Disciplinary Literacy and Supporting Adolescent Readers

April 10, 2025

Session 7

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Meet the Presenters

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Housekeeping

- Please complete the registration form for this event.
- Today's slide deck can be accessed here:
- All resources are available in a our shared folder and archived on ISBE's Illinois Comprehensive Literacy Plan webpage after each session.

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Illinois has an **urgent** and **collective responsibility** to achieve **educational equity** by ensuring that **all** policies, programs, and practices **affirm** the **strengths** that each and **every child** brings within their **diverse backgrounds** and **life experiences**, and by delivering the comprehensive **supports**, **programs**, and **educational opportunities** they need to **succeed**.

ISBE Equity Statement

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Shared Norms

Empower — Stay future-focused, work toward solutions, and promote progress in every discussion.

Engage — Actively participate by sharing feedback and interacting in both the chat and small groups.

Uplift — Encourage diverse perspectives, provide space for everyone to share their ideas, and embrace discomfort to foster growth.

Unite — Foster a sense of togetherness and openness, ensuring full participation. Make your video available if possible.

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Learning Outcomes

- Understand key concepts of *disciplinary literacy* and they relate to literacy needs of adolescents
- Align disciplinary literacy instructional practices with the diverse needs of your students
- Become familiar with digital and print resources that support disciplinary literacy practices

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Agenda

1. disciplinary literacy overview
2. highlight instruc-tional practices
3. review resources

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What instructional or curricular strengths are you observing in Tier 1/core literacy across disciplines in Grades 6-12?

Why do you consider what you're observing a strength?

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2024 ILLINOIS COMPREHENSIVE LITERACY PLAN

isbe.net/LiteracyPlan

January 2024

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Content or disciplinary literacy focuses on developing students' ability to effectively read, write, and communicate within specific academic disciplines. This aspect of literacy recognizes that different subjects like science, mathematics, history, and literature each have unique conventions, vocabularies, and methods of inquiry.

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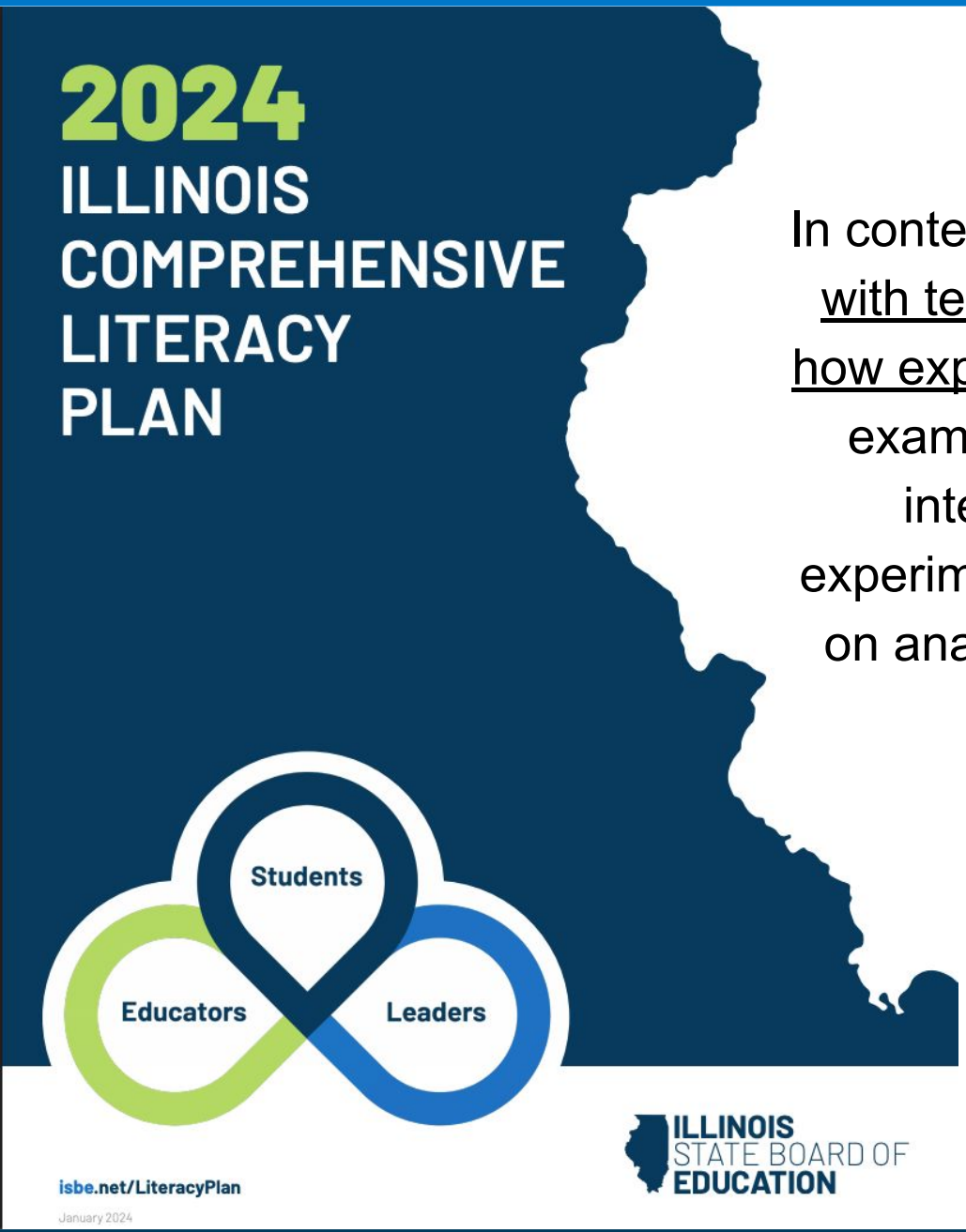

In content literacy, students learn to engage with texts in a manner that is reflective of how experts in the field approach them. For example, in science, this might involve interpreting data from graphs and experiments, while in history, it might focus on analyzing primary source documents.

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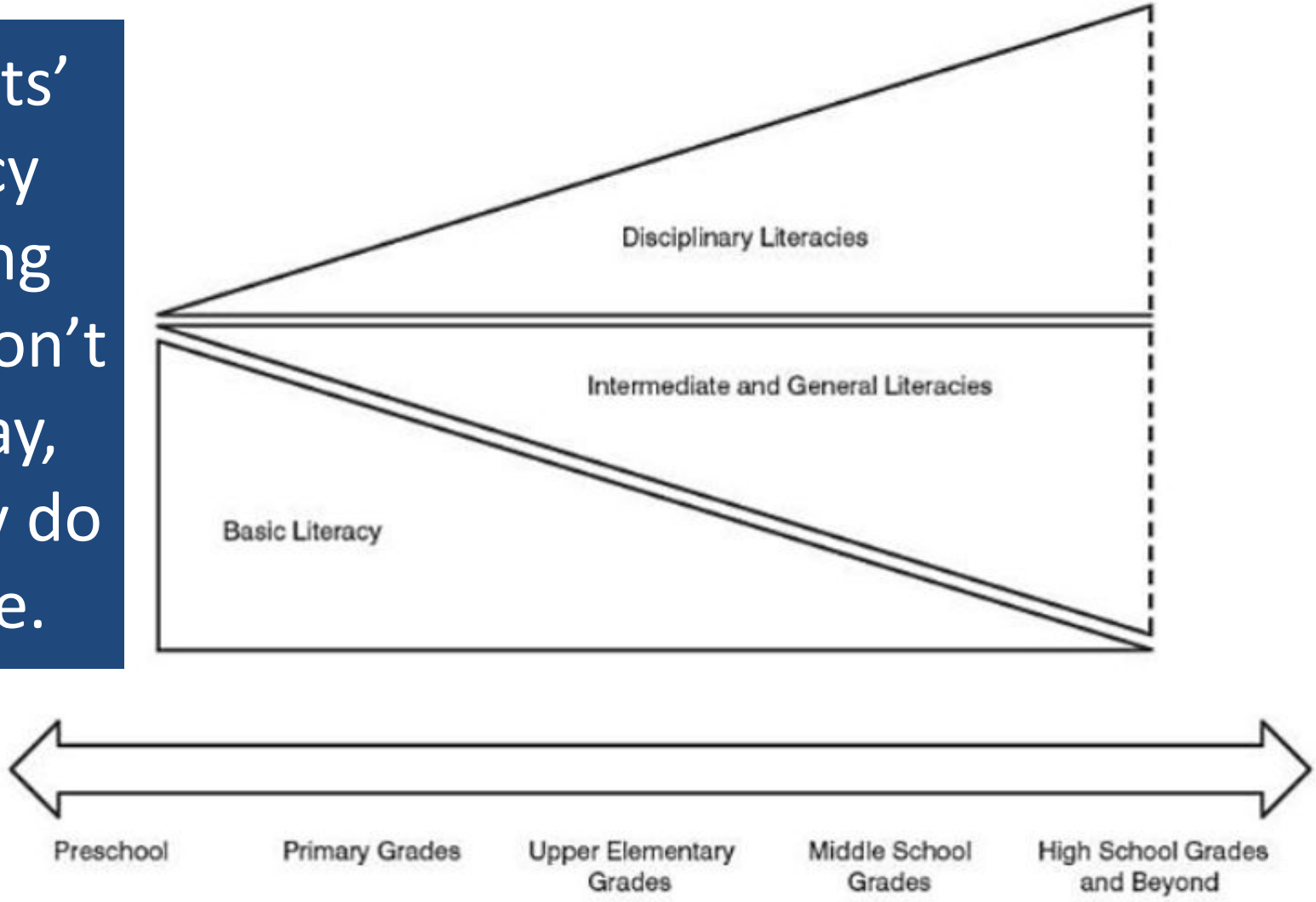
Students' literacy learning needs don't go away, but they do change.



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content area literacy

put literacy IN the content area classrooms

general reading comprehension strategies for learning content

disciplinary literacy

uncover the literacy practices IN the disciplines to replicate knowledge-making and inquiry within them

discipline-specific strategies for reading, writing, and talk

critical disciplinary literacy

uncovering the power structures within disciplinary knowledge

seek to change and expand, not merely replicate disciplinary practices

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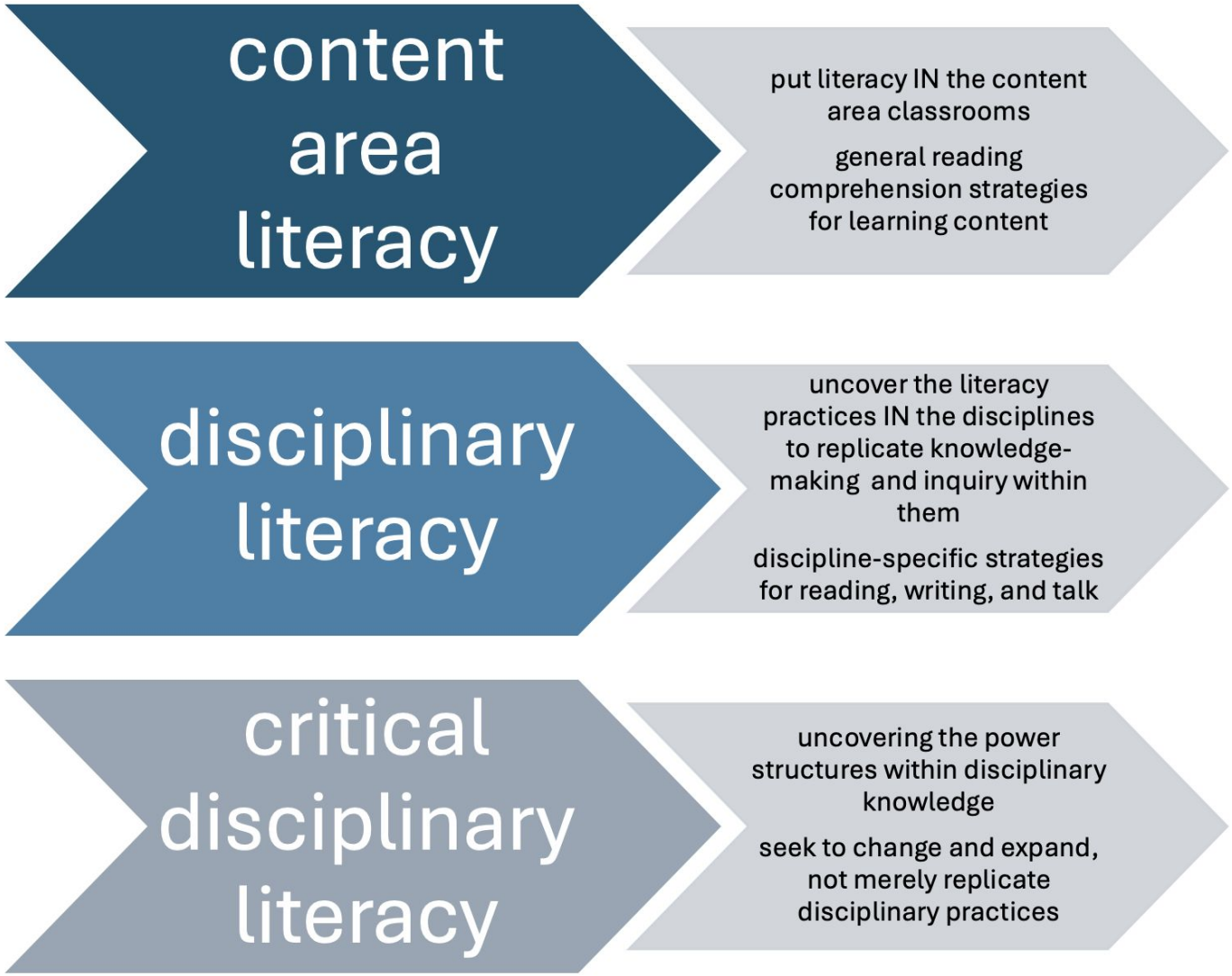

"Every teacher is a teacher of reading!"

"Every teacher is a an expert in their discipline. Show students how to think like a..."

expertise is <u>shared</u>, replication is not enough

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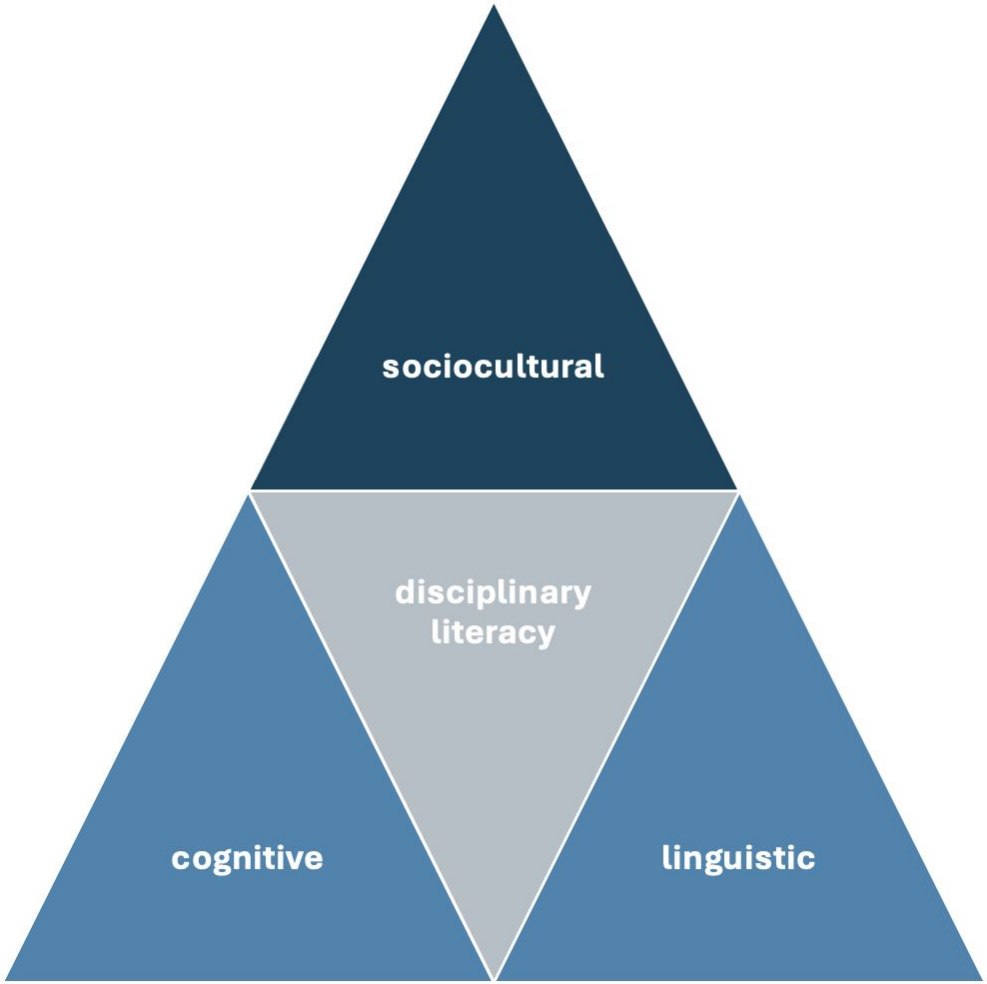
three ways of viewing the differences among disciplines



different goals, conceptions of what knowledge is, and ways of producing it.

engage in and privilege different kinds of thinking.

use language in different ways to make and communicate meaning.

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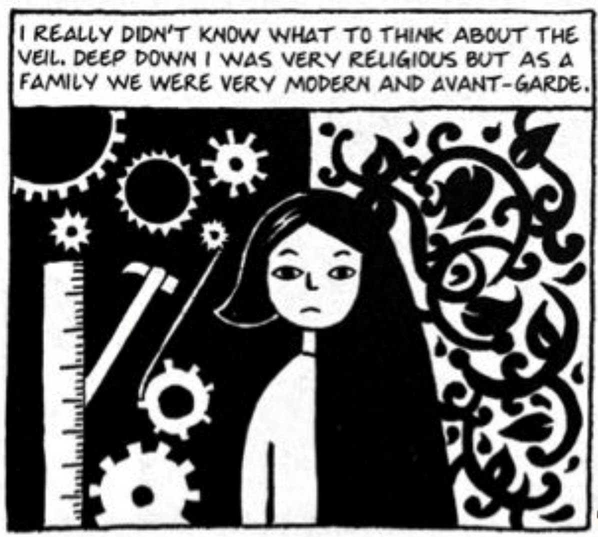
A good man is hard to find

(The Avon Book of Modern Writing, 1953)

THE grandmother didn't want to go to Florida. She wanted to visit some of her connections in east Tennessee and she was seizing at every chance to change Bailey's mind. Bailey was the son she lived with, her only boy. He was sitting on the edge of his chair at the table, bent over the orange sports section of the Journal. "Now look here, Bailey," she said, "see here, read this," and she stood with one han… and the other rattling the newspaper at his bald head. "Here this… himself The Misfit is aloose from the Federal Pen and headed towar… read here what it says he did to these people. Just you read it. I… children in any direction with a criminal like that aloose in it. I coul… conscience if I did."



Style · Perspective

The truths 'To Kill a Mockingbird' tells about white people

Rereading a classic on its 60th anniversary

By Errin Haines | The 19th

Add to list

I was probably 15 or 16 when I first read Harper Lee's "To Kill A Mockingbird." I may have seen the movie before then (one I have watched countless times since). The story, one of my favorites of all time, solidified Lee's unwavering status as one of my top-five authors.

This month marks the 60th anniversary of the Pulitzer Prize-winning book. For me, the enduring

Still I Rise

BY MAYA ANGELOU

You may write me down in histo…
With your bitter, twisted lies,
You may trod me in the very dir…
But still, like dust, I'll rise.

Does my sassiness upset you?
Why are you beset with gloom?
'Cause I walk like I've got oil we…
Pumping in my living room.

Just like moons and like suns,
With the certainty of tides,

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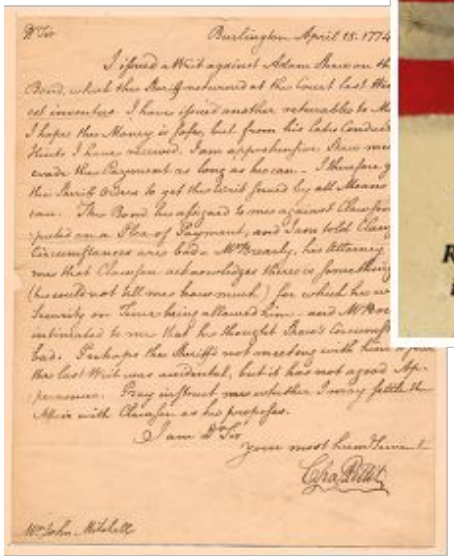

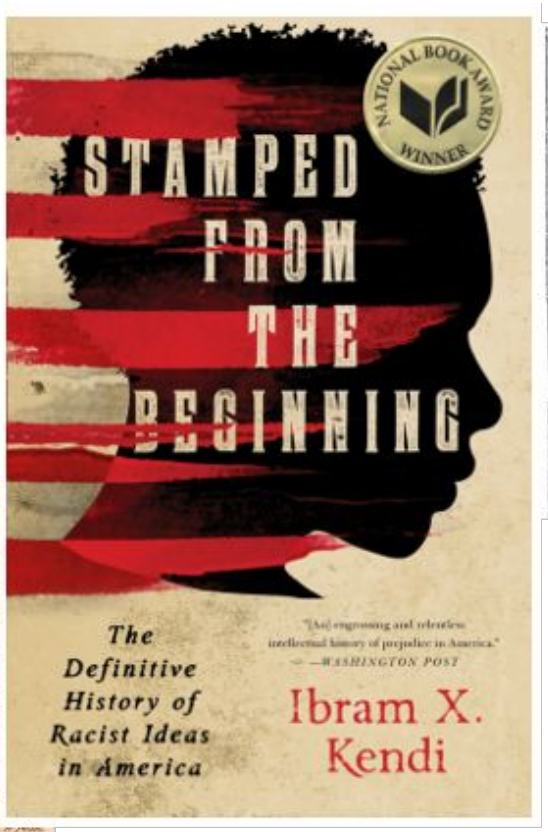

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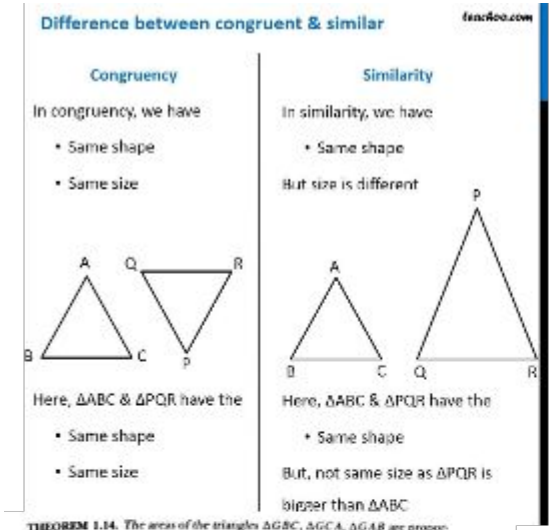


THEOREM 1.14. *The areas of the triangles ΔGBC, ΔGCA, ΔGAB are proportional to the numbers a, b, c* (see Figure 1.12).

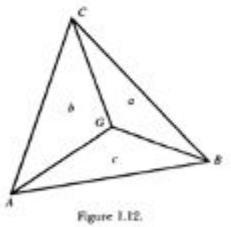


Figure 1.12.

Proof. Let C' be the intersection point of ℓ_{CG} with ℓ_{AB}. First we observe that the areas of $\Delta AC'C$ and $\Delta C'BC$ are proportional to the numbers b and a, since the triangles have the same height, and the length of the bases are proportional to b and a, in this order. It follows that

$$\frac{b}{a} = \frac{\text{area } \Delta CAC'}{\text{area } \Delta CC'B} = \frac{\text{area } \Delta GAC'}{\text{area } \Delta GC'B}$$
$$= \frac{\text{area } \Delta CAC' - \text{area } \Delta GAC'}{\text{area } \Delta CC'B - \text{area } \Delta GC'B}$$
$$= \frac{\text{area } \Delta CAG}{\text{area } \Delta CGB}$$

12 CHAPTER 1 PRELIMINARIES

Section 1.2 Mathematical Induction

Mathematical Induction is a powerful method of proof that is frequently used to establish the validity of statements that are given in terms of the natural numbers. Although its utility is restricted to this rather special context, Mathematical Induction is an indispensable tool in all branches of mathematics. Since many induction proofs follow the same formal lines of argument, we will often state only that a result follows from Mathematical Induction and leave it to the reader to provide the necessary details. In this section, we will state the principle and give several examples to illustrate how inductive proofs proceed.

We shall assume familiarity with the set of natural numbers:

$$\mathbb{N} = \{1, 2, 3, \ldots\},$$

with the usual arithmetic operations of addition and multiplication, and with the meaning of a natural number being less than another one. We will also assume the following fundamental property of $\mathbb{N}$.

1.2.1 Well-Ordering Property of $\mathbb{N}$ *Every nonempty subset of $\mathbb{N}$ has a least element.*

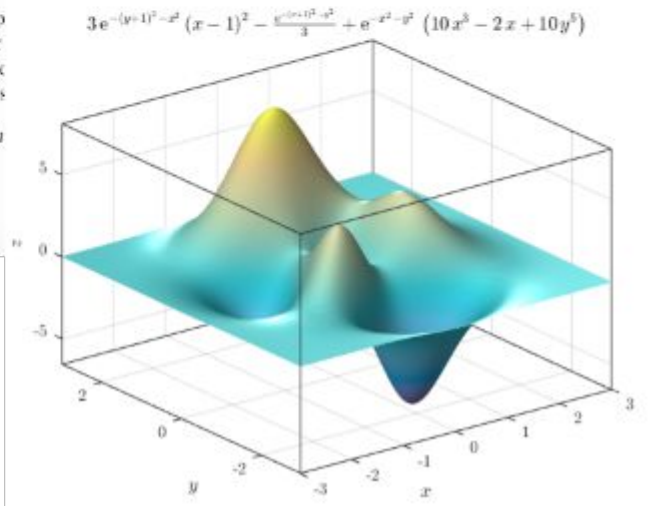
A more detailed statement of this property is as follo
$S \neq \emptyset$, then there exists $m \in S$ such that $m \leq k$ for all k

On the basis of the Well-Ordering Property, we shall
of Mathematical Induction that is expressed in terms of

1.2.2 Principle of Mathematical Induction *Let S be a two properties:*

(1) *The number $1 \in S$.*

(2) *For every $k \in \mathbb{N}$, if $k \in S$, then $k + 1 \in S$.*



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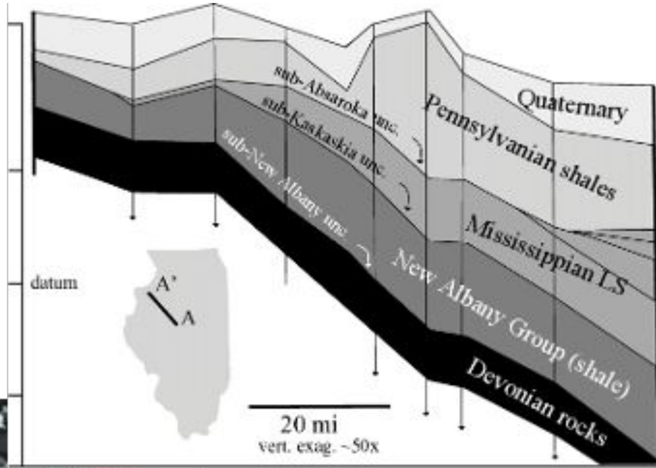
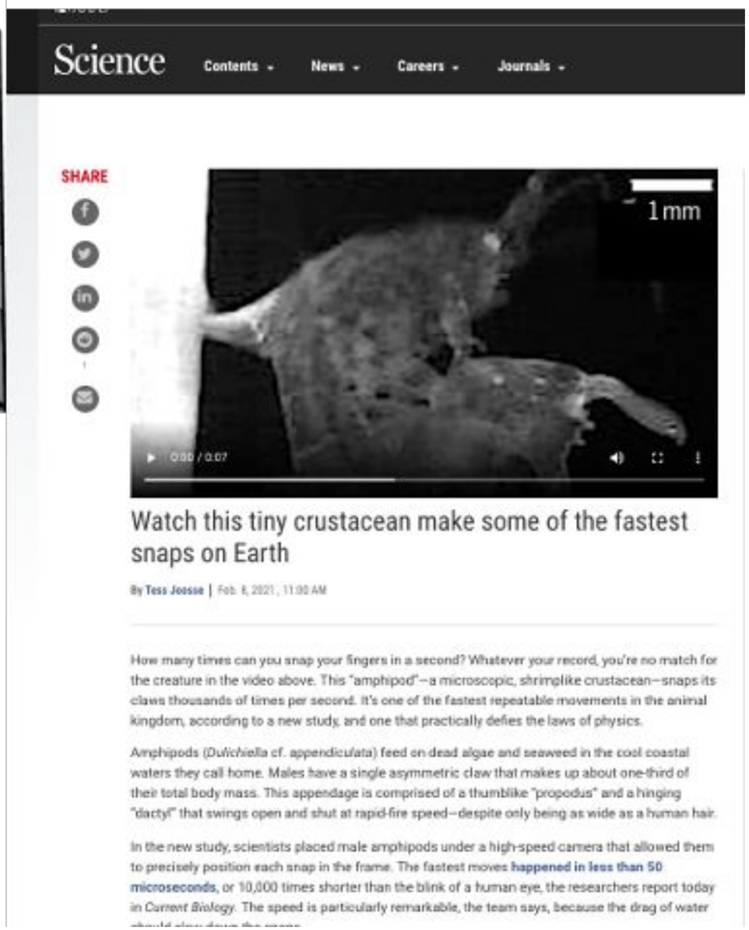
UNCOVERING THE SPLICEOSOME'S SECRETS

With a high-resolution structure of the mRNA-SPLICING MACHINE now in hand, a new era of biological and pharmaceutical discovery is dawning

WATCHING FRUIT FLIES buzz around the ripe bananas in your kitchen, you might think it's a tad ludicrous, mortifying even, that humans have a similar number of genes—about [illegible] as the lowly insects. We are certainly more complex than *Drosophila melanogaster*, so what gives?





Watch this tiny crustacean make some of the fastest snaps on Earth

By Tess Joosse | Feb. 8, 2021, 11:00 AM

How many times can you snap your fingers in a second? Whatever your record, you're no match for the creature in the video above. This "amphipod"—a microscopic, shrimplike crustacean—snaps its claws thousands of times per second. It's one of the fastest repeatable movements in the animal kingdom, according to a new study, and one that practically defies the laws of physics.

Amphipods (*Dulichiella* cf. *appendiculata*) feed on dead algae and seaweed in the cool coastal waters they call home. Males have a single asymmetric claw that makes up about one-third of their total body mass. This appendage is comprised of a thumblike "propodus" and a hinging "dactyl" that swings open and shut at rapid-fire speed—despite only being as wide as a human hair.

In the new study, scientists placed male amphipods under a high-speed camera that allowed them to precisely position each snap in the frame. The fastest moves happened in less than 50 microseconds, or 10,000 times shorter than the blink of a human eye, the researchers report today in *Current Biology*. The speed is particularly remarkable, the team says, because the drag of water

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What happens to texts as readers grow?

Take on purposes and content tied with the broader historical and social world

Follow forms governed by unfamiliar disciplinary practices

Use language and ideas that are increasingly decontextualized and abstract, often with reliance on more complex internal clause structure

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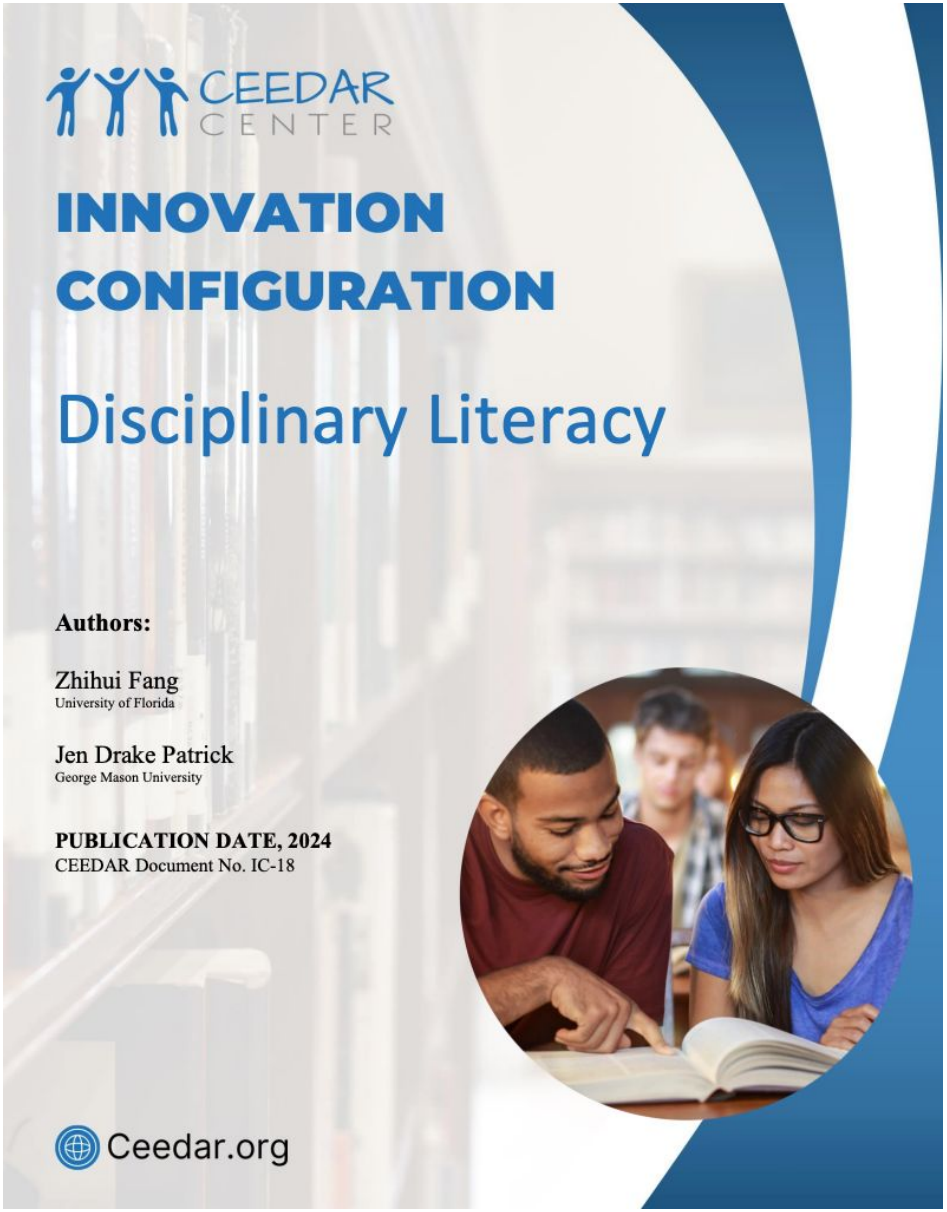

Let's take a closer look at one publication's view of literacy in the disciplines

Breakout rooms

What do you notice?
Which of these elements of disciplinary literacy practice do you see in your school settings?
Which others do you see?

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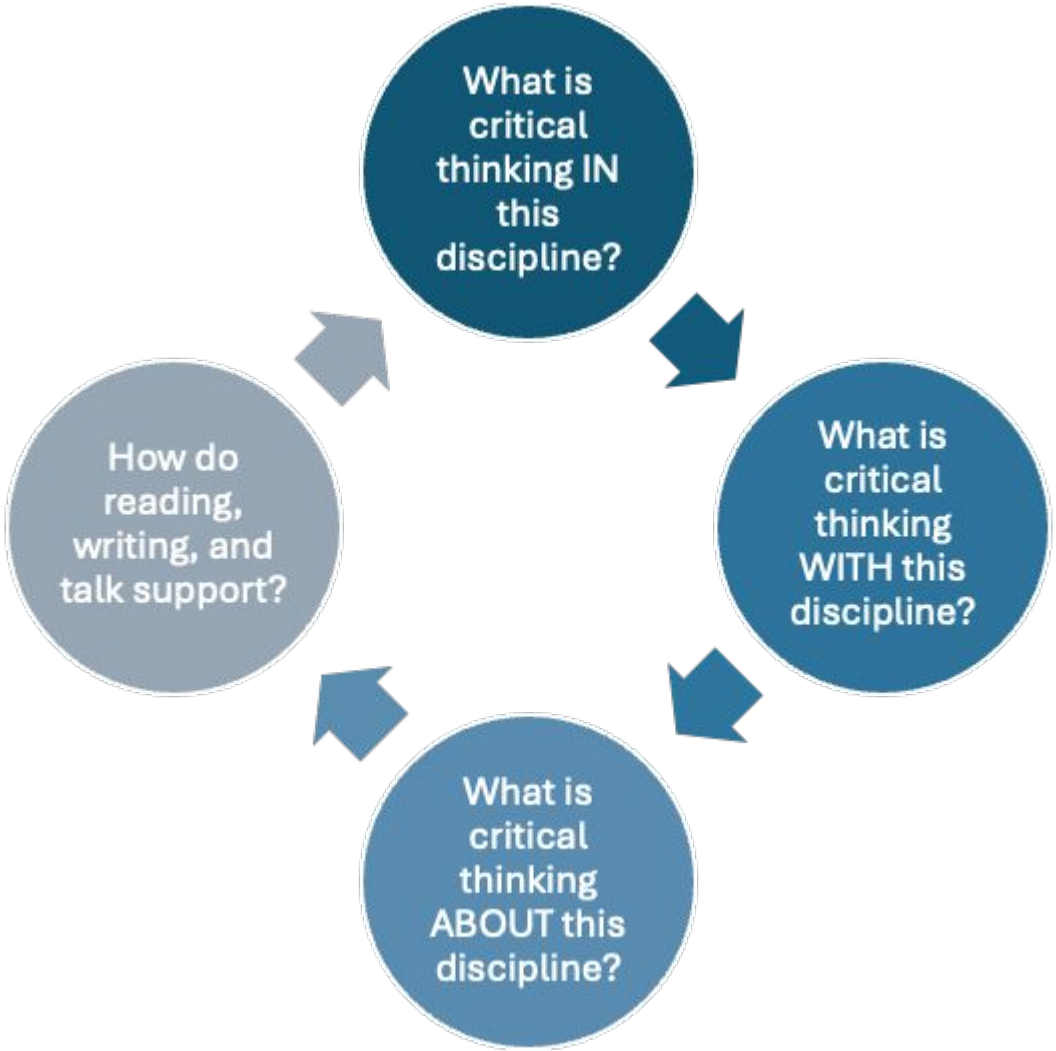
a framework for critical thinking and motivation



How do I detect and account for bias in primary historical sources?

How do I use primary sources to develop an account of an event?

Why do dominant accounts of an event privilege or exclude certain perspectives?

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A disciplinary approach to literacy

is…

- an acknowledgment that the need for literacy instruction doesn't end
- a validation of the literacy expertise of teachers in all disciplines
- a way to frame learning in real-world, inquiry-based settings

is not…

- a panacea for all literacy challenges in MS/HS
- an abandonment of "content area reading" strategies
- a program, curriculum, or package

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What can make difficult text difficult?

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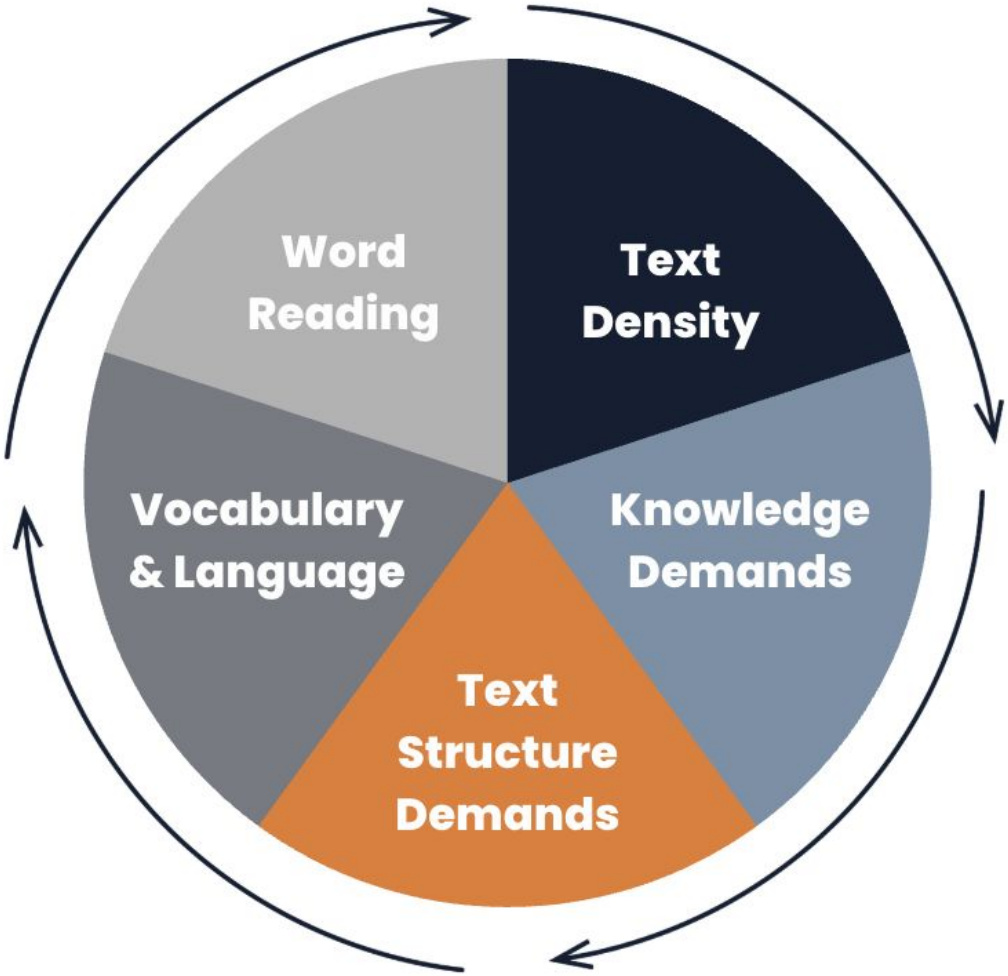

What about a text can be difficult?

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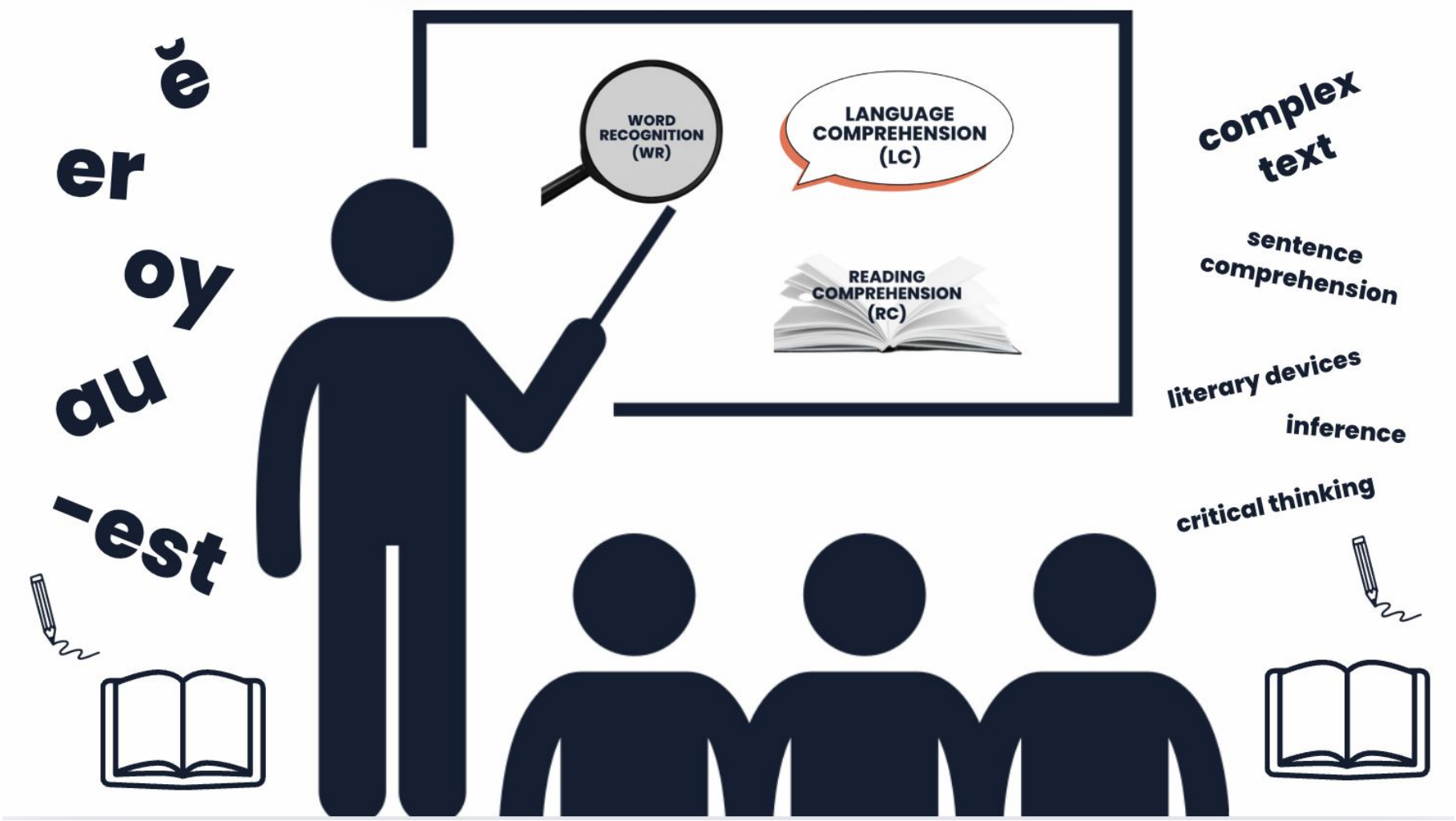

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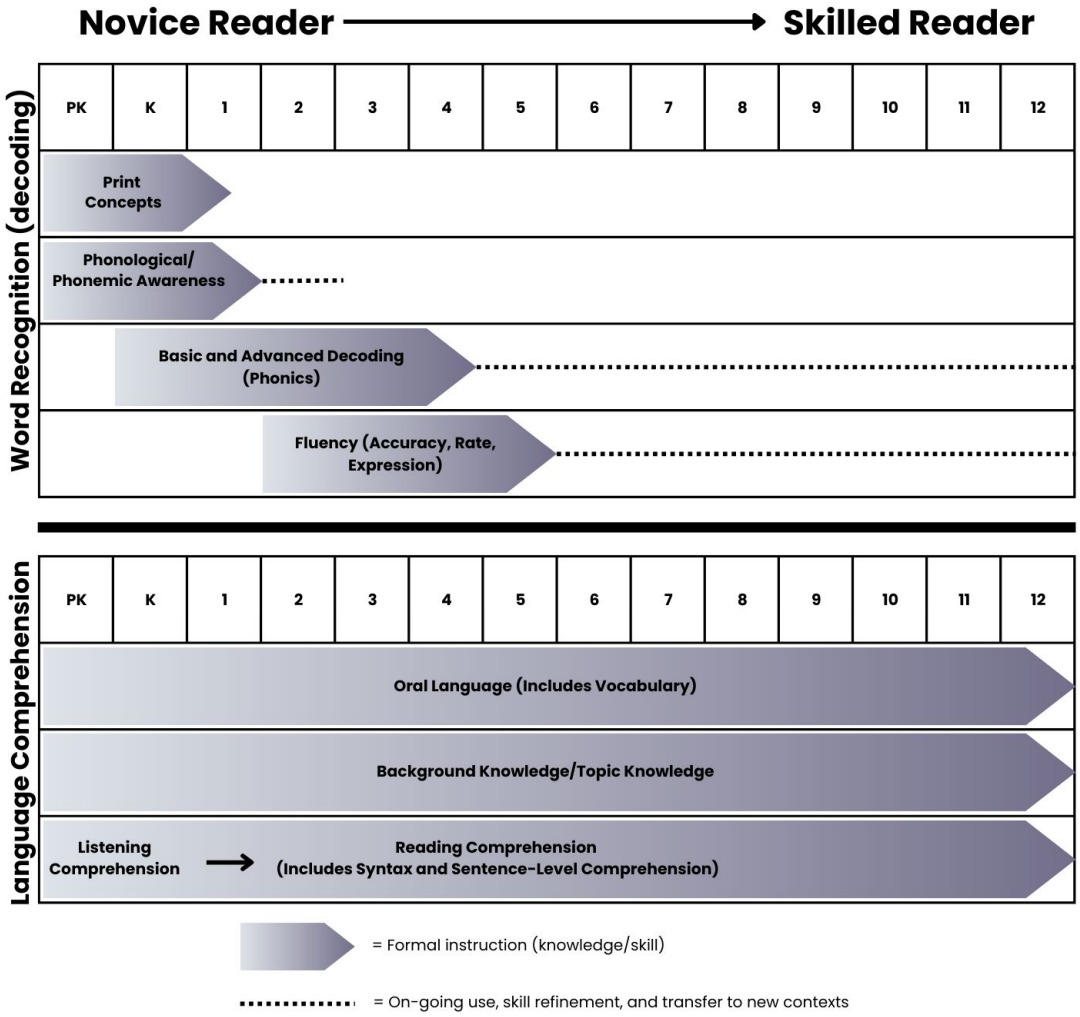
Learning Progression for Developing Skilled Readers



ISBE Dyslexia Handbook, P. 76

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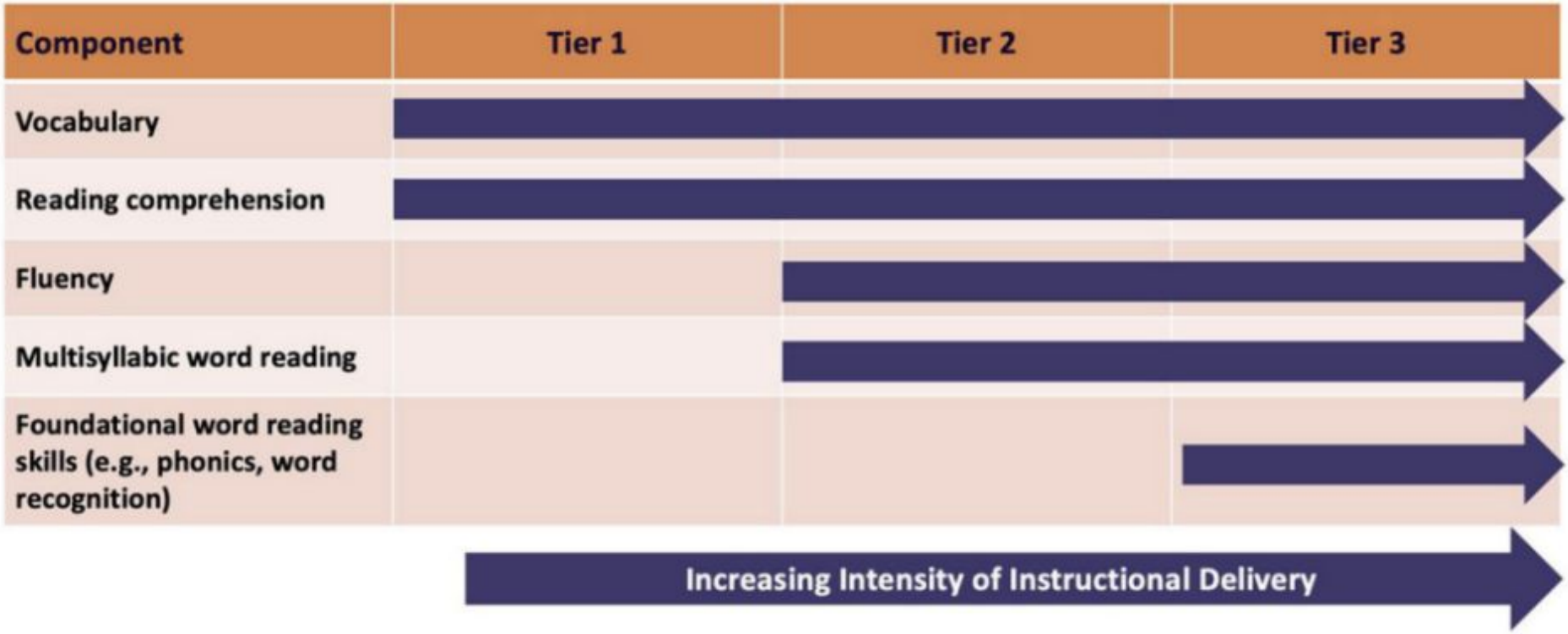
Tiers of Reading Instruction for Secondary Settings



ISBE Dyslexia Handbook, P. 77

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Recognize	• Students' strengths & identities, including knowledge & experiences, community connections, & linguistic resrouces.
Leverage	• Those strengths & identities through thoughtful text selection, purposeful learning experiences, and targeted scaffolds.
Support	• Students by providing practice & intruction to develop literacy knowledge using strengths & identities as levers for learning from texts.

(Lupo, Reynolds, & Hardigree, 2025)

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Vocabulary & Language Scaffold

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Phonology (What sounds does the word have?)	**O**rthography (How is the word spelled?)	**S**yntax (What part of speech?)
		
Semantics (What is the meaning of the word?)	**U**nderstanding (Does this word sound familiar? Where is it from?)	**M**orphology (Are there meaningful word parts?)

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Phonology (What sounds does the word have?)	**O**rthography (How is the word spelled?)	**S**yntax (What part of speech?)
2 syllables	prefix + root	verb
 predict 		
Semantics (What is the meaning of the word?)	**U**nderstanding (Does this word sound familiar? Where is it from?)	**M**orphology (Are there meaningful word parts?)
to say before to say what you think will happen before it happens	in ELA we predict what will happen in the book	**pre** before **dict** to say or speak

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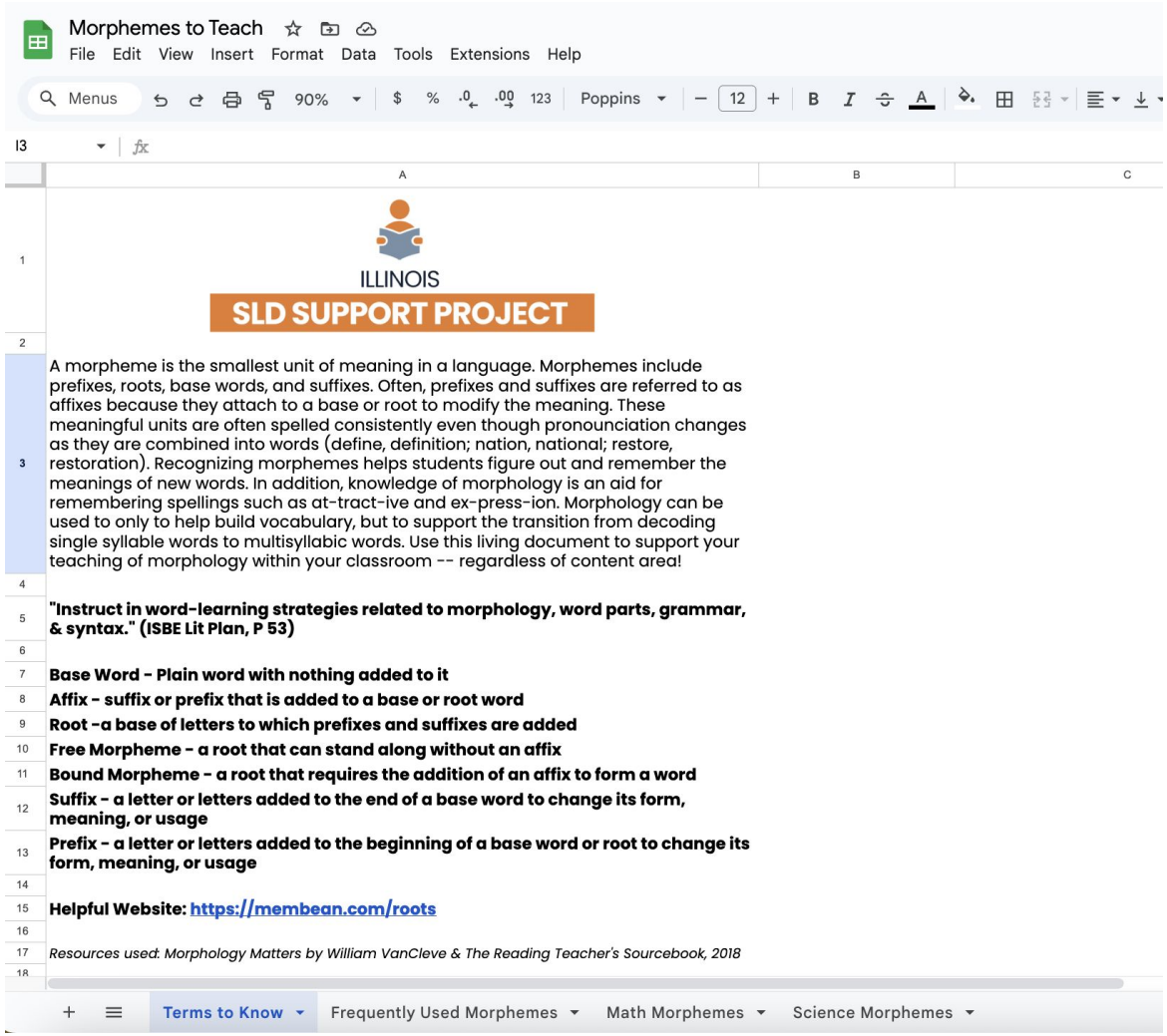
What morphemes do I teach?



Morphemes to Teach

File Edit View Insert Format Data Tools Extensions Help

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A morpheme is the smallest unit of meaning in a language. Morphemes include prefixes, roots, base words, and suffixes. Often, prefixes and suffixes are referred to as affixes because they attach to a base or root to modify the meaning. These meaningful units are often spelled consistently even though pronounciation changes as they are combined into words (define, definition; nation, national; restore, restoration). Recognizing morphemes helps students figure out and remember the meanings of new words. In addition, knowledge of morphology is an aid for remembering spellings such as at-tract-ive and ex-press-ion. Morphology can be used to only to help build vocabulary, but to support the transition from decoding single syllable words to multisyllabic words. Use this living document to support your teaching of morphology within your classroom -- regardless of content area!

"Instruct in word-learning strategies related to morphology, word parts, grammar, & syntax." (ISBE Lit Plan, P 53)

Base Word - Plain word with nothing added to it

Affix - suffix or prefix that is added to a base or root word

Root -a base of letters to which prefixes and suffixes are added

Free Morpheme - a root that can stand along without an affix

Bound Morpheme - a root that requires the addition of an affix to form a word

Suffix - a letter or letters added to the end of a base word to change its form, meaning, or usage

Prefix - a letter or letters added to the beginning of a base word or root to change its form, meaning, or usage

Helpful Website: https://membean.com/roots

Resources used: Morphology Matters by William VanCleve & The Reading Teacher's Sourcebook, 2018

Terms to Know | Frequently Used Morphemes | Math Morphemes | Science Morphemes

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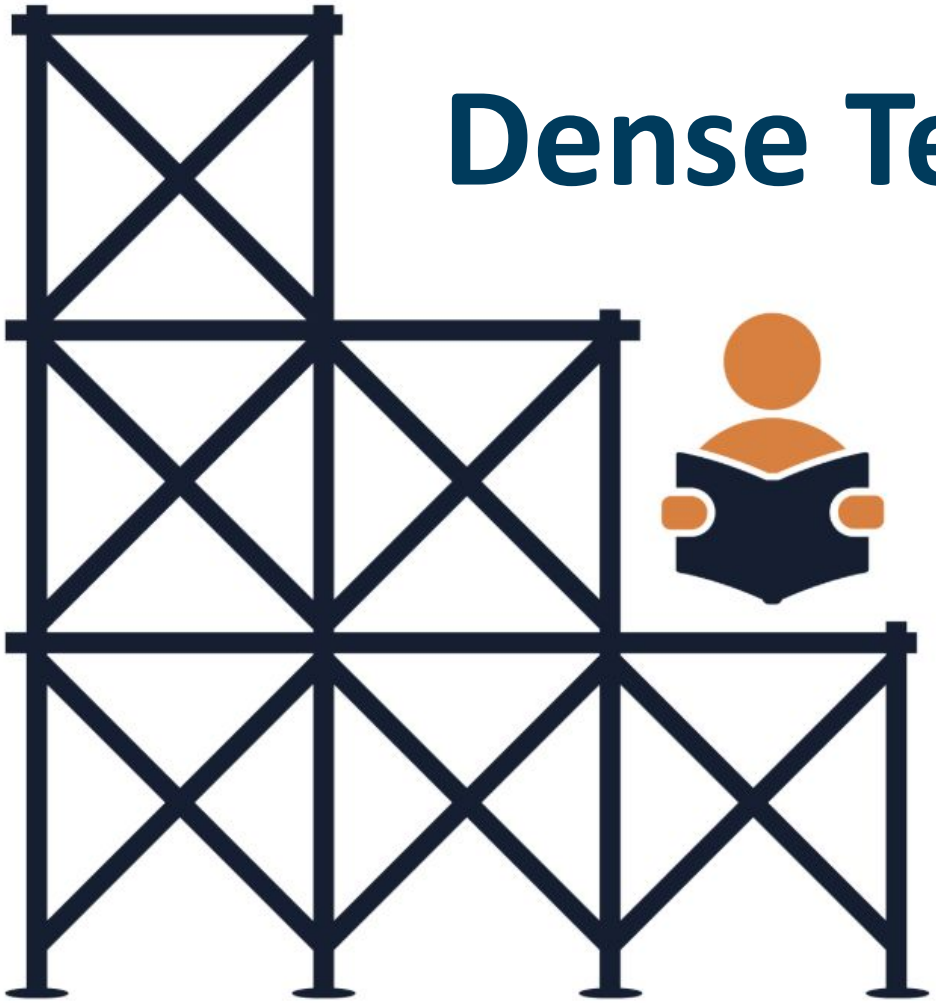
Dense Text Scaffold



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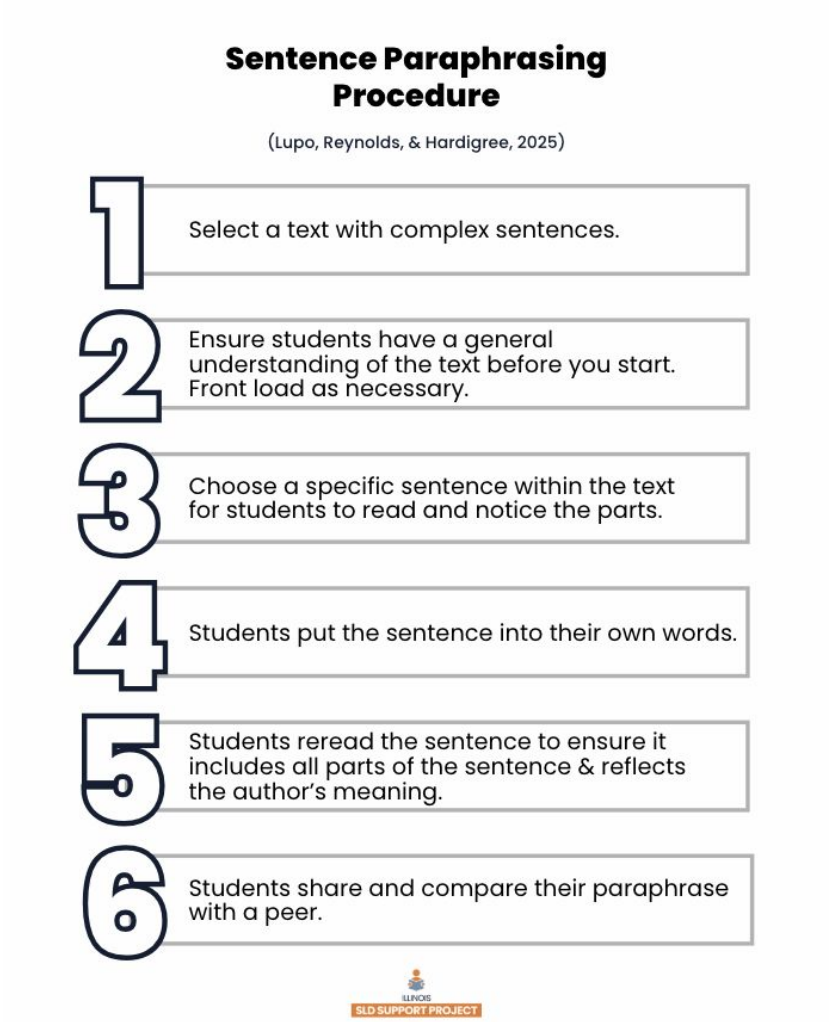
Sentence Paraphrasing



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Sentence Paraphrasing Procedure

(Lupo, Reynolds, & Hardigree, 2025)

1 Select a text with complex sentences.

2

Ensure students have a general understanding of the text before you start. Front load as necessary.

Before reading, introduce the Elizabethan era, theater's role, historical context, setting, common language with translations, and figurative devices such as metaphors. Consider curating a text set with photos, multimedia such as video clips, short stories, etc. Review these elements as students begin Act 2.

3 Choose a specific sentence within the text for students to read and notice the parts.

"But, soft! What light through yonder window breaks? It is the east, and Juliet is the sun."

4

Students put the sentence into their own words.

"But, soft! What light through yonder window breaks?

It is the east, and Juliet is the sun."

Be quiet! Look! What light is shining through that window?

metaphor - the sun rises in the east. Juliet is radiant.

5 Students reread the sentence to ensure it includes all parts of the sentence & reflects the author's meaning.

6

Students share and compare their paraphrase with a peer.

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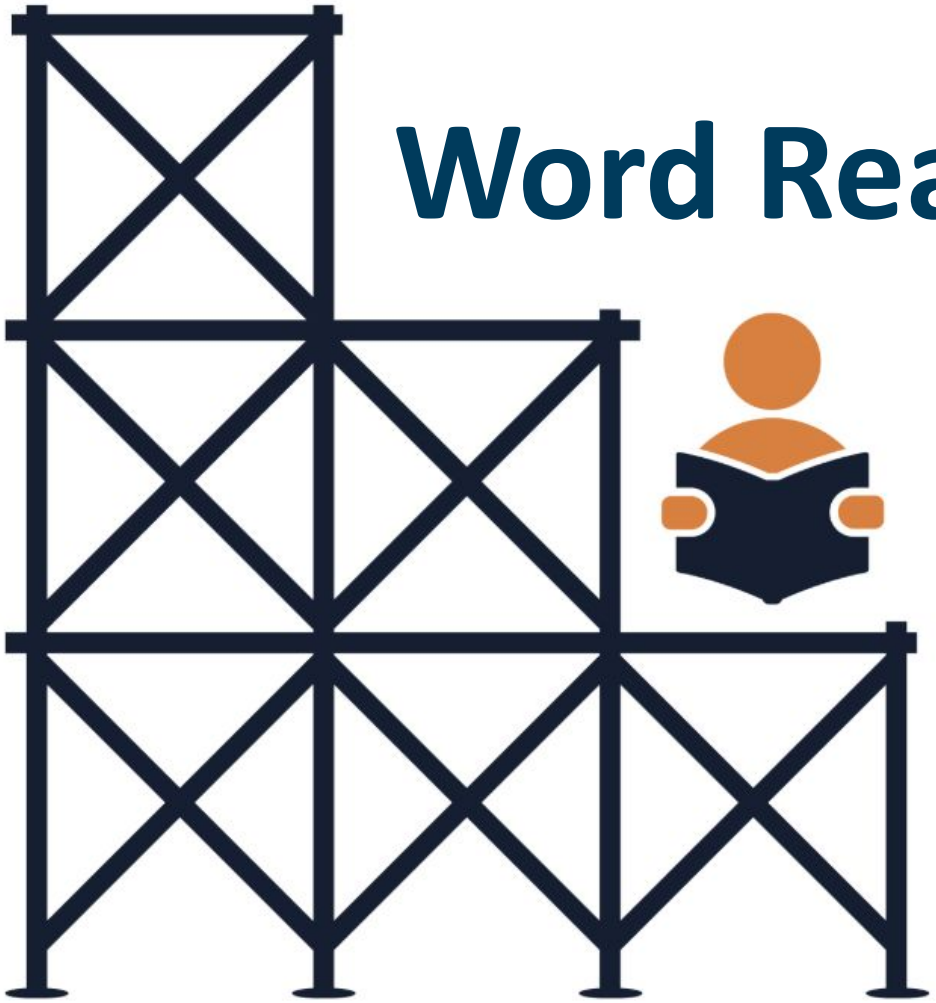
Word Reading Scaffold



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Decoding Strategy for Multisyllabic Words

1. Look for & circle prefixes & suffixes.

2. Identify any cognates.

instruction ≅ instrucción

3. Underline remaining vowels.

4. Loop under each word part as you say it out loud.

5. Read the whole word.

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What supports will teachers need in providing these scaffolds in Tier 1 instruction across the disciplines?

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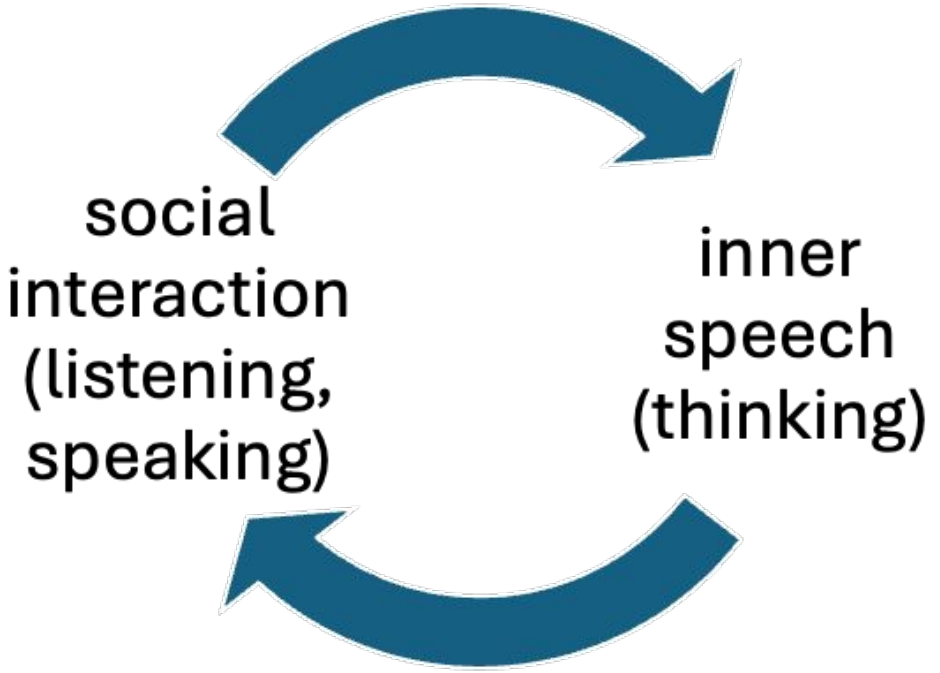
Think-alouds

short, purposeful engagements with text in which the teacher names and then demonstrates a particular way (or ways) of thinking while reading



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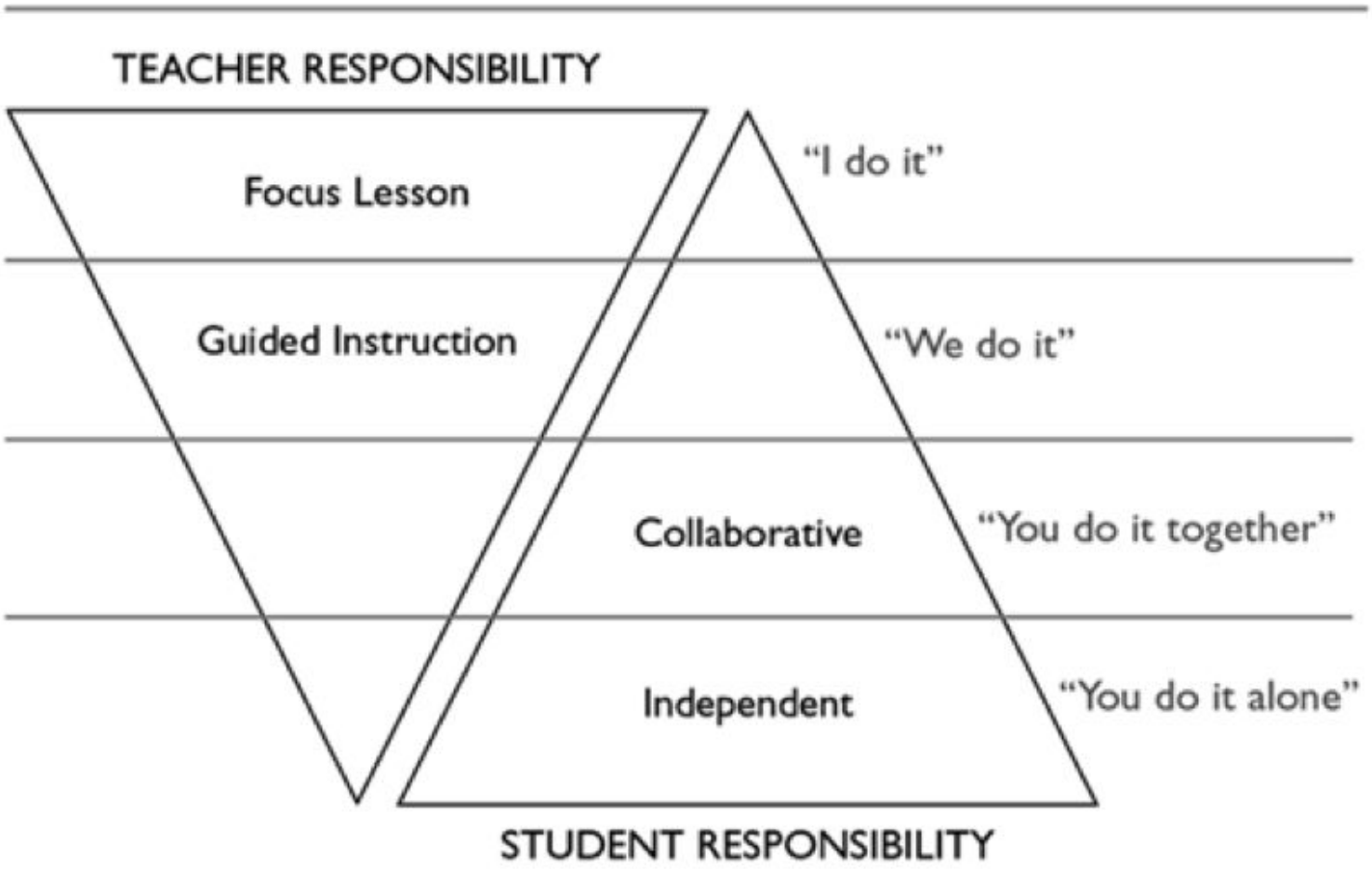

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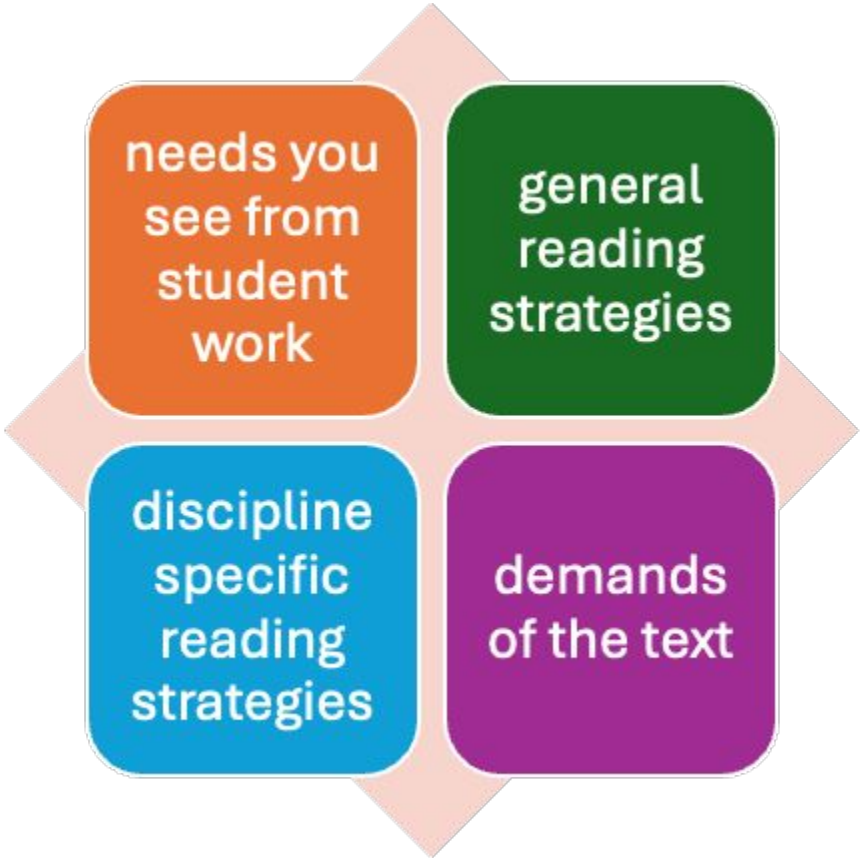
deciding focus for a think-aloud



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Choosing a focus for a think-aloud

- chunking
- clarifying
- making connections
- visualizing and interpreting visuals
- questioning for engagement and deepening understanding
- predicting and confirming

How to detect and deal with bias in a primary source

How to move back and forth between graphics and text in a report or article

How to understand the world an author drops you into at the beginning of a story

How to read science skeptically

How to use background from previously studied texts to inform a new text

How to read word problems to convert them into mathematical language

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Preparing a text for a think-aloud

Match text to goals, but begin with a goal: What am I trying to show?

Read the text carefully and pay attention to what your brain is doing while you read

Practice stopping and sharing your thinking, making sure you're focused on UNDERSTANDING and not PERFORMING

Practice connecting your goals to your talk; ask students what they noticed you doing; then encourage them to keep reading with your strategies in mind

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Think alouds are

- Focused and goal oriented
- Invitations for us as teachers to get to know our texts and reading processes well
- Ways you give access to ways of thinking, comprehending, and interpreting that are likely new to many students
- Purposefully "teacher-centered" to provide modeling and guidance on the way to a pass-off to groups or individual reading
- One tool in a repertoire of practices
- An invitation for students to re-read with their own background knowledge and processes

are not

- long, drawn out experiences
- chances to ask questions that you then point toward students ("interrogation style")
- chances for you to show off what you know and can do—you're bridging the expertise between students and you
- one-time experiences/miracle "fixes"

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Writing and Assessment

Embed writing activities into content.

Generate ideas from class work.

"Writing isn't just a skill. Writing instruction can also be a powerful tool for teaching content" (Maloney, 2024).

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Within students' writing, their learning and writing development are evident.

Four criteria generally used to assess writing quality

- Structure
- Coherence
- Unity
- Well-constructed sentences

The Writing Revolution 2.0 2024

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suggestions for starting a disciplinary literacy focus in your setting

Plan big, but start small–invite interested faculty from across departments to start investigating what it means to *do* their discipline

Read, interpret, and discuss texts from each others' disciplines together

Discuss shared observations of strengths and areas for growth in student readers

Develop, practice, and refine think-alouds together

Expect implementation across disciplines to vary in style and intensity

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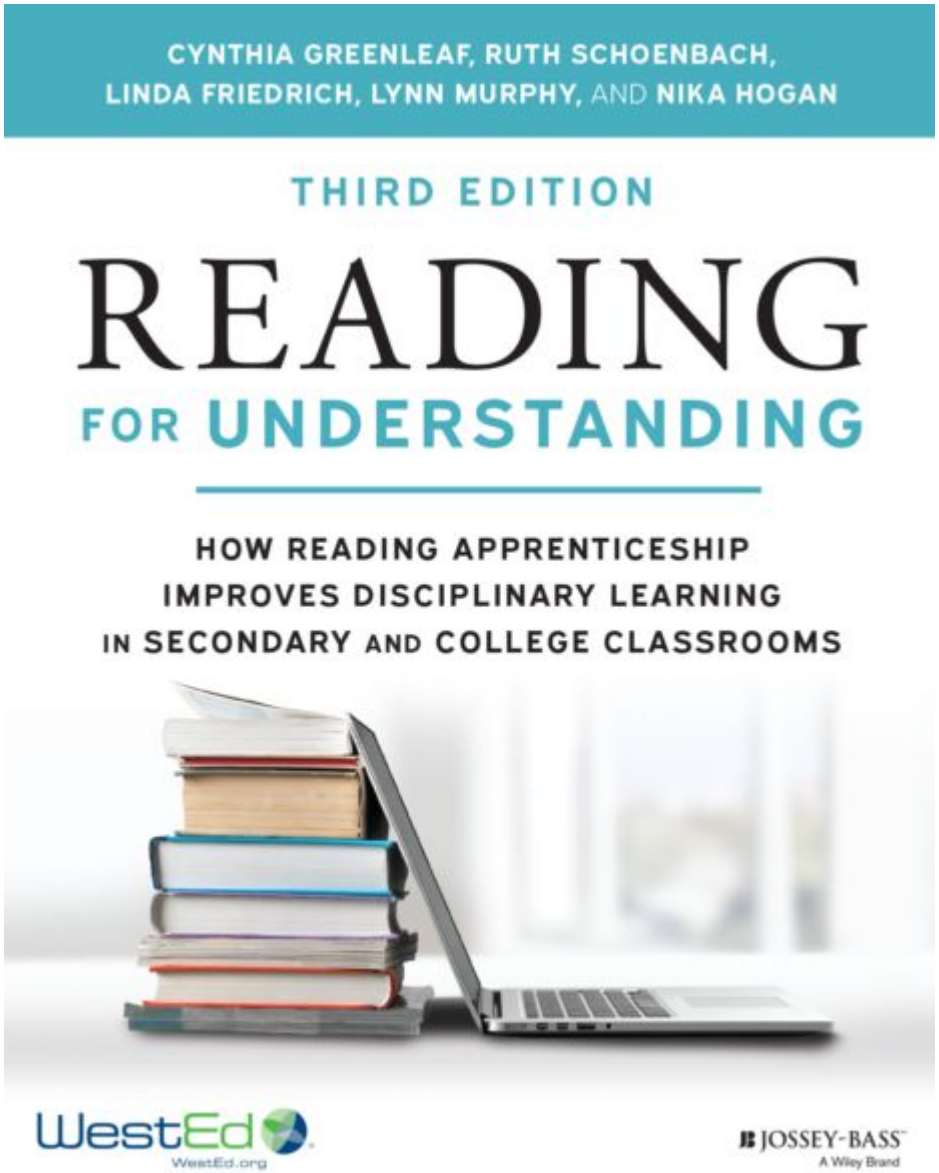

An excellent book on adolescent reading instruction, with some focus on disciplinarity

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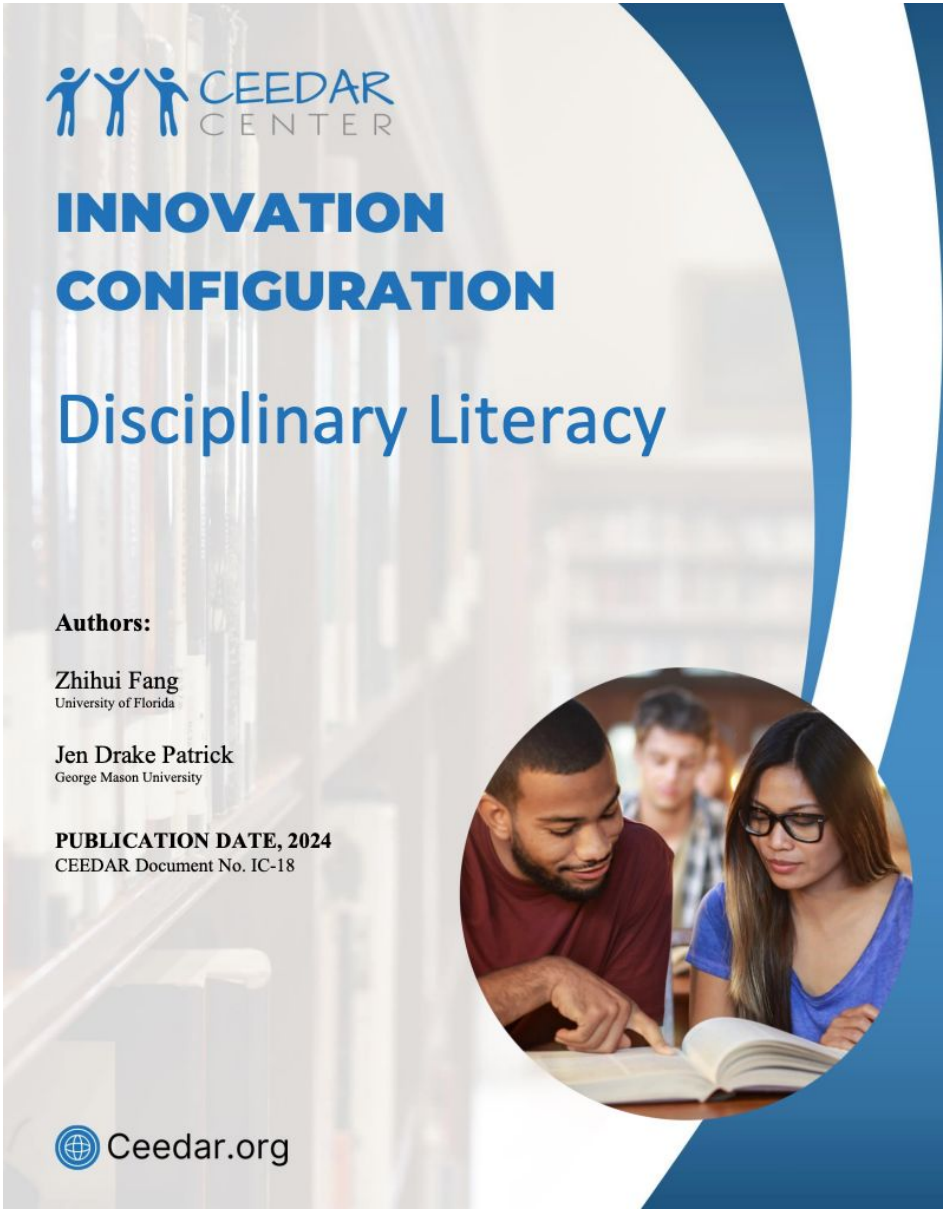

A strong starter resource, available for free online

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Appendix A
Innovation Configuration for Evidence-Based Disciplinary Literacy Instructional Practices

Essential Components	Implementation Levels				
Instructions: Place an X under the appropriate variation implementation score for each course syllabus that meets the criteria level from 0 to 3. Score and rate each item separately.	**Level 0**	**Level 1**	**Level 2**	**Level 3**	**Rating**
	There is no evidence that the component is included in the syllabus, or the syllabus only mentions the component.	Must contain at least one of the following: reading, test, lecture/ presentation, discussion, modeling/ demonstration, or quiz.	Must contain at least one item from Level 1, plus at least one of the following: observation, project/activity, case study, or lesson plan study.	Must contain at least one item from Level 1 as well as at least one item from Level 2, plus at least one of the following: tutoring, small group student teaching, or whole group internship.	Rate each item as the number of the highest variation receiving an X under it.
1.0 Components of Disciplinary Literacy Instruction for All Content Areas					
1.1 Teach academic language (e.g., academic vocabulary, grammatical patterns, discourse structures). 1.2 Build content knowledge about academic domains (e.g., science, social studies) through reading and other means (e.g., watching film, fieldwork). 1.3 Teach generic reading strategies that are valued across discipline (e.g., predicting, inferring, zooming out, zooming in,					
4.0 Components of Disciplinary Literacy Instruction in Science					
4.1 Integrate firsthand (e.g., observation, experiment) and secondhand (reading, writing, talking) experiences. 4.2 Teach scientific language (e.g., technical vocabulary; nominalizations; dense noun phrases; complex sentences; verbs for defining, identifying, classifying, characterizing, or describing concepts and relationships; hedging devices). 4.3 Teach science genres (e.g., procedure, procedural recount, explanation, report, exposition, description, discussion).					

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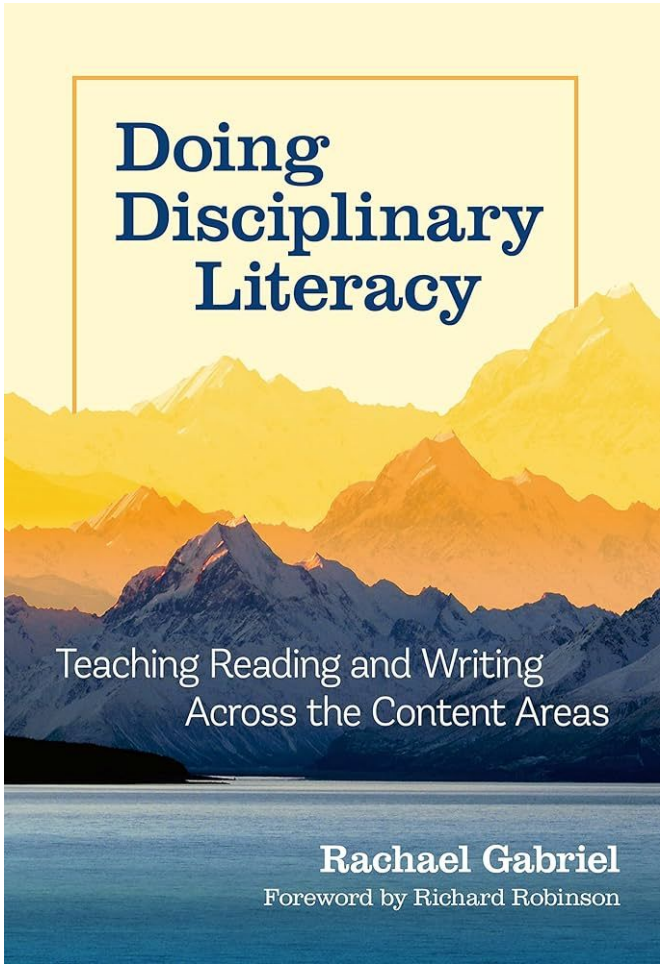

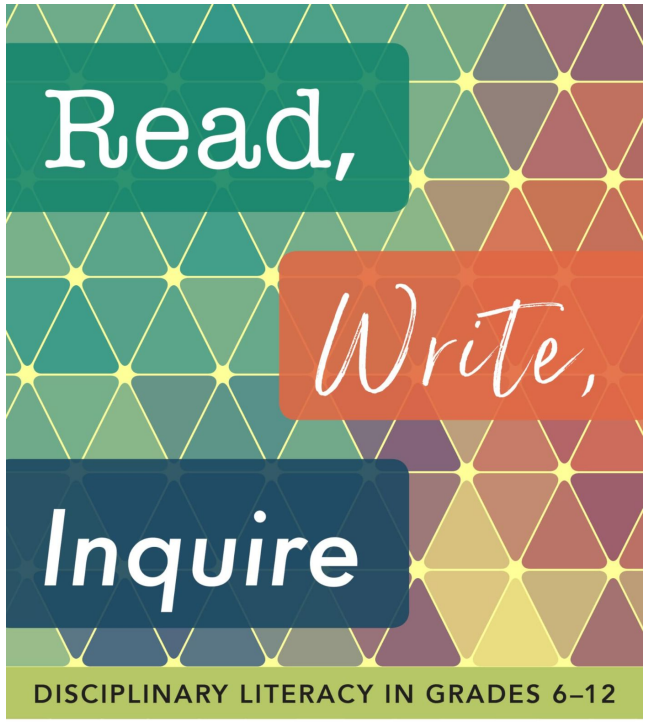

Hiller A. Spires
Shea N. Kerkhoff
Casey Medlock Paul

Books that provide strong and approachable deeper dives

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Books that take a strongly linguistic/ language-based approach to disciplinary literacy (not "starters")

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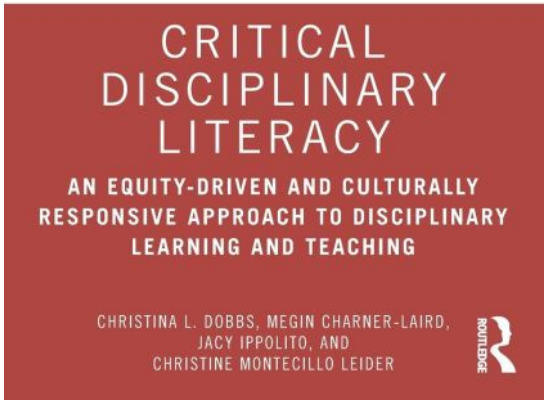

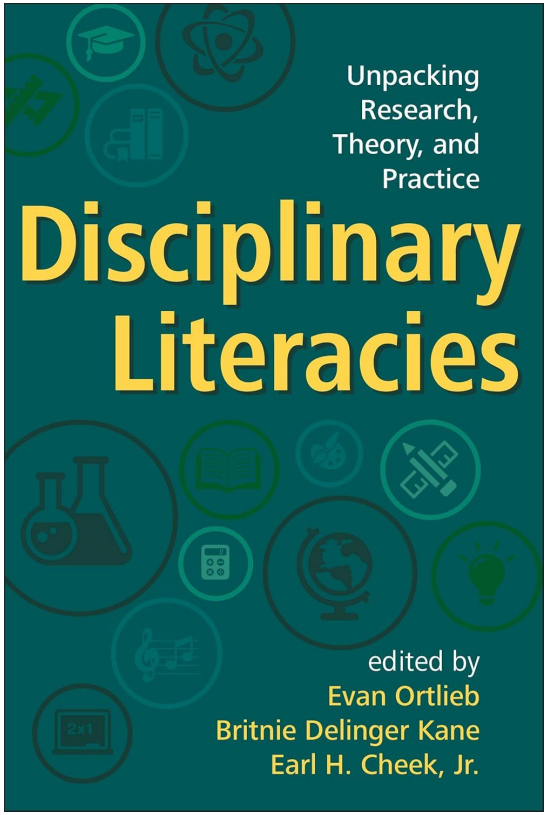

Books that take a push the field to take a more critical stance about disciplinarity

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Don't forget!

- Grant for Local Literacy Plan Template

- For ROEs/ISCs and Districts
- IWAS/System Listing/Surveys/District Literacy Plan
- Can describe activities in the future or reflect a recently written plan
- IWAS/System Listing/Active Grants/District Literacy Plan Implementation
- -Upload a PDF of the plan
- Due April 21, 2025 for start date of Jan. 1, 2025
- If not completed by April 30, 2025, risk deobligation of funds

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Mark Your Calendars: 2024-2025 Capacity Builders

- 10/17/24 Session 1: Overview of the Series and Illinois Comprehensive Literacy Plan
- 11/14/24 Session 2: Understanding Literacy Data
- 12/5/24 Session 3: Making Sense of Data Overload
- 1/23/25 Session 4: Local Control and Data Utilization
- 2/13/25 Session 5: Evaluating Curriculum and Instructional Practices
- 3/13/25 Session 6: Key Literacy Strategies and Concepts
- 4/10/24 Session 7: Disciplinary Literacy
- **5/8/25 Session 8: Monitoring Progress and Leveraging Resources**
- 6/5/25 Session 9: Writing!

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Evaluation

Evaluation | Session 7: Assembling and Leading a Literacy Team

Please complete the evaluation form for this session:

https://forms.office.com/r/4snUSkXS1D

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Capacity Builders: ICLP Lead Team

Jill Uher
Director of Professional Learning | South Cook ISC

Dara Carr
Professional Development/School Improvement | BHS ROE #28

Julie Stratman
Assistant Regional Superintendent | Regional Office of Education #1

Molly Allen
Assistant Regional Superintendent | Regional Office of Education #17

Chrissy Wiggs
Professional Development Director | Regional Office of Education #21

Kellyn Sirach
Reading Content Specialist | IL SLD Support Project

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ELA Principal Consultant| Illinois State Board of Education

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Deborah MacPhee
Professor, Elementary. Literacy |Illinois State University

Michael Young
Assistant Professor, Elementary Literacy | Illinois State University

Melissa Jones-Bromenshenkel
Professor, Dept of Special Education|Eastern Illinois University
Grant Partner | IL SLD Support Project

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Questions

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