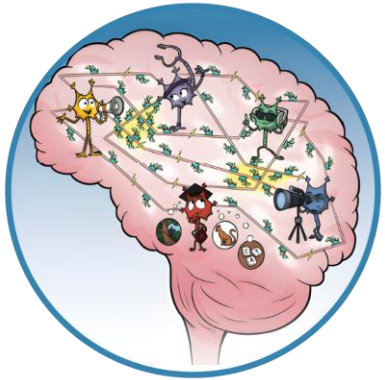
Calling All Neurons!

Understanding Brain Science to Support All Readers, Struggling or Not



with
Author | Literacy/Dyslexia Specialist
Lori Josephson, M.A.

ReadOhio Literacy Academy
June 3, 2026

Disclaimer

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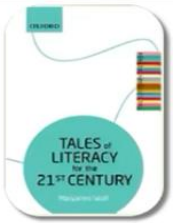
Today's Agenda/Learning Objectives

- Understand how the brain acquires literacy, a learned, complex, and multifaceted skill, from the moment of birth based upon current research aligned with The Science of Reading.
- Explore the reasons why some children struggle to attain literacy.
- Provide strategies and resources for families/caregivers to support children's literacy development.
- Discuss ways families/caregivers can work with schools to optimize children's literacy development.
- Reflect upon why literacy attainment is an imperative in today's society.
- Concluding Thoughts

These are a few of the books and podcasts available to professionals and interested parties shedding light on literacy development.

My book, *Calling All Neurons! How Reading and Spelling Happen*, explains to students 8 years old+, their families, and even very busy educators how the brain learns to read and spell in easy-to-understand language!

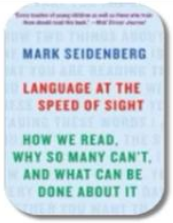


Dr. Maryanne Wolf

Proust and the Squid
Reader, Come Home
Tales of Literacy for the 21st Century

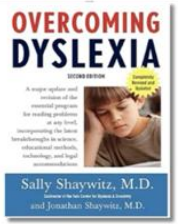
Dr. Stanislaus Dehaene

Reading and the Brain: The New Science of How We Read



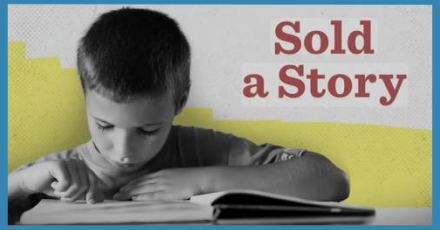
Dr. Mark Seidenberg

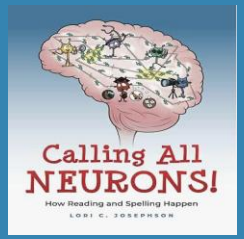
Language At The Speed of Sight: How We Read, Why So Many Can't, And What Can Be Done About It



Dr. Sally Shaywitz

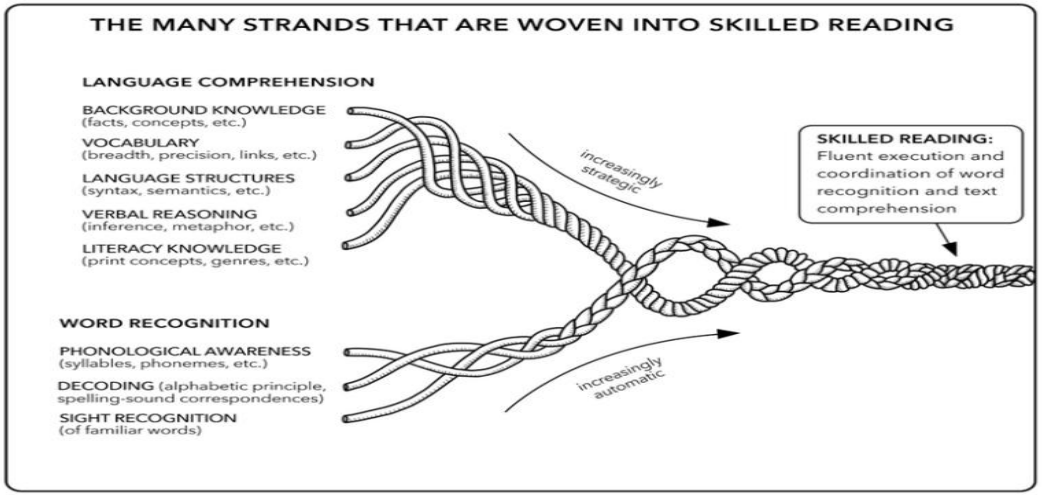
Overcoming Dyslexia (2nd Edition 2020)





Reading/Spelling/Writing are *COMPLEX Processes*

I speak Hollis Scarborough's language! This very famous metaphor was designed with parents (YOU!) in mind!

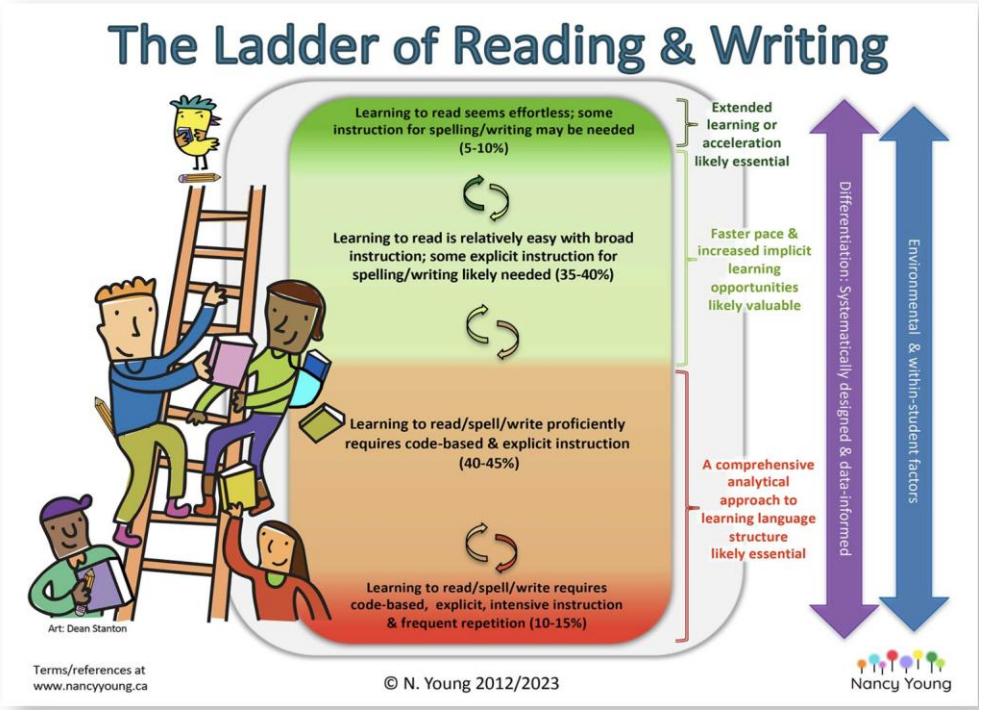


Scarborough, H. S. (2001). Connecting early language and literacy to later reading (dis)abilities: Evidence, theory, and practice. In S. Neuman & D. Dickinson (Eds.), Handbook for research in early literacy (pp. 97–110). New York, NY: Guilford Press.

Listen to Hollis explain this infographic! https://youtu.be/83tfzOFpBak?si=RMFhHgIQuciMF0_G

Reading/Spelling/Writing are *COMPLEX Processes*

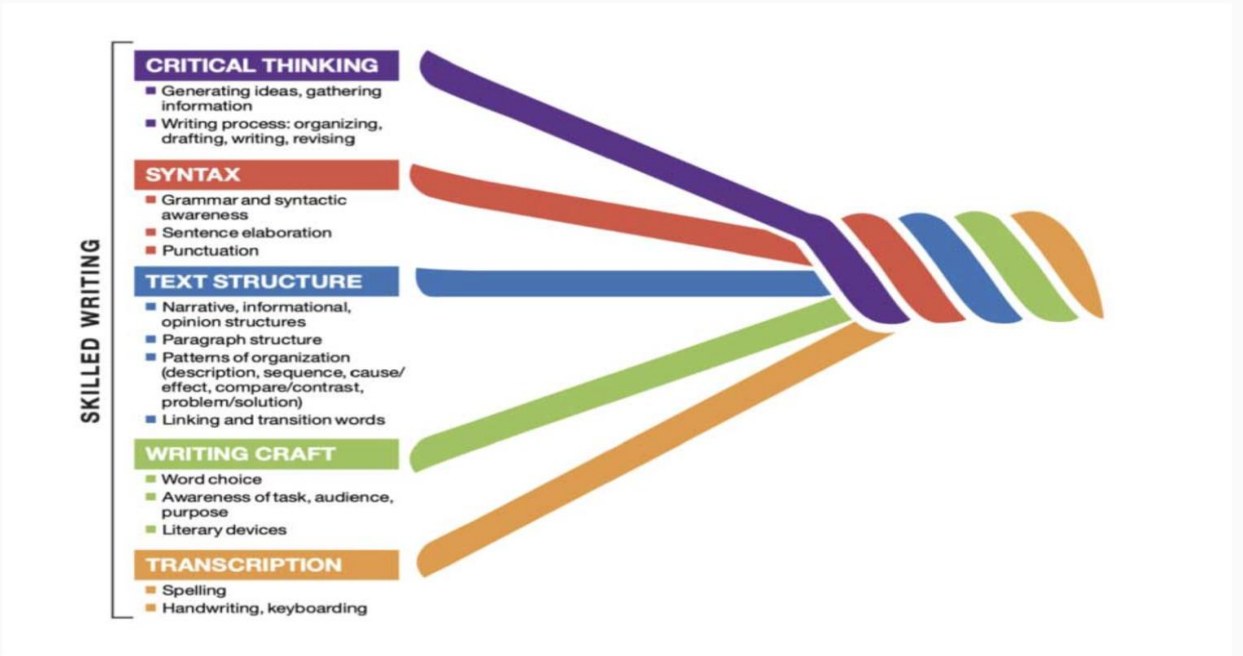
I speak Nancy Young's language too!



Read about Nancy Young's infographic! https://nancyyoung.ca/the-ladder-of-reading-writing/

Reading/Spelling/Writing are *COMPLEX Processes*

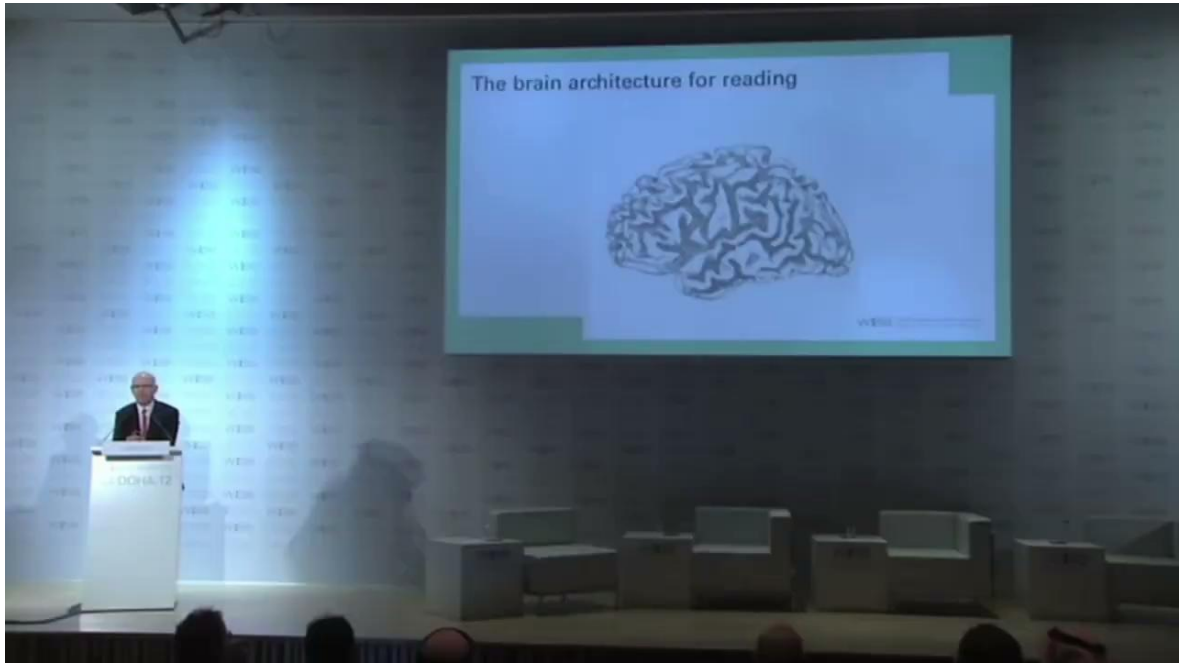
And I speak Joan Sedita's language! The Writing Rope Model



© 2019 Joan Sedita, Keys to Literacy. Published in The Writing Rope: A Framework for Explicit Writing Instruction in All Subjects (Brookes Publishing Company).

Watch Joan Sedita describe her Writing Rope Model
https://youtu.be/HttwUbG2YaE?si=RUSzCT3AsAFqvfCr

ALL Brains Learn to ‘Read’ in precisely the SAME WAY, dyslexia or not (BIG AHA Moment For Me)!! Here is what Stanislaus Dehaene has to say:



View the entire video: How The Brain Learns to Read HERE:
https://youtu.be/25GI3-kiLdo?si=MuLIccy9WcXrXe6I

Drs. Gaab's and Turesky's Hypothesis: Literacy Begins In Utero (2026) https://osf.io/preprints/psyarxiv/y7ue3_v2

- Learning to read —> education, vocation, health
- "Lower order oral language and cognitive skills necessary for high order reading skills (comprehension) begin emerging in the perinatal period."
- Perinatal brain may be equipped with neural scaffolding supporting literacy development

Nationwide Children's Hospital here in COLUMBUS!!

https://apnews.com/article/reading-literacy-screeners-kindergarten-readiness-e3134b6b233bdc633fbc53618830d4ff

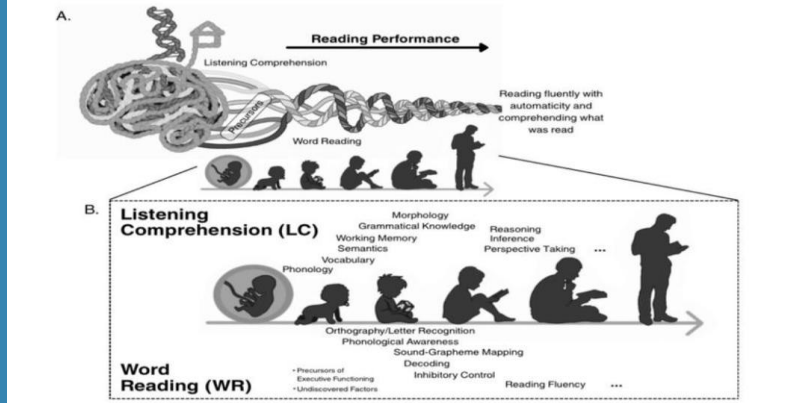


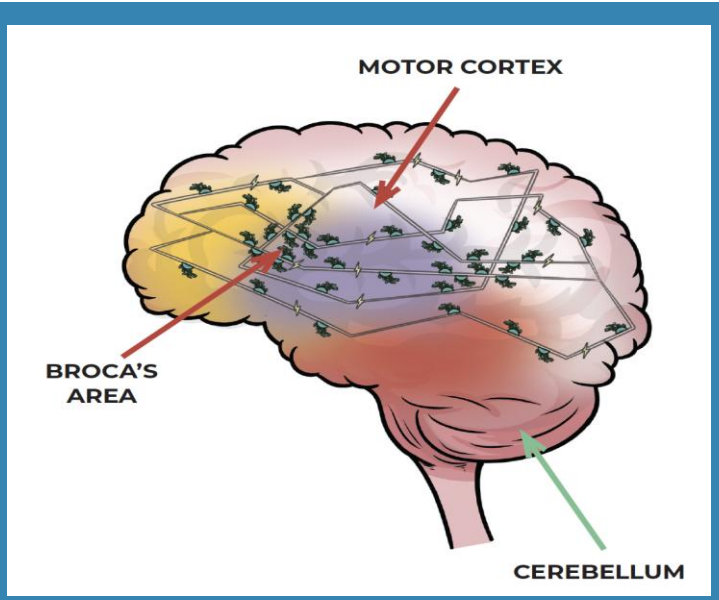
Figure 1. Sample multifactorial conceptualization of reading development starting in utero. The illustration in (A) expands Scarborough's Reading Rope (Scarborough 2001) to include the perinatal period as well as brain, genetic, and environmental factors. As depicted, genetics and environment shape brain development beginning in utero, driving reading development from lower-order oral language processing to higher-order reading comprehension. (B) Illustrates the main known (sub)skills necessary for the development of reading comprehension skills along a developmental timeline. This visualization is limited by the absence of both epigenetic factors and the feedback loop of reading development on the environment, as well as by the inherently rigid nature of a rope being used to depict a fluid developmental process.

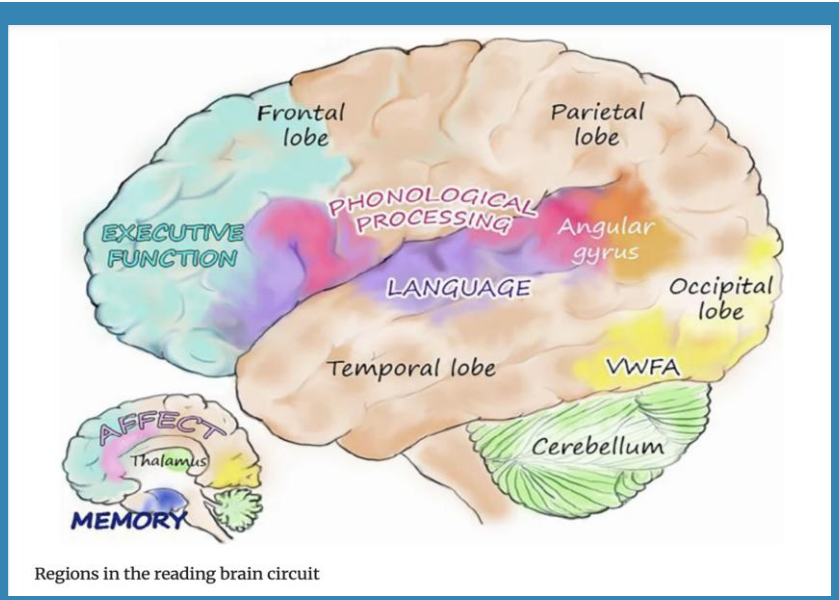
Paradigm Shift:
Proactive vs. Reactive Approach

The Emerging Role of the Brain's Cerebellum or "Little Brain"

The **Cerebellum** [sĕ-rĕ-bĕl-ŭm], in the back of the brain, also works to do things like open and close a person's mouth so they can speak. In addition, the Cerebellum's neurons help humans learn to read and spell by coordinating eye movements, remembering things such as language and how to do things in a specific order, paying attention, and the timing of all of these activities."

Wolf, M., Gotlieb, R.J.M., Kim, S.A. *et al.* Towards a dynamic, comprehensive conceptualization of dyslexia. *Ann. of Dyslexia* **74**, 303–324 (2024). https://doi.org/10.1007/s11881-023-00297-1





Regions in the reading brain circuit

What is the Science of Reading: The Reading League?

THE DEFINITION

What is the science of reading?

The **science of reading** is a vast, interdisciplinary body of scientifically-based research about reading and issues related to reading and writing.

This research has been conducted over the last five decades across the world, and it is derived from thousands of studies conducted in multiple languages. The science of reading has culminated in a preponderance of evidence to inform how proficient reading and writing develop; why some have difficulty; and how we can most effectively assess and teach and, therefore, improve student outcomes through prevention of and intervention for reading difficulties.

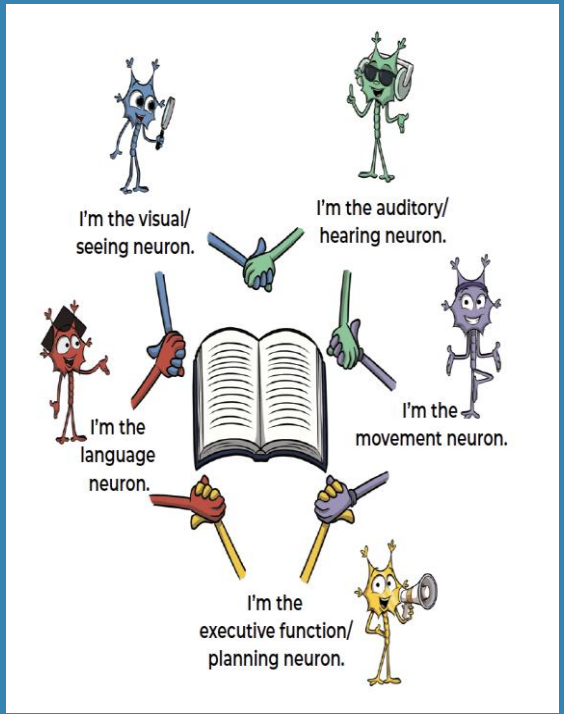
The science of reading is derived from researchers from multiple fields:

- Cognitive Psychology
- Communication Sciences
- Developmental Psychology
- Education
- Implementation Science
- Linguistics
- Neuroscience
- School Psychology

https://www.thereadingleague.org/wp-content/uploads/2022/01/Science_of_Reading_Defining_Guide_eBook.pdf

Downloadable version available and also available in Spanish

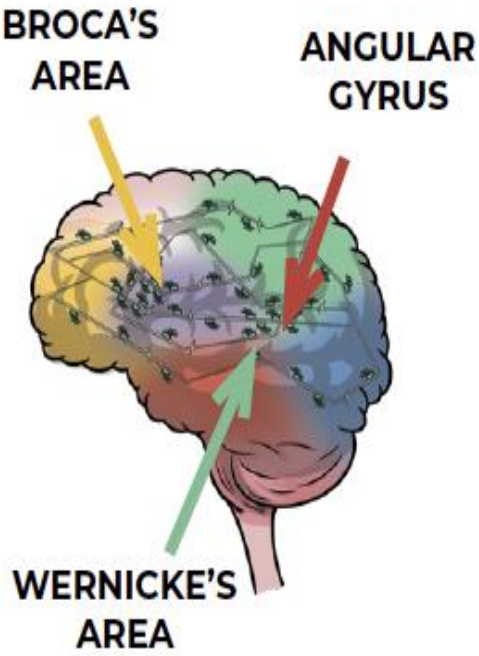
The Constant Interaction of the Different Specialized Neuronal Networks is a 'Real Thing'!!



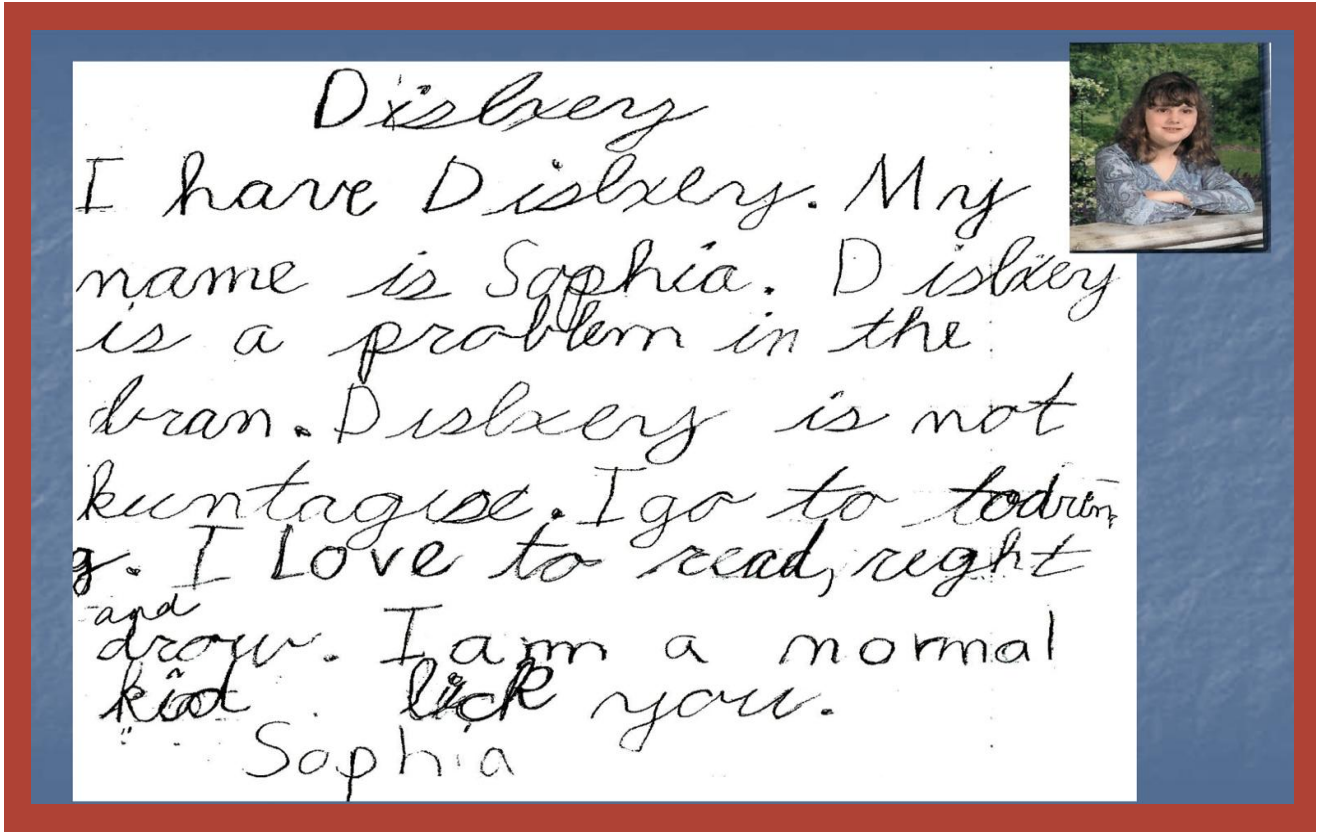
The **Angular Gyrus** [ăng-ū-ler jī-rŭs] is the place in the brain where the **Parietal** [pa-rī-ĕt-ŭl], **Temporal** [tĕm-por-ŭl], and **Occipital** [ŏks-ĭp-ĭt-ŭl] **Lobes** meet and work together to help people understand single words (things and ideas like 'mother,' 'five,' 'bed,' 'run,' 'love').

Wernicke's [wer-nĭck-ēz] **Area** in the **Temporal Lobe** works with the **Angular Gyrus** tucked way inside to help us figure out the meanings of several words grouped together and sentences. This helps us understand information and ideas (like 'clean your room,' 'watch out,' 'I love you').

Toward the front of the brain, my neurons in **Broca's** [brō-căhz] **Area** allow people to think about what they want to say using language. Future readers and spellers need to be able to understand words and how words are put together. For example, if you know that 'a bike' means one bike and that 'bikes' means more than one bike by adding the /s/ sound, that is **Broca's Area** at work!"



Definition of Dyslexia: From the 'Mouths of Babes'!



**NOTE: Children who struggle often share these same feelings! Anyone here agree?

IN THE NEWS: Dyslexia Has *Nothing* to do with Intelligence!

The International Dyslexia Association (IDA) affirmed today that dyslexia, a reading disability, is entirely unrelated to a person's intelligence or cognitive potential. Dyslexic individuals possess the capacity to think, lead, and achieve at the highest levels, and countless have gone on to accomplish extraordinary achievements across every field.

IDA stands firmly in support of dyslexic learners by advancing evidence-based reading instruction grounded in the science of reading, while also championing the unique strengths, resilience, and potential that define this community.

International DYSLEXIA Association®

According to Devin Kearns, IDA Scientific Advisory Board Chair, "Research consistently shows that dyslexia is unrelated to a person's intelligence." (March 2026)

Compare and Contrast IDA Dyslexia Definition… My Add: “a continuum disorder”

2002

Neurological in origin

Difficulties with: decoding, word accuracy, fluency, spelling, phonological component of language

Unexpected given cognitive abilities, effective classroom instruction

Secondary consequences: reading comprehension, reading experience, vocabulary, background knowledge.

Is dyslexia lifelong? I think so.

2025

Result of interplay of ***multiple biological*** and ***environmental influences***

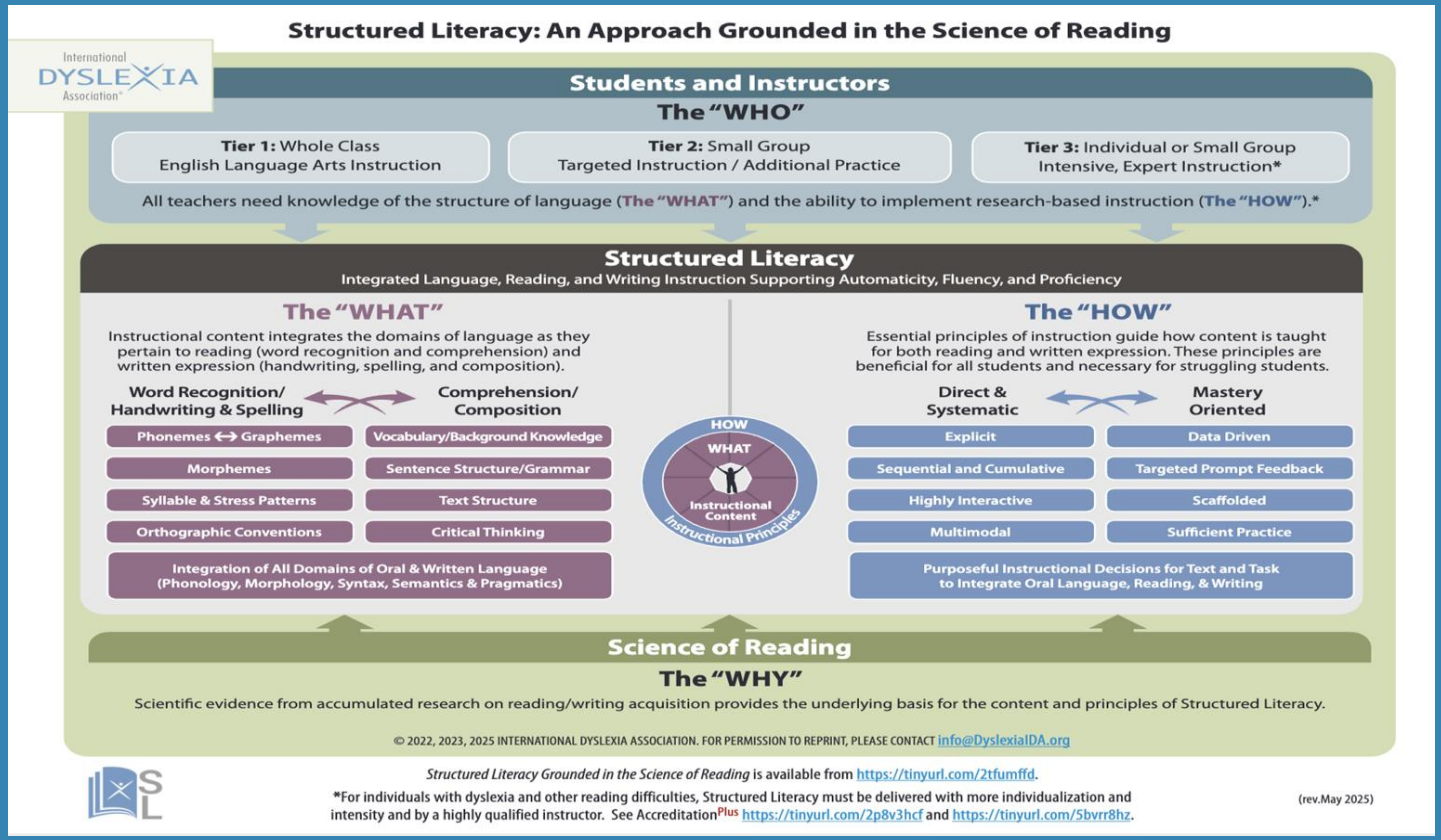
Difficulties with word reading (accuracy, speed or both), spelling (variable depending on language system), phonological and ***morphological issues, oral language***

Low end of reading continuum despite ***evidence aligned*** effective instruction with peers

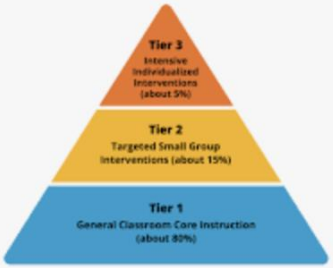
Secondary consequences: ***language development, academic progress, psychological well-being, vocational opportunities***

Emphasis on effectiveness of ***early intervention***

Info/Resources/Supports for Families/Caregivers: What to do?
What is Structured Literacy? What is MTSS?
"Know Your Stuff and Know Who You Are Stuffing!"



Michelle Elia, Ph.D



"You can't intervene your way out of a Tier 1 problem."
(Michelle Elia, Ph.D 2020)

ALL students benefit from solid Tier 1 instruction delivered explicitly with emphasis on all strands of the Reading Rope. Ideally, Tier 2 *mirrors* the solid Tier 1 curriculum in all ways to reduce *cognitive load*.

Students who struggle (and/or who have dyslexia) need *more explicit instruction delivered with fidelity*, *more intensivity*, *more practice*. Intermediate grade students and adolescents need to learn the *same material as younger students* if they *lack foundational skills*. Students ought *not to receive Intervention in lieu of Tier 1* instruction. Many of today's intermediate grade students and adolescents 'missed out' on solid Tier 1 Instruction.

Michelle Elia joined Marietta College in August 2023 and is an Assistant Professor of Literacy. Michelle has previously served as an Intervention Specialist, Special Education Consultant, and Regional Early Literacy Specialist. She also serves on the Board of the Northern Ohio Branch of The International Dyslexia Association and received her doctorate at Mount St. Joseph University in Cincinnati.

Key Takeaways For Parents/Caregivers So Far

- Develop an understanding of what it takes to develop a literate brain: read about it, watch videos, listen to podcasts.
- Be aware of how your child's school district is teaching literacy (reading, spelling, handwriting, written language)--do not be shy about asking questions.
- Be part of 'The TEAM'!! You've been part of 'The Team' since before your child was born.
- Continue to read with and to your child even AFTER he/she/they can read independently.

Now, for more detail…

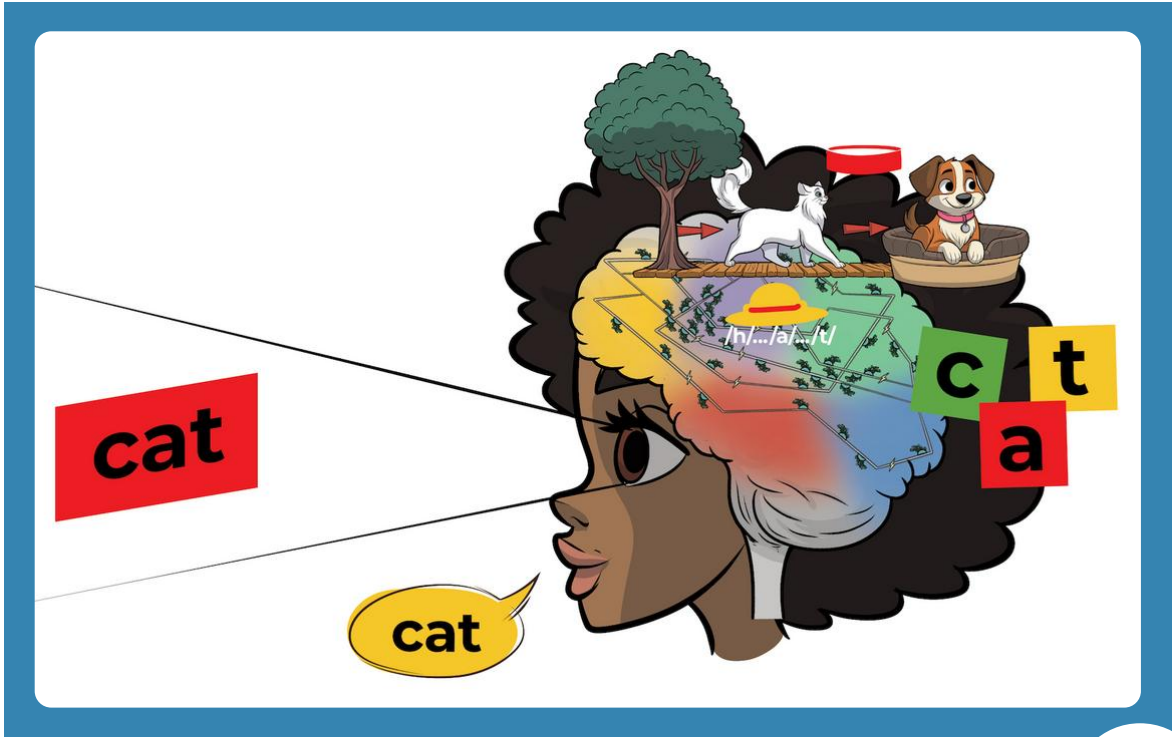
SOOO MANY Connections Need to Take Place to Create *New Neuronal Networks* Necessary to Attain Literacy

1- see the individual letters

2-'image' a cat

3-'hat' rhymes with 'cat'

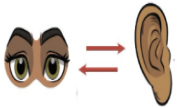
4-associations: cats climb trees, chase dogs, drink milk, etc.



These connections help develop vocabulary, comprehension, sound knowledge, spelling knowledge, background information, metacognition.

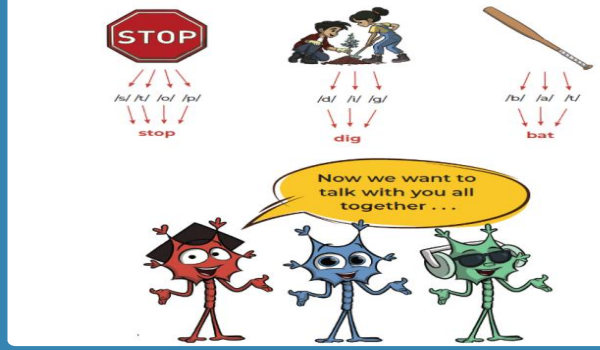
Foundational ‘Readers-In-Training’ Students (including those with Dyslexia) Must Be Taught These Vital Skills to Decode and Encode

Sound Blending
Aids in decoding (reading)



Sound Segmenting
Aids in encoding (spelling)

Awareness and understanding the position of each phoneme in spoken words is what is important! Reading researchers (Susan Brady 2022 and others) have found it's best to practice these skills when the student also sees the letters.



Phonemic Awareness Skills

Orthographic Mapping

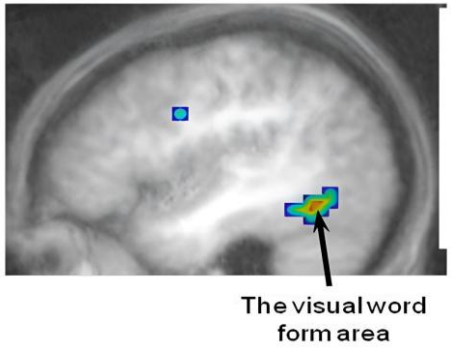
Foundational Readers-In-Training’ literally ***orthographically map*** *each word*. From that point on, readers recognize each word ***automatically*** with no need to ‘sound out’. Reading and Spelling taught ***simultaneously***.

Use of Structured Literacy curriculum with practice using ***decodable text*** for a ***short window***.

WHY teach these skills? As Anita Archer states, “There is no comprehension strategy powerful enough to compensate if a student cannot read the words.”

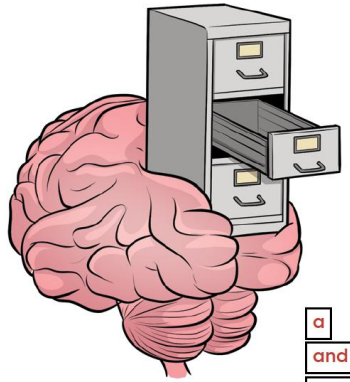
The Brain's 'Filing Cabinet'- Brain's Letterbox, Visual Word Form Area–Word Automaticity—>Fluency—>Comprehension

- √ located in Occipital (with activity in the Temporal) area of the brain
- √ specialized for recognizing letter strings and essential for fluent reading
- √ area of the brain initially used to recognize faces and objects, but is repurposed and transformed to recognize strings of letters as a hub for information storage



Source: Inside the Letterbox: How Literacy Transforms the Brain Stanislaus Dehaene https://pmc.ncbi.nlm.nih.gov/articles/PMC3704307/

"SO, BY THE TIME *most readers and spellers* are in second or third grade, we visual neurons have *stored or saved* thousands of words and many letter patterns in the **Occipital Lobe** of the brain. We recognize them so fast that we don't use our green auditory neuron cousins when reading and spelling except when we are trying to figure out new and longer words."



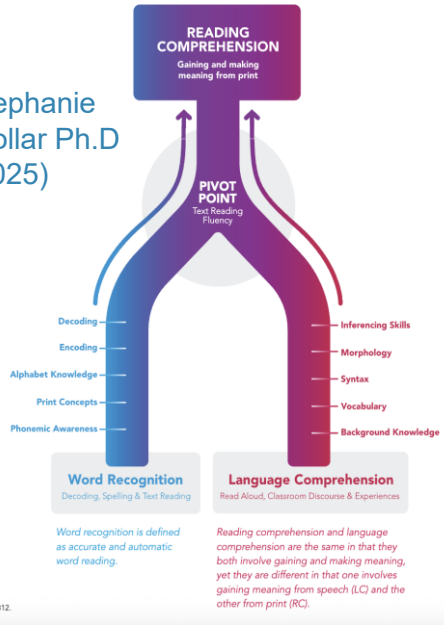
a	blue	find	help
and	can	for	here
away	come	funny	I
big	down	go	in
is	look	not	run
it	make	one	said
jump	me	play	see
little	my	red	the

Supports for *Foundational* 'Readers-In-Training' of Any Age!

Consider for Intermediate/Older Foundational 'Readers in Training': "What begins as a core phonological and word recognition deficit–often associated with other language weaknesses–becomes a diffuse, debilitating problem with both spoken and written language."
-Louisa Moats (2022)

"Every day in every class, students read, write, and speak." -Anita Archer (2024)

Stephanie Stollar Ph.D (2025)



1. Work on Word Recognition and Language Comprehension skills *simultaneously* right from the beginning. Create a *'safe space'* for students who struggle. Use Upper Level Terminology with intermediate and older students (linguistics, orthography, morphology, etc.). Include: sound/symbol relationships, morphology (inflectional and derivational suffixes, prefixes, roots) right from the beginning as well. Explain how the brain learns to read/roadblocks with dyslexia in the mix.

2. Hopefully, the curriculum your children receive has an *evidence based scope/sequence aligned with SOR*; teach decoding/encoding (including handwriting) *simultaneously* aiming toward word automaticity and fluency. Teach 6 basic syllable patterns and basic syllable division concepts. Hopefully, your children's schools will modify the schedule to allow for adequate instructional time for ALL students with dyslexia *outside of Tier 1 instruction*. (I know this is challenging!).

3. 'Pivot Point': when students begin to become more automatic and fluent, text selection changes–reduction in read alouds to having *students read (complex) text with support and independently* over time.

Supports for *Foundational* 'Readers-In-Training' of Any Age!

4. ***Vocabulary Development!*** students must SAY the word, SEE the word, OBSERVE/USE the word in context(s), allowing for multiple repetitions. This must occur daily to be effective. (*Bringing Words to Life,* Beck, et. al.)

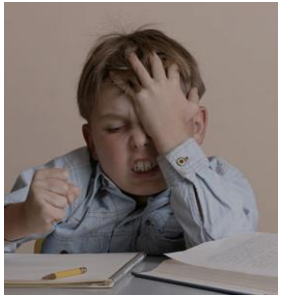
5. Make efforts to ***integrate literacy*** in all subject areas.

6. ***Intensify reading practice***! Engage in Repeated Reading practice for fluency development, especially for younger students. Read several selections on the same topic to develop background information. With teacher (and parent/caregiver) scaffolding and 'active' guidance, students will likely be able to read more challenging material than you think!

7. Watch for and address ***comorbidities***: ADD, ADHD, DLD, mental health issues, etc.

8. Teach Sentence Structure (syntax) and Discourse (text structure) to help with both comprehension and ability to complete written assignments/written language tasks ***as students become more able***.

The shame of literacy failure is REAL no matter the age of the student!



9. Of course, put accommodations as needed: time extensions, word banks, glossaries, provision of class notes, oral responses, etc. BUT, these *will not teach these students literacy skills*! Here is a list: https://dyslexiaida.org/accommodations-for-students-with-dyslexia/

Supports for Intermediate ‘Readers-In-Training’

Multisyllable Word Decoding/Encoding + Morphology + Word Origin Knowledge = GREATER PROFICIENCY and SUCCESS!

Online Etymology Dictionary highly recommended (etymonline.com)

lock (n.1)

"means of fastening," Old English *loc* "bolt, appliance for fastening a door, lid, etc.; barrier, enclosure; bargain, agreement, settlement, conclusion," from Proto-Germanic **lukana-*, a verbal root meaning "to close" (source also of Old Frisian *lok*

lock (n.2)

"tress of hair," Old English *locc* "lock of hair, curl" (plural *loccas*), from Proto-Germanic **lukkoz* (source also of Old Norse *lokkr*, Old Saxon, Old Frisian, Dutch *lok*,

Related Words: ‘reluctant, reluctance’ /rē/ /lŭc/ /tənt/

Polysemy Vocabulary Words 40-84% of all English words have more than 1 meaning!

“Canal locks are necessary to allow boats and ships to navigate waterways with different water levels, effectively acting as ‘elevators’ for vessels by means of raising or lowering them between sections of a canal or river. They do their jobs using both gravity and water pressure.”

Academic Vocabulary learning is essential –same routines SAY, SEE, USE

Text Project Website

Words appearing in MANY subject areas!

Academic Word List (AWL)
[part of the 4,000 Simple Word Families]

The AWL was developed by Coxhead (2000) from analyses of college texts. Of the 570 words on that list, 343 are among the 4,000 simple word families. Most of the words belong to word families with at least several members among the most frequent words in English.

Sorted in alphabetic order

abandon	capable	contract
access	capacity	contrary
accompany	category	contrast
accurate	cease	contribute
achieve	challenge	convert
acquire	channel	convince
adapt	chapter	core
adequate	chart	couple
adjust	chemical	create
administration	circumstance	credit
adult	civil	culture
affect	clause	cycle
aid	code	data
alternative	commission	debate

These are the ones to teach directly!! More bang for your buck!!

The Role of Morphology–it's ‘integral information’ *where meaning and spelling collide*

- **Explicit teaching of affixes beginning in kindergarten and continuing throughout all grades!**

(Available on my website: lorijosephson.com)

- **Morphology Matrix Maker**

https://www.neilramsden.co.uk/spelling/matrix/

- **Understanding morphology *helps kids spell and increase vocabulary!***

Most Frequent Prefixes and Suffixes in Printed Academic English

SUFFIXES

Suffix	Meaning of Suffix	Sample Word with Suffix	Percentage of All Suffixed Words
-s, -es	1. plural noun 2. present tense verb 3. possessive adjective	1. bikes, dresses 2. jumps, fixes 3. girl's, girls'	31%
-ed	1. past tense verb 2. descriptive adjective	1. landed, jumped, yelled 2. left-handed	20%
-ing	1. progressive tense verb 2.descriptive adjective	1. eating 2. jumping [frog]	14%

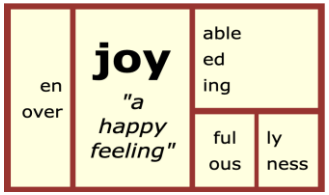
65%

Most Frequent Prefixes and Suffixes in Printed Academic English

PREFIXES

Prefix	Meaning of Prefix	Sample Word with Prefix	Percentage of All Prefixed Words
un-	1. not 2. opposite of	1. unhappy 2. unrest	26%
re-	1. again 2. back	1. retest 2. recline	14%
in-, im-, il-, ir-	1. not	inappropriate, impossible, illiterate, irrational	11%

51%



bikes/biking (n./v.)

unpredictable (adj.)

unhappiness (n.)

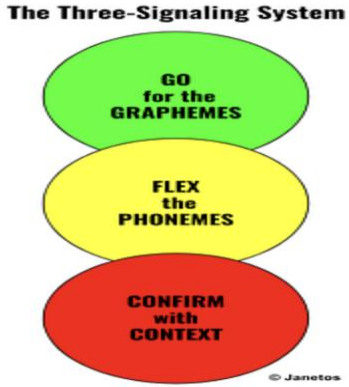
misinformation (n.)

English is MORPHOPHONEMIC! Important Information For Students with Dyslexia (or NOT) of ANY AGE!

- Dependent on *morphology* (meaning) and *phonology* (sounds)
- Set for Variability: a reader's ability to adjust their pronunciation of a word after initially decoding it using their phonics knowledge ('mágnet' vs. 'magnétic')
- We need to teach students to 'flex the vowel' sound — AKA, try variations (short, long, schwa) until the word becomes recognizable (not always true!!)--our students with dyslexia cannot always recognize the words they try to 'sound out' simply using phonics instruction
- Students who are 'stuck on sounding out words' and 'phonics knowledge'--this sometimes obstructs meaningful parts of words– tend to struggle with dysfluent reading and poor spelling
- Spoken syllables (oral pronunciation) vs. written elements (meaning driven). For example, **'suggestion'**:

/sŭ/ /jĕs/ /chŭn/ vs. <suggest> + <ion>

"Why do we *say* it this way, BUT... *spell* it this way?"



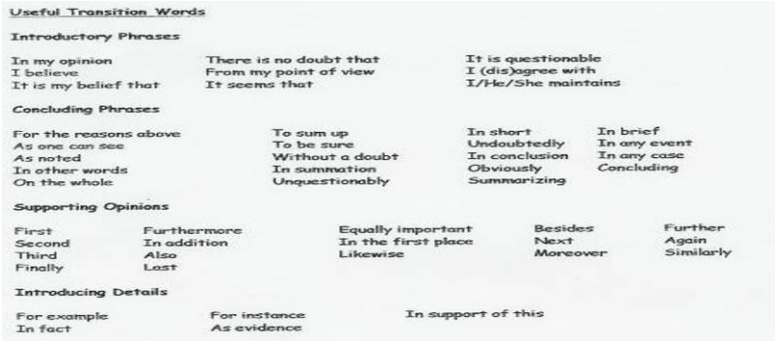
Supports for ‘Readers-In-Training’ in Intermediate and Upper Grades

Consider the Emergence of ‘Content Literacy’ (encompassing many academic subject areas)

****general reading and writing skills to learn subject matter**
****involves both literal and inferential skills**
****accurate comprehension of tables, graphs, and charts**
****’Gist’ questions/statements: who/what/most important idea? (Vaughn 2024)**
****”frontloading” concepts/vocabulary during Intervention**

Canals are waterways that are built by people and used for shipping, travel, and irrigation. Canals have been an important way to move goods and carry people for more than 5,000 years.

Some canals make it possible for boats to travel inland from oceans and lakes. A canal may also serve as a shortcut between two bodies of water. Other canals carry drinking water to cities or **irrigation** water to farms.



Useful Transition Words

Introductory Phrases

In my opinion	There is no doubt that	It is questionable
I believe	From my point of view	I (dis)agree with
It is my belief that	It seems that	I/He/She maintains

Concluding Phrases

For the reasons above	To sum up	In short	In brief
As one can see	To be sure	Undoubtedly	In any event
As noted	Without a doubt	In conclusion	In any case
In other words	In summation	Obviously	Concluding
On the whole	Unquestionably	Summarizing	

Supporting Opinions

First	Furthermore	Equally important	Besides	Further
Second	In addition	In the first place	Next	Again
Third	Also	Likewise	Moreover	Similarly
Finally	Last			

Introducing Details

For example	For instance	In support of this
In fact	As evidence	

Consider Written Language Development

****syntax (word order), sentence variation/expansion**
****role of morphology**
****paragraph development**
****transition words–included in Resources!**

“The boys are relaxed and happy,”
“The relaxed and happy boys attended the banquet after winning the final game.”

Figurative Language Development **“under lock and key”, “lockdown”, “lock horns”, “lock in”, “Goldilocks”**

Foreign language study (middle school, HS)? What about EL students?

Additional Supports for *Remediated (but still dyslexic, so potholes emerge!) 'Readers-In-Training'*

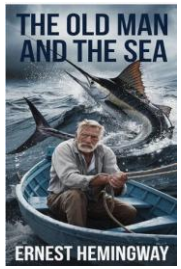
MORE Academic Vocabulary: students must acquire 80,000 words (minimum 10,000 base words + proper nouns) in order to be college ready–continue with more advanced Morphology/Word Study (Hirsch 2003), (Irvin, Blankenship 2022)

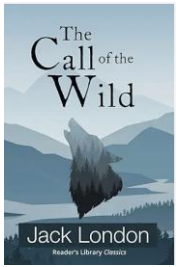
Disciplinary Literacy

****use of *unique vocabulary, text structures* specific to a particular academic subject**
****ability to read, write, think, communicate effectively in particular academic subjects**
****different academic subject require different types of disciplinary literacy**

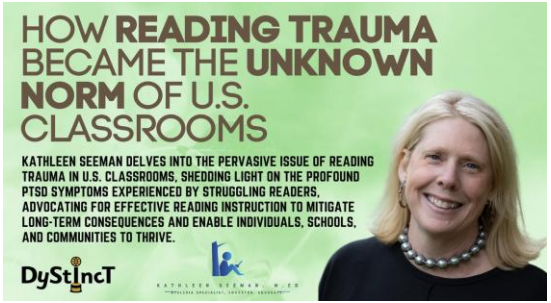
Reading Stamina Development

****Should students be expected to read entire books??? I say an emphatic 'YES!' Even if they are 'short' books! Even complete short stories preferred over excerpts for 'deep reading/critical thinking'!**





What About Executive Function & Self-Regulation?
Sharon Vaughn Study: Providing Anxiety Reduction Training Demonstrated Improved Intervention Outcomes (PATTAN, 2024)



Dystinct
March 2024
Kathleen Seeman

"Struggling readers wrestle with a host of emotions and reactions, many of which they themselves cannot understand or explain. These trauma responses occur in classrooms, office spaces, within relationships, and in other situations where the struggling reader is experiencing the shame and humiliation of not knowing how to read. This is reading trauma in action. These reactions can vary but are very much rooted in abject reading failure."

"For the most part, these [older] kids have avoided reading, and have developed maladaptive coping strategies."--Louisa Moats

How Can Parents/Caregivers Work With Schools to Optimize Literacy Development?

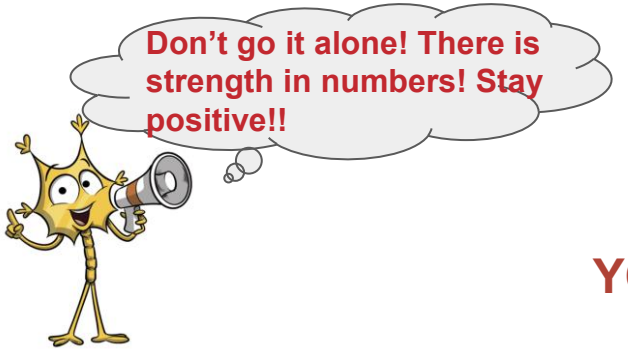
Key Takeaways:

- ***Share the information*** in this talk with school personnel.
- ***Understand*** your child's areas of struggle and ***discuss*** these struggles with your child's teachers (***all of them*** inclusive of content area and 'specials' teachers).
- Convey your willingness to work ***with teachers***! Trust me, they will ***appreciate your support***!
- If your child is experiencing 'meltdowns' over homework and/or tests, school projects, etc., don't be afraid of sharing with school personnel. Share 'victories' as well!
- Don't assume anything! Communication is key!

Don't be afraid to ***ask questions***!! You know your child best and you are ***your child's best advocate***! YOU are an integral part of 'The Team'!

Build a Coalition! Work with Others!
Consider These Organizations and Ideas:

- Parents for Reading Justice
- Local Branches of The International Dyslexia Association (Northern, Central, Ohio Valley)
- Facebook Groups: Science of Reading-What I Should Have Learned in College (large national group and Ohio group)
- LinkedIn: LOTS of info; many newsletters–all free!
- Reading Rockets, Reading Universe, Understood, Cox Campus
- Summary of Sold A Story in Under an Hour! Here it is: https://revealnews.org/podcast/how-teaching-kids-to-read-went-so-wrong/
- Encourage 'Literacy Night' at your kids' schools!



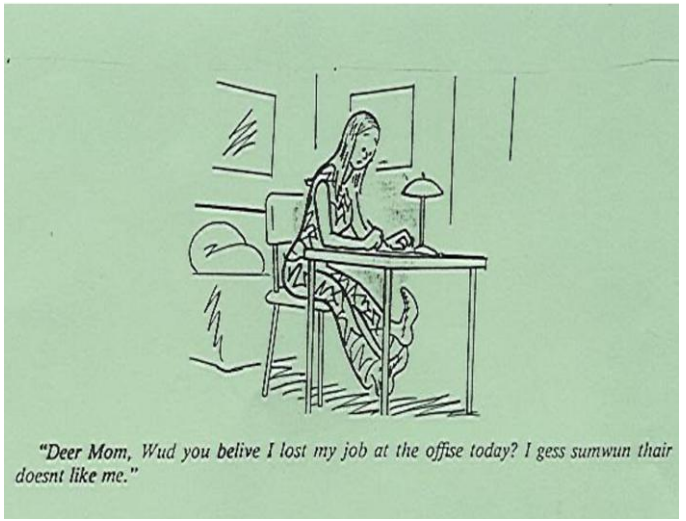
YOU can make a DIFFERENCE!

Effective Strategies for Parents/Caregivers To Support Literacy Development at Home

1. Make it FUN!
2. Give kids CHOICES!
3. Set READING GOALS *with* your child.
4. Make a CHECK-IN a regular routine!
5. Pick a THEME and RUN WITH IT!
6. Incorporate ___ new vocabulary words per day and repeat them regularly!
7. Practice WRITING via modeling, reading what others write, etc.
8. Work on VERBAL REASONING - inferencing, figurative language.
9. Enjoy DIALOGIC READING together!
10. Use technology to your child's ADVANTAGE *carefully!!*

Characteristics of Adolescent Foundational 'Readers-In-Training'

- inadequate foundational skills resulting in gaps in all areas of literacy (phonemic awareness, phonics, word reading accuracy/automaticity, fluency, morphological awareness, spelling, handwriting, comprehension, keyboarding, written language)
- limited vocabulary
- insufficient exposure to text
- limited reading stamina
- poor self-esteem AKA 'reading trauma'



"The school to prison pipeline is not some myth. It's fueled by dyslexics. 47-50% of people who are incarcerated are dyslexic…43% of self-made millionaires are dyslexic. So it can go either way. The question is, who has the support and resources to go left instead of right."

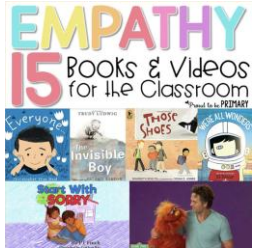
~Kareem Weaver

Award Winning Educator/Community Advocate

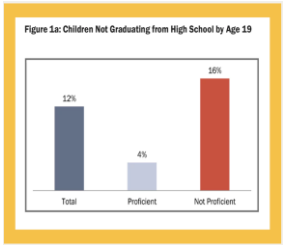
What is the purpose of learning how to read, spell, and write anyway?

Gain Knowledge

Share Ideas With Others



Develop Empathy Deep Reading



Avoid Disenfranchisement, Incarceration

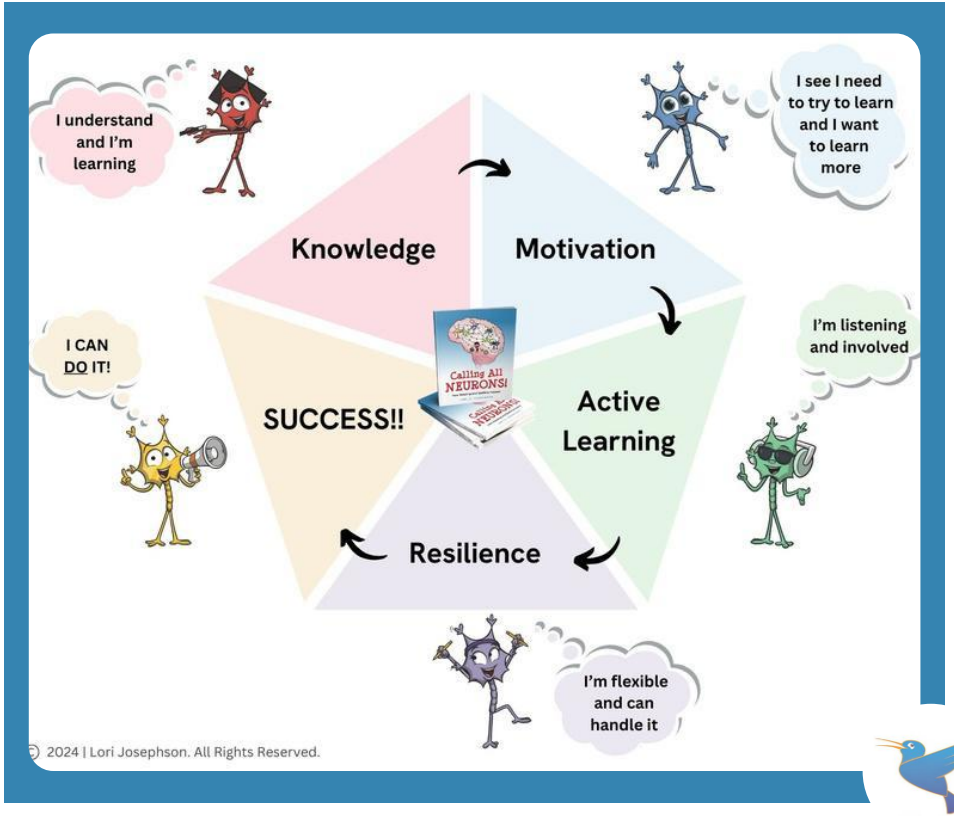
"The ultimate purpose of reading is to extract and construct meaning from all kinds of text."
~Pamela Snow (2002)

The More You/Your Students Know About the Process...

01 NAEP Scores have declined–we must work to reverse this trend! Could use of EdTech, overall screen time, and cell phone usage (note increasing bans) influence this trend?

02 YOU have the tools and the knowledge to make a difference. We MUST find a way to provide those students with dyslexia/literacy struggles with the INSTRUCTIONAL TIME needed to change the trajectory of their lives. Educators need a solid knowledge base and support.

03 Knowledge of what it takes to create a literate brain leads to increased MOTIVATION—>ACTIVE LEARNING→> RESILIENCE—>SUCCESS!



Final Thoughts:

“Literacy is a civil right. It's also a gift. It's an opportunity to share thoughts and feelings with others that can be revisited and saved.” ~Lori Josephson

Keep practicing! Learning to read, write, and spell takes a long time—usually several years. The more you read, write, and spell, the better you get at it. Many adults even say that they become better readers, writers, and spellers with every word, book, or newspaper they read.”

Questions?
Comments?
Contact me at:
lorijosephson.com

Thank you very much!

Supporting ‘Readers-In-Training’ with or without dyslexia is a marathon rather than a sprint.
Keep up the good work you do with your/our children! I appreciate you!

Resources

NOTE: Although many educators and students have found these resources helpful, the resources listed are not necessarily endorsements, as individual students' needs vary.

Foundational Skills for Adolescents

Curricula & Materials

- **EBLI (Speech to Print Program)** https://eblireads.com/
- **Keys to Literacy** https://keystoliteracy.com/
- **95% Solution** https://www.95percentgroup.com
- **Really Great Reading** www.reallygreatreading.com
- **REWARDS Grades 4-12** https://www.voyagersopris.com/products/reading/rewards
- **SPIRE** https://www.epslearning.com/products/spire-overview
- **UFLI** https://ufli.educatn.ufl.edu/foundations/
- ***Uncovering the Logic of English*** https://logicofenglish.com/products/uncovering-the-logic-of-english?srsltid=AfmBOoqN4Ug_6NEuPUtFdMFX8hjSR6wxqs03QVzM-saJo9PGHGqXe2q-
- **Wilson Reading Systems, Fundations, Just Words** https://wilsonlanguage.com

Vocabulary/Morphology

- **Academic Word List** textproject.org/vocabulary-instruction/academic-word-list
- ***Bringing Words to Life*** amazon.com/Bringing-Words-Life-Second-Instruction/dp/1462508162
- ***Beneath the Surface of Words*** amazon.com/Beneath-Surface-Words-English-Spelling/dp/057832671X
- **Megawords, Essential Language Structure** https://www.epslearning.com/products/megawords
- **Morphology Matrix Maker** neilramsden.co.uk/spelling/matrix/
- **Most Common Prefixes/Suffixes** lorijosephson.com/wp-content/uploads/2024/04/Most-Frequent-Prefixes-and-Suffixes-in-Printed-Academic-English.pdf
- **On-Line Word Origin Dictionary** etymonline.com

Resources

Comprehension

- ***The Reading Comprehension Blueprint: Helping Students Make Meaning from Text*** productproducts.brookespublishing.com/The-Essentials-of-Adolescent-Literacy-P1682.aspxs.brookespublishing.com/The-Reading-Comprehension-Blueprint-P1197.aspx
- ***The Essentials of Adolescent Literacy (Keys to Literacy)*** products.brookespublishing.com/The-Essentials-of-Adolescent-Literacy-P1682.aspx

Written Language

- ***The Writing Rope: A Framework for Explicit Writing Instruction for All Subjects*** products.brookespublishing.com/The-Writing-Rope-P1344.aspx
- ***Writing Matters: Developing Sentence Skills in Students of All Ages*** wvced.com/product/writing-matters-developing-sentence-skills-in-students-of-all-ages/
- **Transition Words Handout** -Lori Josephson (attached)

Miscellaneous

- **Accommodations for Students with Dyslexia** dyslexiaida.org/accommodations-for-students-with-dyslexia/
- **Dyslexia in the Classroom** dyslexiaida.org/wp-content/uploads/2015/01/DITC-Handbook.pdf
- **Social Emotional Problems Related to Dyslexia** **dyslexiaida.org/social-emotional/**
- ***Calling All Neurons! How Reading and Spelling Happen*** lorijosephson.com/calling-all-neurons-how-reading-and-spelling-happen/
- **International Dyslexia Association** **dyslexiaida.org**
- ***Overcoming Dyslexia 2nd Edition*** https://www.amazon.com/Overcoming-Dyslexia-Complete-Science-Based-Problems/dp/0679781595
- **Melissa & Lori Love Literacy Podcast Ep. 100: Trauma and Reading with Steven Dykstra** podcasts.apple.com/us/podcast/ep-100-trauma-and-reading-with-dr-steven-dykstra/id1463219123?i=1000555942998
- **What is MTSS?** readingrockets.org/classroom/evidence-based-instruction/mtss

Resources

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Third	Also	Likewise	Moreover	Similarly
Finally	Last			

Introducing Details

For example	For instance	In support of this
In fact	As evidence	

Cause and Effect

Since	Caused by	In effect
Due to	This results in	Brought about
Therefore	Consequently	Made possible
If...then	As a result of	Accordingly
Leads to	For this reason	As might be expected
Give rise to	Leads to	Was responsible for

Compare and Contrast

Similarly	Likewise	As well as	Whether or not
Compared to	Have in common	In the same way	Even though
In like manner	Contrasting	All are	Rather than
On the other hand	On the contrary	The same as	Nevertheless
Although	As opposed to	Conversely	In spite of

Countering

I realize you	believe	,but	Some people	favor	I question
I understand	feel	,yet	It may be that	support	Let me explain
Even though you	maintain	,however,	On the contrary	State	On the other hand
Although	want	I doubt	Nevertheless	_____ idea deserves some merit	

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