



# **The Science of Reading**

## **CA Literacy Initiatives**

### **and Assembly Bill 2222**

April 11, 2024

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**Associate Superintendent, C&I**

# Overview of Today's Session

## Science of Reading

Reading Science:  
What it is / is not

The Reading Brain

Simple View of  
Reading

Components of  
Skilled Reading

## CA Literacy

Some Literacy  
Initiatives in  
California  
(and in our County)

## AB 2222

Major  
Components of  
the Bill

Support and  
Opposition

# The Science of Reading

## *What is Reading Science?*



The Science Of Reading: Defining Guide (2002)

defines the science of reading as:



*...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: Defining Guide (2002)

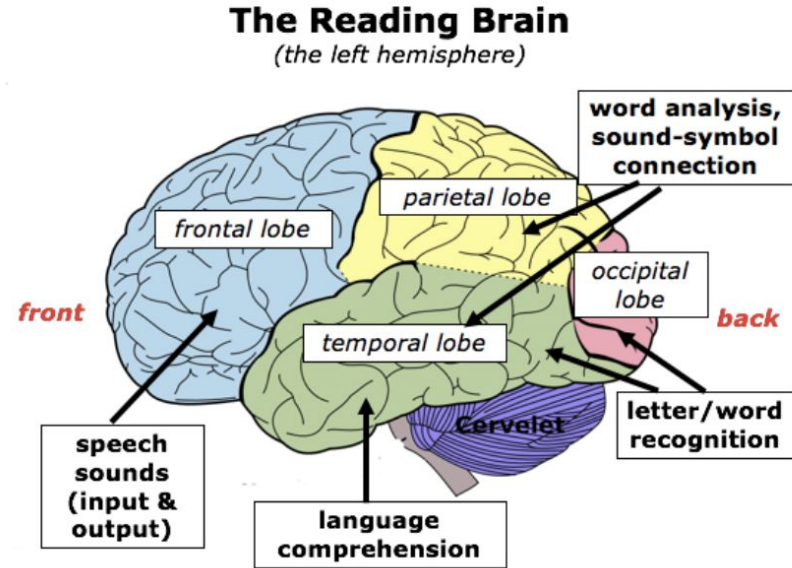
defines the science of reading as:



*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 and intervention of reading difficulties.*

## The Science of Reading is Derived From Researchers in Multiple Fields:

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



# The “Reading Brain”

- Reading does NOT happen naturally
- While our **brains are wired for language**, they are **not hard-wired for reading**.
- Human beings were never born to read. **Reading is a human invention** that reflects how the **brain rearranges itself to learn something new**.
- **Plasticity and the creation of new neural networks:** Neurons are reprogrammed to accomplish new tasks
- The brain can **rearrange itself in multiple ways** to learn to read, depending on the **writing system** and the **medium**

# The “Reading Brain”

The “reading brain” represents the semi- miraculous capacity of the brain to form new circuits for cultural inventions from older, genetically programmed, component processes that make up vision, language, cognition, and emotional systems.

Each component part is necessary for the whole circuit to function well enough to achieve expert reading.



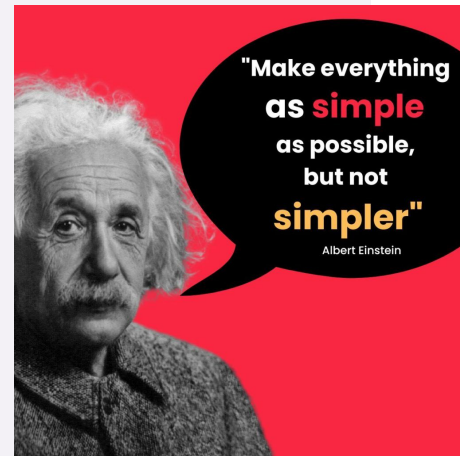
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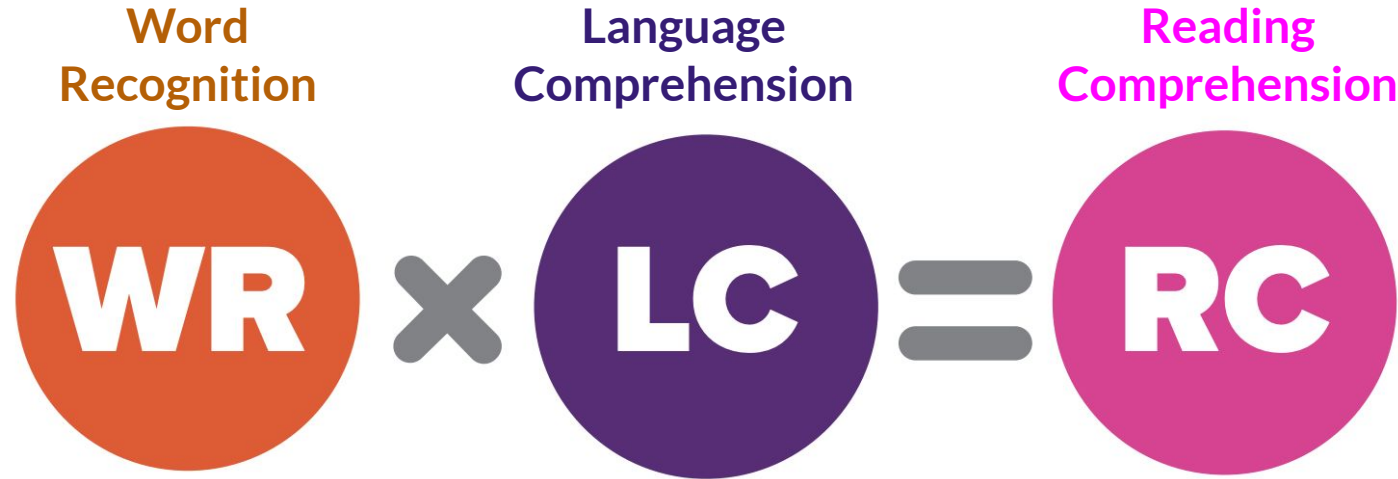


# What the Science of Reading is **NOT**

- ⊘ an ideology or philosophy
- ⊘ a fad, trend, new idea, or pendulum swing
- ⊘ a political agenda
- ⊘ a one-size-fits-all approach
- ⊘ a program of instruction
- ⊘ a single, specific component of instruction, such as phonics



# The Simple View of Reading



Gough, P. B., & Tunmer, W. E. (1986). Decoding, reading, and reading disability. *Remedial and Special Education*, 7, 6-10.

## **SCARBOROUGH'S READING ROPE**

**Scarborough's Rope is a visual metaphor for the development of skills over time (represented by the strands of the rope) that lead to skilled reading.**

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). Guilford.

## Language Comprehension

**Background Knowledge**  
(facts, concepts, etc.)

**Vocabulary**  
(breadth, precision, links, etc.)

**Language Structures**  
(syntax, semantics, etc.)

**Verbal Reasoning**  
(inference, metaphor, etc.)

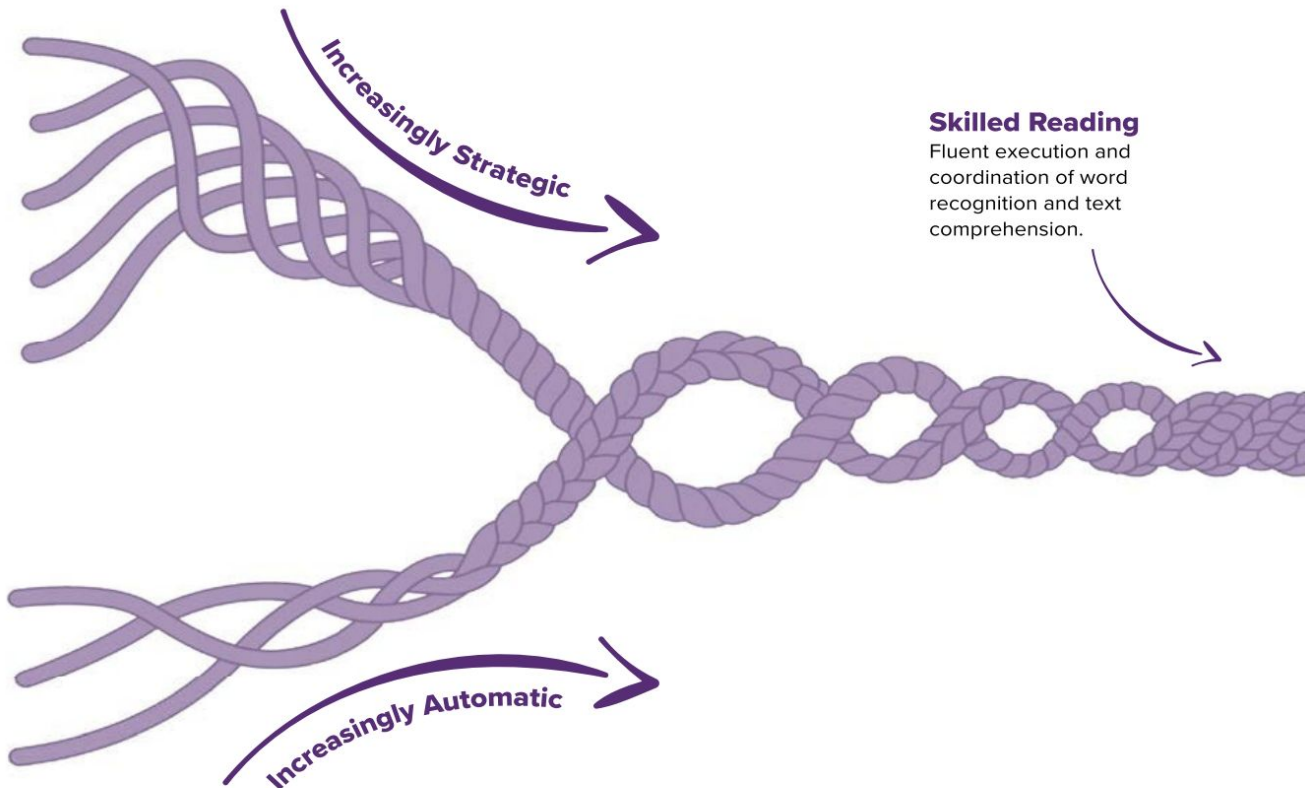
**Literacy Knowledge**  
(print concepts, genres, etc.)

## Word Recognition

**Phonological Awareness**  
(syllables, phonemes, etc.)

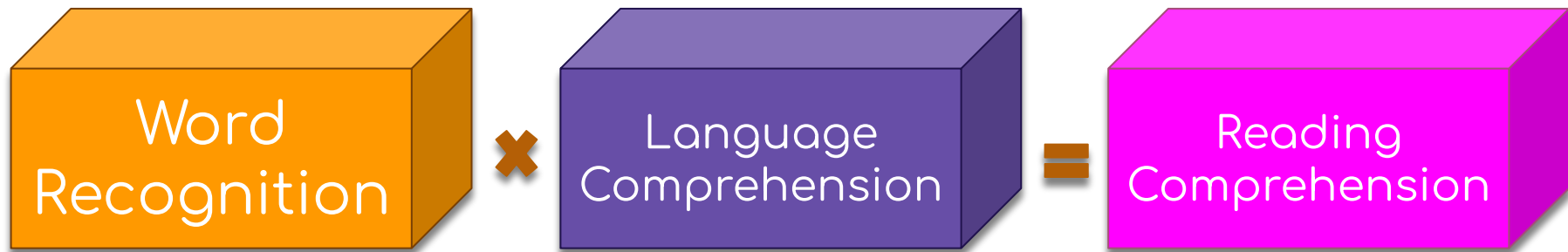
**Decoding**  
(alphabetic principle,  
spelling-sound correspondences)

**Sight Recognition**  
(of familiar words)




## Skilled Reading

Fluent execution and coordination of word recognition and text comprehension.



1	×	1	=	1
1	×	0	=	0
1/2	×	1/2	=	1/4
.75	×	1	=	.75

# Literacy Initiatives in CA (not an exhaustive list)

A grey starburst callout box with a blue outline, containing text.

With connections to  
work and initiatives  
in our county



# CALIFORNIA Comprehensive State Literacy Plan



March 2021  
California Department of Education

Priority 1	Birth to age five projects that support <u>early childhood education programs</u> that promote literacy-rich environments and experiences and support the quality of programs and their capacity to support <b>early language and literacy skills, as well as to increase family support by increasing knowledge, skills, and confidence through family-centered curriculum and literacy activities with special attention to linguistic diversity and equity and access for all.</b>
Priority 2	TK–5 programs that build <u>teacher capacity</u> for <b>Tier 1 literacy instruction, including foundational skills, reading comprehension, and best first reading and writing instruction.</b>
Priority 3	TK-5 programs that build <u>school capacity</u> for <b>effective literacy and comprehensive English Language Development (ELD) for English Learner (EL) students</b> , including opportunities to develop biliteracy and primary language instruction whenever possible.
Priority 4	TK–5 programs that build <u>school capacity</u> to support <b>students struggling with reading</b> , including, but not limited to, <b>students with disabilities and students with dyslexia.</b>
Priority 5	Grades 6–12 programs that build <u>teacher capacity</u> <b>across disciplines for literacy instruction, including peer to peer coaching models.</b>
Priority 6	Grades 6–12 programs that build <u>school capacity</u> for <b>effective literacy and comprehensive ELD for EL students</b> , including opportunities to develop biliteracy and primary language instruction whenever possible.
Priority 7	Grades 6–12 programs that promote and build <u>school capacity</u> for <b>effective literacy instruction for students with disabilities.</b>



# CALIFORNIA Comprehensive State Literacy Plan



March 2021  
California Department of Education

**BILITERACY/ MULTILINGUALISM**

**LANGUAGE ARTS**

**LANGUAGE PROFICIENCY**

**LITERACY**

**READING**

**WR  
+  
LC**

**Foundational  
skills**



# Some of the CA Statewide Literacy Initiatives

Initiative	Lead(s)	Timeline	Resources
<a href="#">California Dyslexia Initiative (CDI)</a>	Sacramento COE w/UCSF	Through 2024	<a href="#">CDI Conference</a>
<a href="#">Comprehensive Literacy State Development Grants (CLSD)</a>	Various COEs	Through fall 2024	<a href="#">Online Literacy Resources Repository</a>
<a href="#">Early Literacy Support Block Grant (ELSB)</a>	Sacramento COE & CDE	Through June 2024	<a href="#">Resource Padlet</a>
<a href="#">EWIG: Effective Language Acquisition Programs</a>	LA, Orange, Sacramento, San Bernardino COEs	Through June 2025	New: Specific to each Zone
<a href="#">Learning Acceleration Grants</a>	<a href="#">Santa Clara COE</a> <a href="#">San Diego COE</a>	Through 2027	<a href="#">CCEE's CCLA</a>
<a href="#">Literacy Coaches/Reading Specialists Educator Training Grant (LCRSET)</a>	Sacramento & Napa COEs	Through June 2028	<a href="#">Resource Padlet</a> <a href="#">Flyer</a>
<a href="#">Reading Instruction and Intervention Grant (RII)</a>	Contra Costa COE	Through March 2026	<a href="#">Project Arise courses</a> are available

# Some more CA Statewide Literacy Initiatives...

## CA Coalition for Inclusive Literacy ([CCIL](#))

Universal Design for Learning for Inclusive literacy; First round sunsetted in 2023; Trained Coaches

## CA Reading and Literature Project ([CA Reading & Literature Project](#))

Based at Universities - UCs and CSUs - and virtual - ongoing.

Teaching and assessment of: Foundational reading skills; Reading comprehension & academic language; Content area literacy; Designated/integrated ELD; Biliteracy transfer instruction (Spanish/English)

## Learning Acceleration Grants

## Redesign of the Pre-Kindergarten Learning Foundations

## Additional Grants to support EL Roadmap implementation

## Hiring of Specialists at the CDE

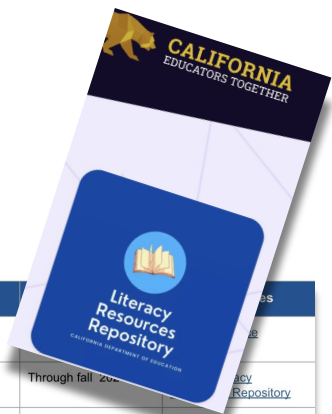
# LETRS Professional Learning: Science of Reading



- 8 Unit Intensive Course
- Generally over two years
- 140 - 170 hours to complete
- Brain science - how reading develops
- Course work (online or in-person), Reading, Bridge to Practice
- Not a step-by-step or simple
- Curriculum agnostic - but systematic

# Statewide Actions to Support Literacy

## Grants, Professional Learning, and Resources for Educators



Initiative	Lead(s)	Timeline	Resources
<a href="#">California Dyslexia Initiative (CDI)</a>	Sacramento COE w/UCSF		
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<a href="#">EWIG: Effective Language Acquisition Programs</a>	LA, Orange, Sacramento, San Bernardino COEs	Through June 2025	In development; contact zone leads
<a href="#">Learning Acceleration Grants</a>	<a href="#">Santa Clara COE</a> <a href="#">San Diego COE</a>	Through 2027	<a href="#">CCEE's CCLA</a>
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## Other Actions and Supports

Existing & New

Required Screeners  
In K-2

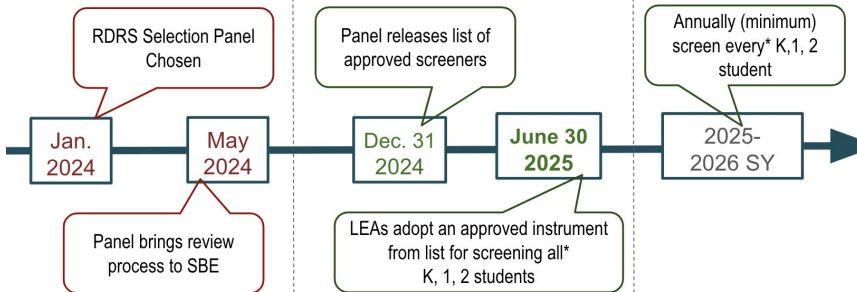
All Teacher Credential Programs:  
Additional Program Standard for  
literacy instruction

# Statewide Actions to Support Literacy

## Required Screeners In K-2

## All Teacher Credential Programs: Additional Program Standard for literacy instruction

### Timeline for RDRSSP



### Preliminary Multiple Subject/Single Subject Credential Evidence Guide Standard 7: Effective Literacy Instruction for All Students

The purpose of this document is to assist prospective Preliminary Multiple Subject and Single Subject credential programs in responding to Program Standard 7: Effective Literacy Instruction for All Students. In the following table, the standard is divided into sections to ensure that prospective programs address each aspect of the standard. (The fact that this guidance document separates the standard section should not prohibit the various concepts from being interwoven throughout the program coursework and clinical practice as is best practice in reading and literacy instruction and as described in Standard 1.) While a brief narrative is acceptable, please be judicious about the length of your response. Reviewers will be looking for the content of the standards reflected in your program. Additionally, unsubstantiated claims/narrative will not be sufficient.

In responding to the standard, please include the following:

- Please list all required reading and literacy instruction related courses for the proposed Multiple Subject/Single Subject credential, by title and number.
- Please link the syllabi for the courses identified in #1.
- Please identify any other coursework in which reading and literacy instruction is covered but where it may not be the primary focus of the course.
- Please note that evidence for each element of the standard must be demonstrated in both coursework and clinical practice.

Note: As part of the program review process, a TPE Matrix is required indicating where each TPE competency is introduced, practiced, and assessed (see IPR Instructions) within the program. In the case of Program Standard 7, TPE 7 is the corresponding TPE. If the standard language is addressed by the evidence provided in the TPE matrix, prospective programs may indicate such and link to the same evidence. This will not be the case for all phrases of the standard language so please review carefully. Responses may, but are not required, to be submitted on this form but must contain all the information requested and be organized similarly.

# Assembly Bill 2222

(Rubio - D, Baldwin Park)



# Assembly Bill 2222

AB 2222 would define evidence-based literacy instruction as:

“evidence-based explicit and systematic instruction in phonological and phonemic awareness, phonics, vocabulary and oral language development, fluency, comprehension, and writing ... that adheres to the science of reading.”

# AB 2222 Proposed Changes

## 1. Teacher Training

At least 30 hours of training from list for every TK-5 teacher by 2028

Districts would have to inform parents if <90% of teachers completed

## 2. Instructional Materials

Change in statute and local control

Would move adoption cycle and require to be from list

## 3. Teacher Preparation

Probation or loss of accreditation

Reading Specialist appointed to CA Commission on Teacher Accreditation



# Support for and Opposition to AB2222

(Rubio - D, Baldwin Park)



✓ Ed Voice

✓ Decoding  
Dylexia CA

✓ Families in  
Schools



X CA Teachers  
Association

X CA Assn. of  
Bilingual Ed.

X Californians  
Together



## Joint Statement

March 2023



National Committee  
for Effective Literacy

“The summit sought to **highlight the areas of alignment** between experts in the fields of **reading science** and **English learner/emergent bilingual (EL/EB) education**”.

**Significant agreement from leaders who are on both sides of this bill**

**Agreement about Reading Science and Language Development**

Agreement

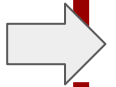
PROBLEM



The Need to Ground Knowledge and Practice in the Science of Reading

When interests can agree on the problem but not the solution - OPPORTUNITY to come together - better outcome for all

SOLUTION



What is NOT in the Bill gets diminished

Changes in Local Control as Precedent

Feasibility and unintended outcomes

Disagreement

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# Questions?



# Thank you