



Dyslexia: What to Watch for and How to Help

Wisconsin Literacy, Inc.

February 3, 2020

Presenter



Kelly Kuenzie

Center Director

Children's Dyslexia Center-
Madison

Polls

What is your role with your literacy organization?

Indicate your training background.





Children's Dyslexia Center-Madison

Madisoncdc.org

Center Director-Kelly Kuenzie

February 2020

OUR MISSION

- Provide free, high quality multisensory reading and written language tutoring to children 7-18
- Promote and encourage the education of professionals
- Train and certify professionals in our IMSLEC-accredited courses
- Raise public awareness of Dyslexia

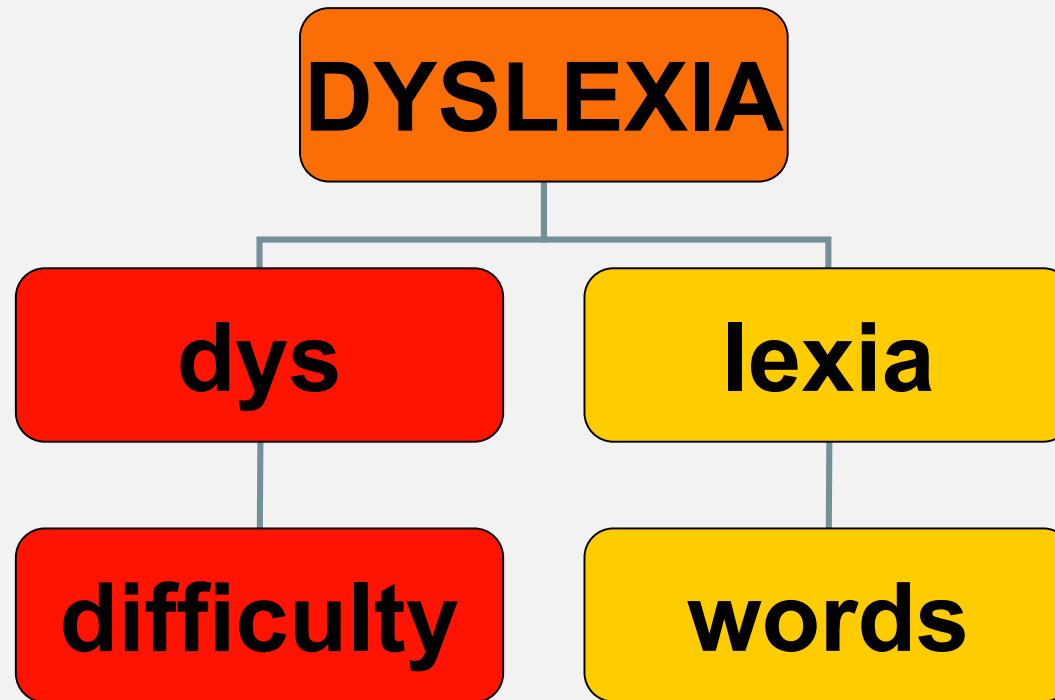


What is dyslexia?

How can you identify adult learners with dyslexia and what are some of their common traits?

What does effective reading instruction for adult learners with dyslexia look like?

WHAT DOES IT MEAN?



“Dyslexia is a **specific learning disability**...”

- one specific **type** of learning disability
- *may exist along with other conditions*
- not synonymous with the broad term learning disability
(eligibility category for special ed)

Federal Disability Definitions

Title 34: Education, Sec. 300.8

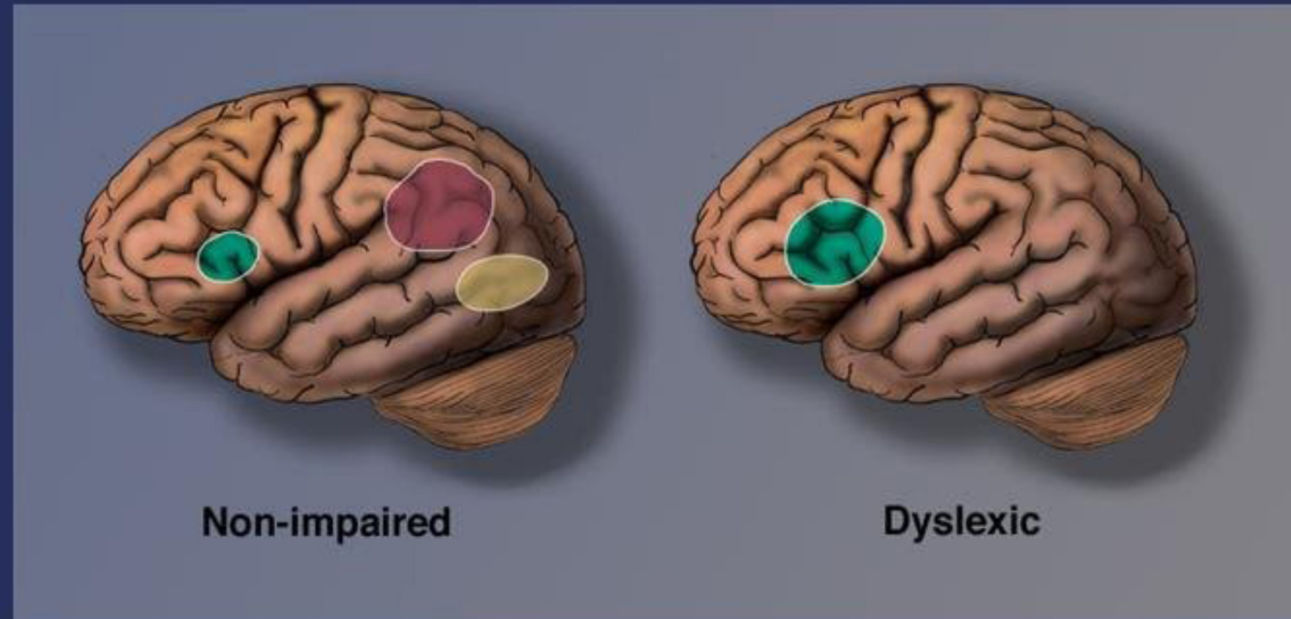
Specific Learning Disability

In General - The term "specific learning disability" indicates a disorder in one or more of the basic psychological processes involved in understanding or in using language, **spoken or written**, that may manifest itself in the imperfect ability to listen, think, speak, **read, write, spell**, or to do mathematical calculations.

Disorders Included - Such term includes such conditions as perceptual disabilities, brain injury, minimal brain dysfunction, **dyslexia**, and developmental aphasia.

“...**NEUROBIOLOGICAL** IN ORIGIN”

Neural Signature for Dyslexia: Disruption of Posterior Reading Systems



“...unexpected in relation to other **cognitive abilities and the provision of effective classroom instruction”**

not predicted by

- *age*
- *cognitive ability*
- *other academic strengths*

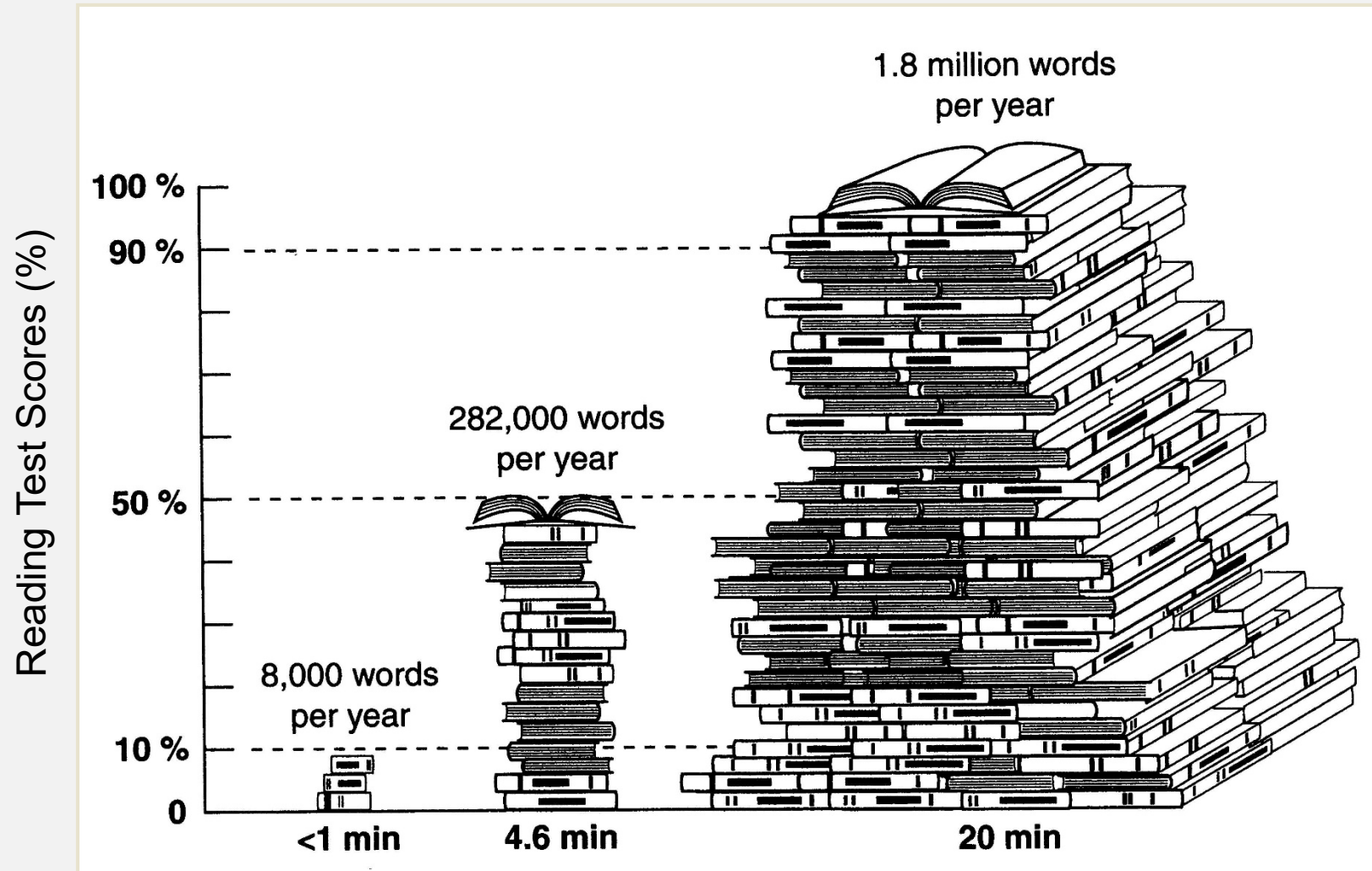
**IT IS CHARACTERIZED BY DIFFICULTIES WITH
ACCURATE AND/OR FLUENT WORD
RECOGNITION, POOR SPELLING ABILITY, AND
POOR DECODING ABILITY.**

- Word recognition: here/her from/form to/of
- Decoding nonsense words: tasp fibe dard
- Fluent reading: labored, choppy
- Spelling: frequent misspellings

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

Recognizes struggling readers

- read less
- practice less
- learn fewer vocabulary words



Time spent reading each day

Overcoming Dyslexia, 2003, Sally Shaywitz, pg. 107

COMMON SIGNS OF DYSLEXIA HIGH SCHOOL & ADULT

- ✓ **AVOIDS READING** BOOKS INDEPENDENTLY
- ✓ CONTINUES TO **SPELL** INCORRECTLY
- ✓ **AVOIDS WRITING** WHENEVER POSSIBLE
- ✓ FINDS UNIQUE WAYS TO COPE WITH **READING & WRITING** TASKS
- ✓ **GUESSES** WHEN READING WORDS IN ISOLATION
- ✓ **HAS DIFFICULTY SEQUENCING** OR ALPHABETIZING.
- ✓ LACKS AWARENESS OF **SOUND TO SYMBOL** RELATIONSHIP OR SPELLING PATTERNS

Adapted from: Bridges to Reading, Parents' Education Resource Center

CLUES AN ADULT LEARNER HAS DYSLEXIA

- ✓ **Anxiety** when in a school setting or reading aloud
- ✓ Persistent anxiety and **depression**
- ✓ Volatile or **avoidance** behavior
- ✓ Unstable work history
- ✓ Tires quickly when doing academic work.
- ✓ Takes much longer to take exams, fill out forms, follow directions.

Common Positive Characteristics of People with Dyslexia

“Unexpected weakness in a sea of strength”

- 😊 Musical Ability
- 😊 Artistic Ability
- 😊 Visual-Spatial Orientation
- 😊 Mechanical Ability
- 😊 Athletics
- 😊 Creative Problem Solving

PEOPLE WITH DYSLEXIA

Galileo Galilei

Leonardo DaVinci

Thomas Jefferson

John F. Kennedy

Bobby Kennedy

George Washington

Woodrow Wilson

Alexander Graham Bell

Hans Christian Andersen

Charles M. Schulz

William Butler Yeats

Agatha Christie

John Lennon

Nikola Tesla

Lewis Carol

Pierre Curie

Walt Disney

Thomas Edison

Henry Ford

Babe Ruth

Steven McQueen

Pablo Picasso

“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.”

Sir Winston Churchill

“The looks, the stares,
the giggles... I wanted to
show everybody that I
could **do better** and also
that **I could read.**”

Magic Johnson

“Somebody asked me if I
could go back and start again
with a different brain, would I.

Years ago I thought yes, I would, but now
I know I wouldn't. Because whatever challenges I
had in school, I guess they forced me to where I
am today. So I now see them as **an asset.**

Henry Winkler

WHY DIAGNOSE DYSLEXIA?

- 15-20% of the population has dyslexia according to the NIH
- Properly identifying helps determine the appropriate instructional approach to be used.
- Qualify for accommodations and services
- 48% of incarcerated adults have dyslexia (Texas research)

DIAGNOSTIC OPTIONS

- Online informal screening- free but will not provide documentation for accommodations.
dyslexiaida.org
- Ask general practitioner for a referral to a psychologist
- A battery of tests are required for a proper diagnosis. IQ requirements have recently changed
 - Doctor's background and experience may affect their choice of standardized tests and interpretation
- Private Diagnostic- most thorough and most expensive.
- UW Educational sciences, Educational and Psychology training center diagnosis for UW students and children.
- Non-profits such Sonas Behavioral Health, who specialize in counseling and diagnosing adults.

HELPFUL DOCUMENTATION IF LEARNER IS GOING IN TO BE DIAGNOSED

Language learner can offer any documentation to the diagnostician. A signed release of information form would be needed otherwise. Adults must agree to share information.

1. Keep written work
2. Document persistent dyslexia clues and avoidance behaviors.
3. Document family history of learning disabilities

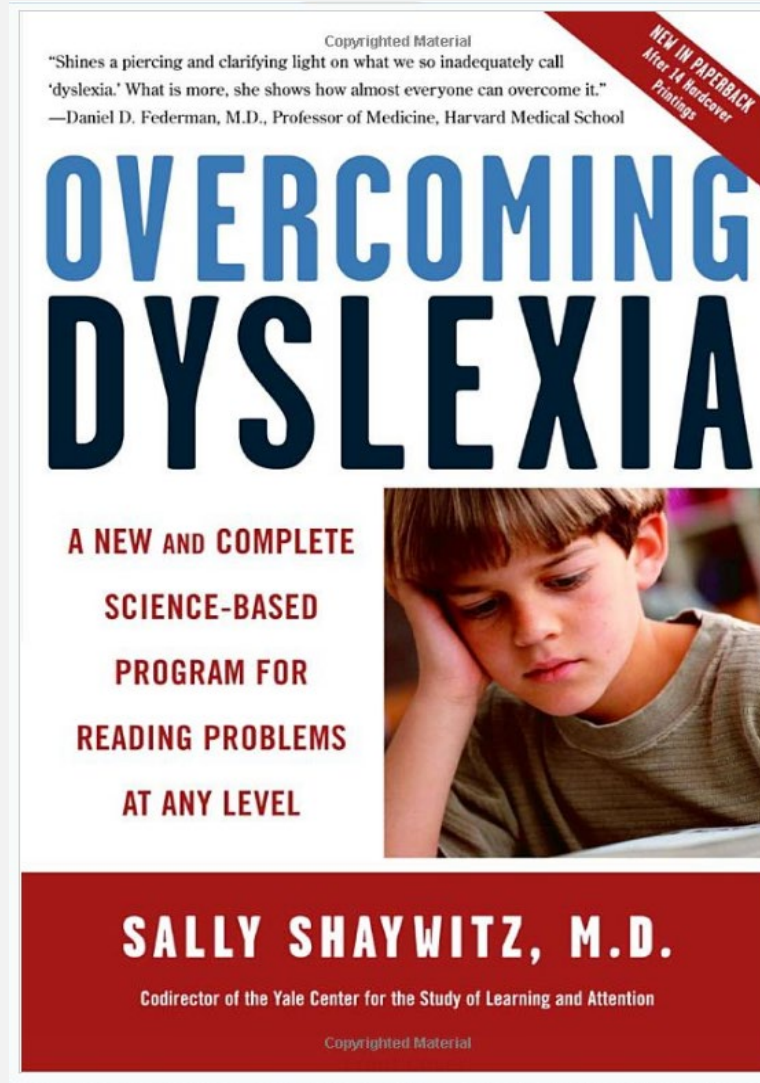
IF YOU HAVE DOCUMENT DISABILITY YOU HAVE
LEGAL RIGHT TO REASONABLE ACCOMMODATIONS
IN YOUR PLACE OF EMPLOYMENT

- “The Americans with Disabilities Act (ADA) prohibits employment discrimination on the basis of workers’ disabilities. The ADA also requires employers to provide reasonable accommodations -- changes to the workplace or job -- to allow employees with disabilities to do their jobs. (For more information on the ADA, see [Disability Discrimination in the Workplace: The ADA](#) and [ADA Amendments: More Protections Against Disability Discrimination](#).)”

Source: <https://www.nolo.com/legal-encyclopedia/free-books/employee-rights-book/chapter7-8.html>

WHAT IS A REASONABLE ACCOMMODATION?

- making existing facilities usable by disabled employees—for example, by modifying the height of desks and equipment, installing computer screen magnifiers, or installing telecommunications for the deaf
- modifying exams and training material—for example, allowing more time for taking an exam, or allowing it to be taken orally instead of in writing
- providing speech to text and text to speech applications. Note taker in classes or meetings.
- scheduled breaks
- hiring readers or interpreters to assist



Dyslexia is not curable but can be overcome successfully.

Requires specialized instruction and intervention

Dyslexics need to be taught to read in a different way

Effective Instruction

READING IS AN ACQUIRED SKILL

- **The brain is hard-wired for speaking and listening**
- **The brain is not hard-wired for reading and spelling/writing**
- Reading is not a natural process and is not a result of simple exposure to text, language or words.
- The process of learning to read rewrites the organization of the brain.
- The structure and transparency of the language interacts with the brain's ability to learn to recognize words automatically. English is complex and not transparent.
- Reading instruction is always brain based – the development of reading proficiency is determined by how efficiently the key language areas of the brain are utilized – “hi-jacked” for reading skills.

NATIONAL READING PANEL FINDINGS

Phonemic Awareness

Phonics

Fluency

Oral Reading

Vocabulary

Comprehension

National Institute of Child Health and Human Development. (2000). *Report of the National Reading Panel. Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction* (NIH Publication No. 00-4769). Washington, DC: U.S. Government Printing Office.

The Many Strands that are Woven into Skilled Reading (Scarborough, 2001)

LANGUAGE COMPREHENSION

BACKGROUND KNOWLEDGE

VOCABULARY KNOWLEDGE

LANGUAGE STRUCTURES

VERBAL REASONING

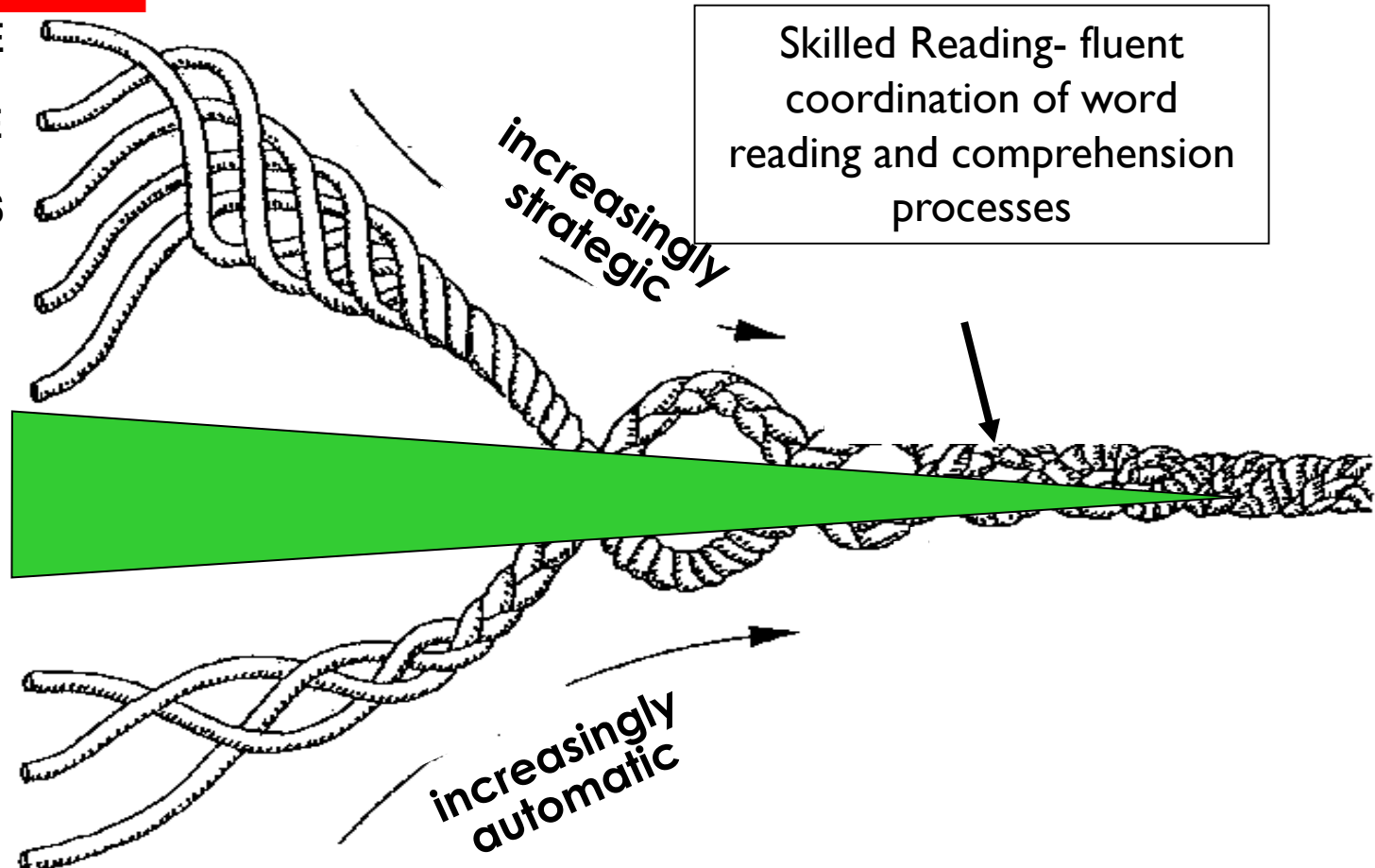
LITERACY KNOWLEDGE

WORD RECOGNITION

PHON. AWARENESS

DECODING (and SPELLING)

SIGHT RECOGNITION



HELPFUL TERMS

- **phonemes** smallest unit of sound the changes meaning
- **phonics** letters on the page represent these sounds
- **alphabetic principle** the written words have the same # and sequence of sounds heard in the spoken word

Effective instruction

- ❖ **Emotionally sound** – 85% success
- ❖ **Systematic** –build knowledge from
Letters>phonemes>syllable>orthography>morphology
- ❖ **Structured** –one pattern at a time build from phonemes to words to sentences
- ❖ **Sequential** –most common to least common patters
- ❖ **Cumulative** –review what was taught and control word list to patterns taught.
- ❖ **Multisensory** – connect auditory>visual>kinesthetic (hearing, seeing, mouth position, written form)

READING: WHERE TO START? SIMPLE TO COMPLEX

Alphabet Skills

Handwriting

Decoding Skills

26 letters, 44 sounds,

98 letters/letter clusters

Fluency

accuracy + rate + prosody

Phonological / Phonemic Awareness

Spelling

spelling generalizations & rules

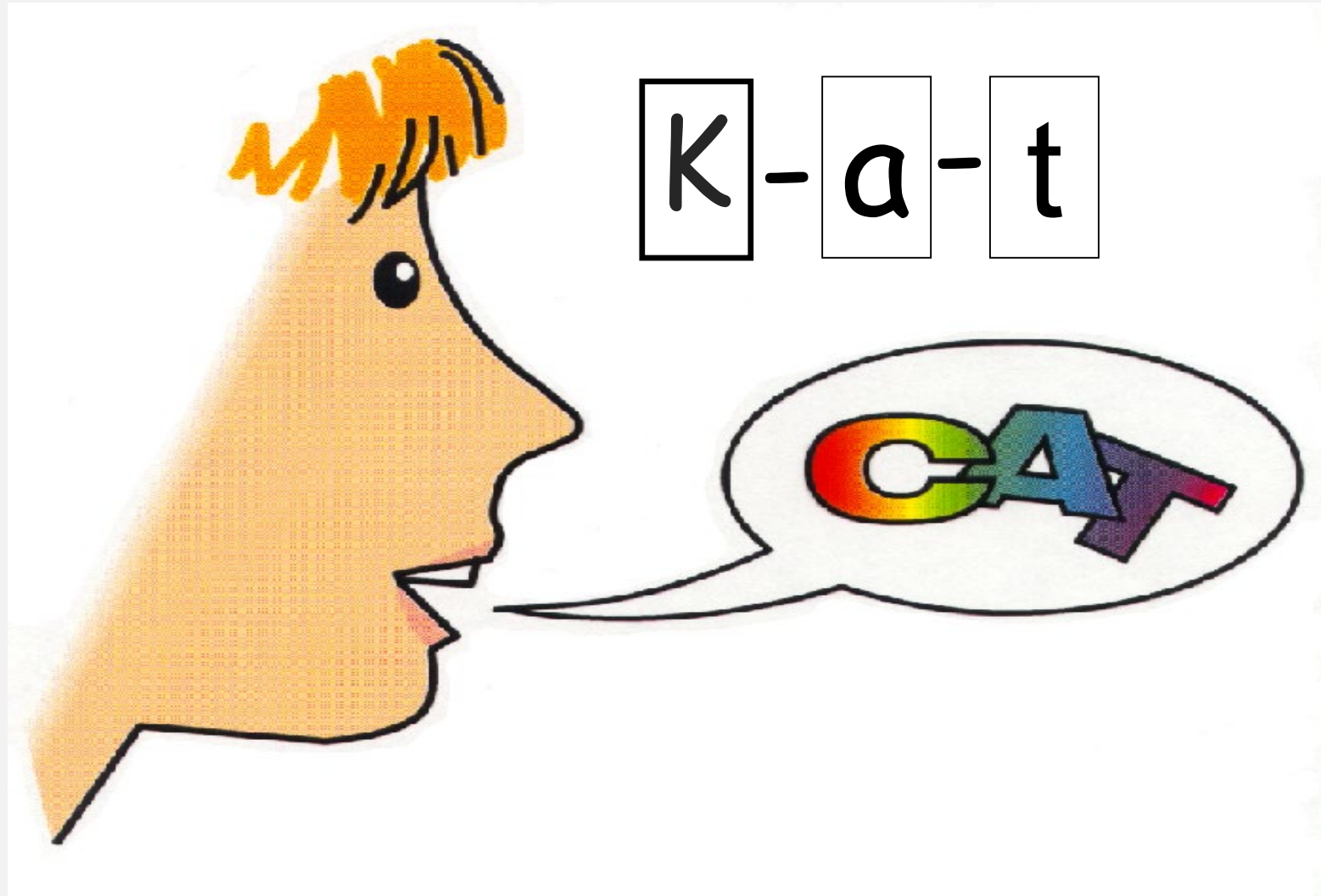
Comprehension Skills/Vocabulary Development

including syntax, semantics, morphology

THE SOUNDS OF ENGLISH

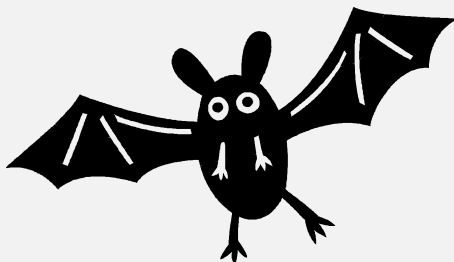
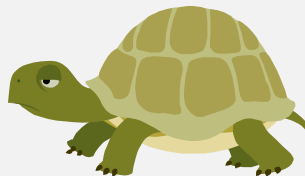
- ✓ There are 40-44 speech sounds (phonemes) in English
- ✓ Sounds are co-articulated
- ✓ first become aware of large chunks of sound, then smaller
 - Words in sentences
 - Syllables in words: /nap/-/kin/
 - Onset-rime in syllables: /b/-/ed/, /Fr/-/ed/
 - Phonemes (smallest units of sound)

Phonemic Awareness



SOUND ISOLATION

WHAT IS THE BEGINNING SOUND IN TURTLE?



Sound Segmentation

Tell me each sound in bat...

Sound Deletion & Manipulation

Say 'scat', now say scat without the 's'



WHAT IS A SYLLABLE?

A word or word part with one vowel sound

*readers who recognize syllable types are better, faster readers and spellers

6 SYLLABLE TYPES IN ENGLISH

(SYLLABLES INDICATE THE VOWEL SOUND)

- Closed-short vowel, ends in a consonant on, pep, at
- Open-ends in a vowel, vowel is long no, me, I
- Silent-e – long vowel-consonant-final-e lake, pole
- Vowel team -two or more letters, one vowel sound-meat, saw, sight
- R-controlled-vowel is masked by the r-car, her, bird
- Consonant-le -able, rumble, settle, poodle

*80% of all syllables are open and closed

SHORT VOWEL SOUNDS ARE THE MOST PROBLEMATIC

- a /ă/ as in apple
- e /ĕ/ as in edge
- i /ĭ/ as in itch
- o /ŏ/ as in octopus
- u /ŭ/ as in up

NONSENSE WORDS TO BREAK THE GUESSING HABIT

shid	hesh	shamp
shan	glosh	blash
shab	chup	chint
chid	mich	prich
chan	chilp	cholp
thand	themp	thes
thun	cath	prath
mith	theg	whill

PRACTICE FOR TUTORS

THIS IS NOT AN EXERCISE FOR STUDENTS

list controlled for short a: find the five illegal /ă/ word

man

class

saw

wash

sat

call

had

star

at

sad

was

nap

ram

cab

tax

READING PRACTICE MUST REINFORCE WHAT HAS BEEN
SYSTEMATICALLY TAUGHT
STUDENT MUST HAVE 90% ACCURACY FOR COMPREHENSION

CONTROLLED TEXT

- Reduces guessing
- Only (or mostly) includes patterns directly taught
- Reinforces the fundamental skills of decoding in order to gain comprehension
- Examples-Mac and Tab, Wilson readers for older students, Phonics Books, Fly Leaf Publishing

UNCONTROLLED TEXT

- Use when decoding skills are in place
- Accommodations may be used to access understanding of complex text and develop vocabulary
- Work around- audio books, apps for reading texts like voice dream reader, Libby-library app,

LAYERS OF THE ENGLISH LANGUAGE



ENGLISH IS COMPLEX BUT 85% PREDICTABLE

- One million words in English and 6 syllable types
- English 'acquires' words easily and often.
- *English isn't Crazy* by Diane Hansbury King

Memory

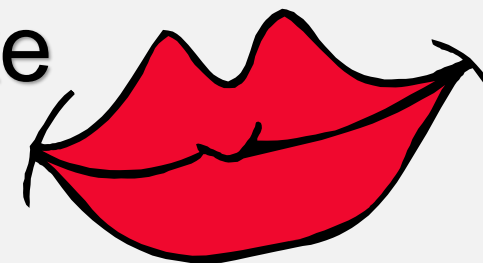
Short term, working memory, and retrieval from **long term memory** is often challenging for learners with dyslexia.

Multisensory activities reinforce the transfer of linguistic representations from short to long term memory.

Multisensory



The term multisensory refers to any learning activity that includes the use of two or more sensory modalities simultaneously to take in or express information. (Birsh, 1)



FAMILY CIRCUS

By Bill Keane



"I know the answer, but I can't quite download it."

Intensive Dyslexia Intervention Programs

Alphabetic Phonics

Dyslexia Training Program;

“Take Flight” by Texas Scottish Rite Hospital;

MTA; Neuhaus

Wilson Reading Method

Spalding

Slingerland

Children's Dyslexia Centers MSL Program

Project READ

Orton-Gillingham (AOGPE)

Helpful Resources

Academic Language Therapy Association

Certifies individuals at Practitioner and Therapist levels

altaread.org

International Multisensory Structured Language Education Council

Evaluates and Accredits Training Centers

imslec.org

ENGLISH LANGUAGE LEARNERS AND DYSLEXIA

People of all races and nations have Dyslexia

- **Esperanza-** Boxed OG kit for Spanish speaking people with Dyslexia. Kit runs around \$400.00.

Children's Dyslexia Centers, Inc.

Teaching Level and Instructor of Teaching Level
Therapy Level and Instructor of Therapy Level

47 Centers throughout the Northeast
childrensdyslexiacenters.org

Academy of Orton-Gillingham

Accredits and Certifies Practitioners and Educators
ortonacademy.org

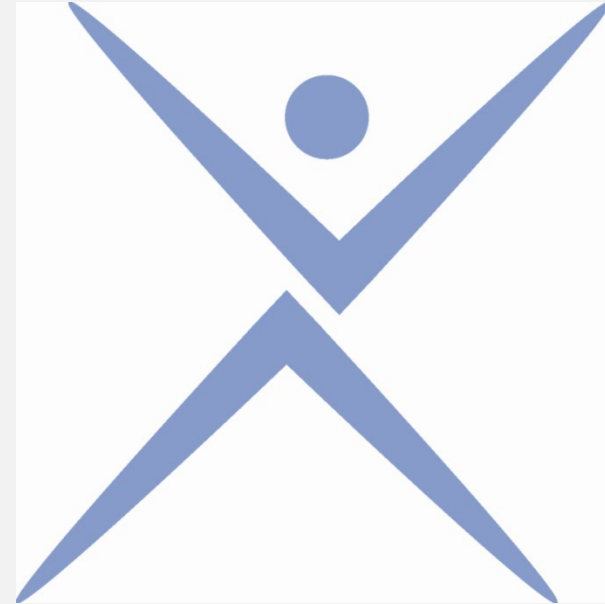
Wilson Language Training

Certifies Level 1 and 2
wilsonlanguage.com

FOR MORE INFORMATION

The International Dyslexia Association

- 40 York Road 4th Floor
Baltimore, Maryland 21204
- [Dyslexiaida.org](http://dyslexiaida.org)



<http://soundsofspeech.uiowa.edu/english/english.html>

Dyslexia

**“The differences are personal.
The diagnosis is clinical.
The treatment is educational.
The understanding is scientific.”**

Margaret Byrd Rawson and Roger Saunders

BIBLIOGRAPHY

- Adams, M.J., (1990). *Beginning to Read: Thinking and Learning About Print*. Cambridge, MA: MIT Press.
- Adams, M.J., Foorman, B. R., Lundberg, I & Beeler, T. (1998) *Phonemic Awareness in Young Children: A classroom Curriculum*. Baltimore, MD: Paul H. Brookes Publishing Co.
- Birsh, Judith R. (2006). *Multisensory Teaching of Basic Language Skills*. Baltimore, MD: Paul H. Brookes Publishing Co.
- Lieberman, I.Y., and Shankweiler, D. (1985). Phonology and the problems of learning to read and write. *Remedial and Special Education* 6: 8-17.
- Lyon, Reid, (1995). Toward a definition of dyslexia. *Annals of Dyslexia* XLV: 3-27.
- Lyon, Reid, (2003). A definition of dyslexia. *Annals of Dyslexia*, Volume 53: 1-14.
- Rutter, Michael et al, (2004). Sex differences in developmental reading disability. *Journal of the American medical Association*, Vol. 291:16, 2007-2012.
- Shaywitz, S.E. (1996). Dyslexia. *Scientific American*. 275, 98-104.
- Shaywitz, M.D., Sally (2003). *Overcoming Dyslexia.*, New York, NY: Alfred A. Knopf.
- Torgesen, J.K., (1995): *Phonological Awareness: A Critical Factor In Dyslexia*. Orton Emeritus Series, Baltimore, MD: Orton Dyslexia Society.

KELLY KUENZIE

*Madison Children's Dyslexia Center
301 Wisconsin Ave.
Madison, WI 53704
608-252-4922*

Email: director@cdc-Madison.org
Website: Madisoncdc.org

Decoding Activity: Recognizing Phonemes

Phoneme translation key:

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 pegin our qrib eq a faziliar blace, a poqy like yours enq zine. Iq conqains a hunqraq qrillion calls qheq work qogaqhys py qasign. Enq wiqhin each one of qhese zany calls, each one qheq hes QNA, qhe QNA coqe is axecqly 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 axecqly 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.

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 that 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.

(Excerpt from "Journey into DNA" on the "Cracking the Code" Web site, NOVA Online.)

