http://www.timrasinski.com/?page=presentations>

# Articles Worth Reading

- Preventing Early Reading Failure
  - [http://www.aft.org/pubs-reports/american\\_educator/issues/fall04/reading.htm](http://www.aft.org/pubs-reports/american_educator/issues/fall04/reading.htm)
- Waiting Rarely Works: “Late Bloomers” Usually Just Wilt
  - [http://www.aft.org/pubs-reports/american\\_educator/issues/fall04/latebloomers.htm](http://www.aft.org/pubs-reports/american_educator/issues/fall04/latebloomers.htm)

# F.A.T City videos

## Experiencing a learning disability

<https://www.youtube.com/watch?v=P8qoIBu44k> Reading comprehension

<https://www.youtube.com/watch?v=CJQAFPG25hY> Reading Decoding

<https://www.youtube.com/watch?v=XjTLeYJCCHM> Fairness

<https://www.youtube.com/watch?v=dnkDxk3ZWDM> commentary

<https://www.youtube.com/watch?v=8vTPW8kHI7w> Auditory and Visual

**Tch**

Teaching Channel

Click

## The Wraparound Learning Experience

Grade 2, ELA, Jim Knight

Common Core Standards: [ELA.RL.2.2](#) [ELA.RL.2.3](#) [ELA.RL.2.7](#)

