



Literacy Through the Health Science Lens

Friday, September 22nd
2:00-2:50pm

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Indiana
DEPARTMENT OF
EDUCATION

Working Together for Student Success

Introduce ELA Literacy Team

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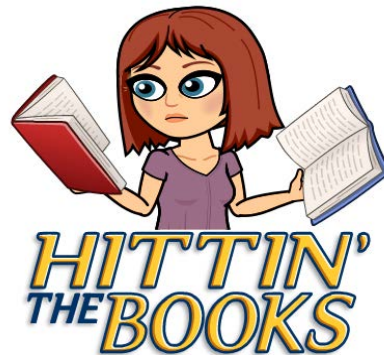
LET ME KNOW



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Agenda

- Disciplinary Literacy
 - What is it?
 - Why?
 - Disciplinary Literacy and Content Area Literacy
- Indiana Content Area Literacy Standards
 - What are they?
 - Learning Outcome
 - Reading
 - Writing



1. Disciplinary Literacy: *What is it?*

“Disciplinary Literacy” recognizes that reading, writing, thinking, reasoning, and *doing* within each discipline is unique--and leads to the understanding that every field of study creates, communicates, and evaluates knowledge differently.

Releah Cossett Lent, [This is Disciplinary Literacy](#)



2. Disciplinary Literacy:

What is it?

“Advanced literacy instruction embedded within content-area classes”

Tim Shanahan



We should teach the specialized ways of reading, understanding, and thinking used in each academic discipline.

Each field has its own ways of using text to create and communicate meaning.

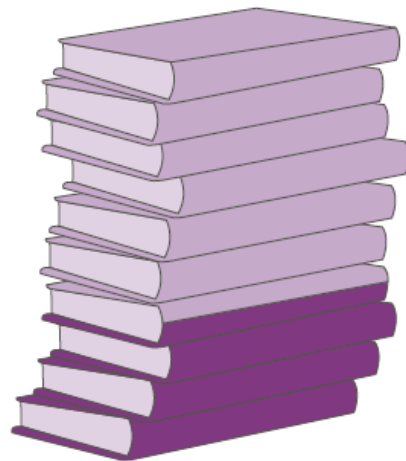




Why?



Percentage of 12th graders that are considered proficient in reading



Only 35 percent of 12th graders are considered proficient in reading and can demonstrate overall understanding of texts, make inferences, draw conclusions and make connections to previous experiences.

Association for Career and Technical Education (ACTE)



CTE = Opportunity



CTE programs provide students opportunities to extend their literacy skills through exercises involving the in-depth integration of both reading and writing, along with critical thinking and employability skills like oral communication, leadership and teamwork.

Association for Career and Technical Education (ACTE)



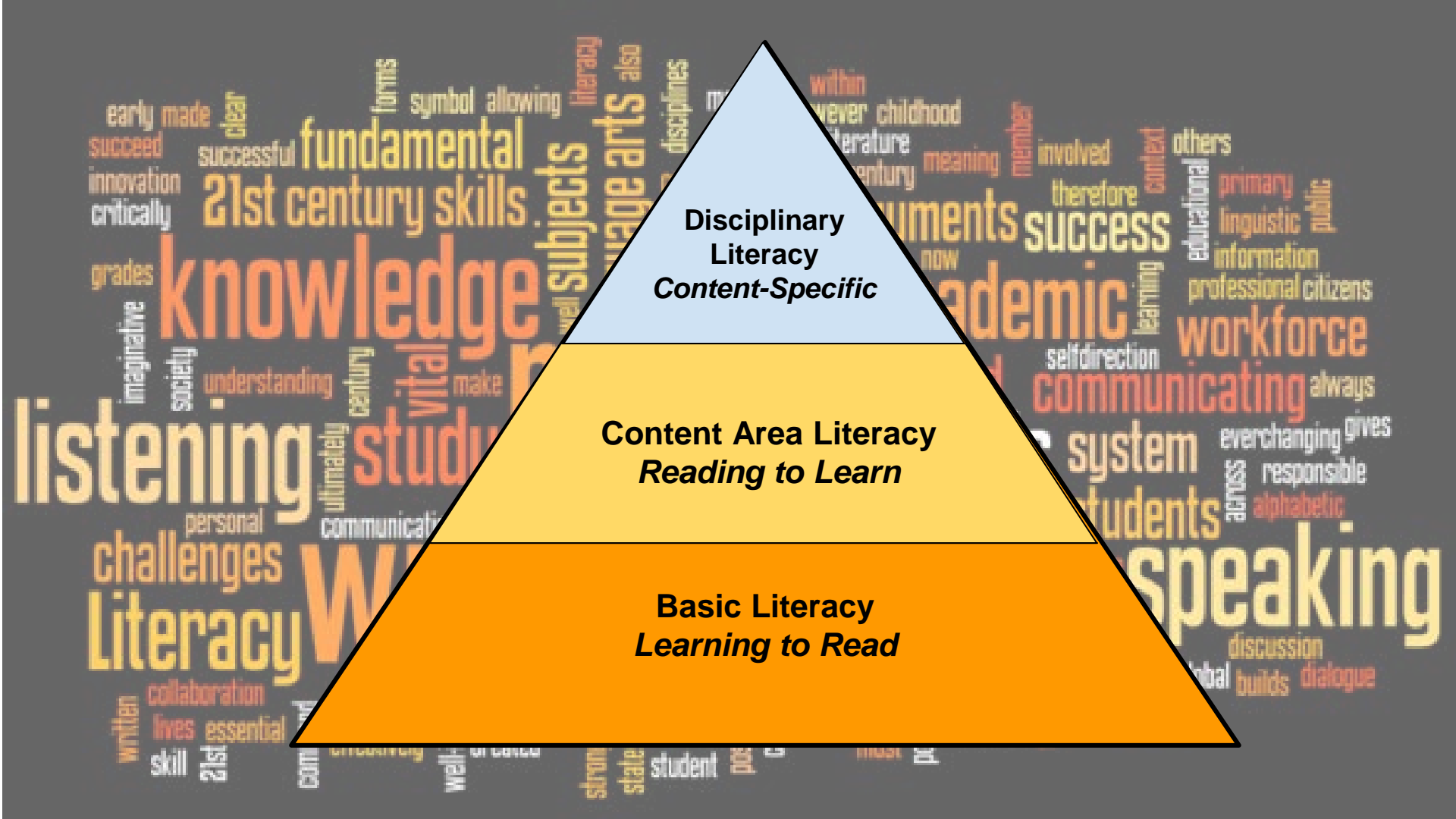
Lots of buzzwords...so what's the difference?

Content Area Literacy

Disciplinary Area Literacy

Literacy





**Disciplinary
Literacy**
Content-Specific

Content Area Literacy
Reading to Learn

Basic Literacy
Learning to Read

Disciplinary Literacy

- Emphasis on the knowledge and abilities possessed by those who create, communicate, and use knowledge within in the disciplines
- Emphasizes the unique tools that the experts in a discipline use to participate in the work of that discipline

Content Area Literacy

- Focuses on study skill
- Emphasizes techniques that a novice might use to make sense of a discipline specific text
- Assumes that what it takes to read and learn any kind of text is the same no matter what the subject matter






Content Area Literacy Standards

Where are they:

- IDOE Webpages-Program Areas under student academic standards
- *If you can't find them, they are also posted on the [ELA Standards Webpage](#)*

Indiana Content Area Literacy Standards		
Title	Updated	Download
Science/Technical Studies Content Area Literacy	08/30/2017	PDF 



Guiding Principle: Students develop *discipline specific* reading and writing skills, within the content areas, students apply these skills in order to develop a deeper understanding of the content area

In Literacy in Science and Technical Subjects, students are expected to do the following:

LEARNING OUTCOMES	LST.1: LEARNING OUTCOME FOR LITERACY IN SCIENCE/TECHNICAL SUBJECTS Read and comprehend science and technical texts independently and proficiently and write effectively for a variety of discipline-specific tasks, purposes, and audiences		
	GRADES 6-8	GRADES 9-10	GRADES 11-12
	6-8.LST.1.1: Read and comprehend science and technical texts within a range of complexity appropriate for grades 6-8 independently and proficiently by the end of grade 8.	9-10.LST.1.1: Read and comprehend science and technical texts within a range of complexity appropriate for grades 9-10 independently and proficiently by the end of grade 10.	11-12.LST.1.1: Read and comprehend science and technical texts within a range of complexity appropriate for grades 11-CCR independently and proficiently by the end of grade 12.
6-8.LST.1.2: Write routinely over a variety of time frames for a range of discipline-specific tasks, purposes, and audiences.	9-10.LST.1.2: Write routinely over a variety of time frames for a range of discipline-specific tasks, purposes, and audiences.	11-12.LST.1.2: Write routinely over a variety of time frames for a range of discipline-specific tasks, purposes, and audiences.	
KEY IDEAS AND TEXTUAL SUPPORT	LST.2: KEY IDEAS AND TEXTUAL SUPPORT (READING) Extract and construct meaning from science and technical texts using a variety of comprehension skills		
	GRADES 6-8	GRADES 9-10	GRADES 11-12
	6-8.LST.2.1: Cite specific textual evidence to support analysis of science and technical texts.	9-10.LST.2.1: Cite specific textual evidence to support analysis of science and technical texts, attending to the precise details of explanations or descriptions.	11-12.LST.2.1: Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account.
6-8.LST.2.2: Determine the central ideas or conclusions of a text; provide an accurate, objective summary of the text.	9-10.LST.2.2: Determine the central ideas or conclusions of a text; trace the text's explanation or depiction of a complex process, phenomenon, or concept; provide an accurate, objective summary of the text.	11-12.LST.2.2: Determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms.	

Key Ideas and Textual Support:

Extract and construct meaning from science and technical texts using a variety of comprehension skills

Standards:

X*.LST.2.1

X.LST.2.2

X.LST.2.3

Structural Elements and

Organization: Build understanding of science and technical text, using knowledge of structural organization and author's purpose and message

Standards:

X*.LST.3.1

X. LST. 3.2

X.LST.3.3

Synthesis and Connection of Ideas:

Build understanding of science and technical texts by synthesizing and connecting ideas and evaluating specific claims

Standards:

X*.LST.4.1

X. LST.4.2

X. LST. 4.3

Learning Outcome: *Read and comprehend science and technical texts independently and proficiently and write effectively for a variety of discipline-specific tasks, purpose, and audiences*

Writing Genres: Write for different purposes and to specific audience or people

Standards:

X*.LST.5.1

X.LST.5.2

The Writing Process: Produce coherent and legible documents by planning, drafting, revising, editing, and collaborating with others

Standards:

X*.LST.6.1

X.LST.6.2

The Research Process: Build knowledge about the research process and the topic under study by conducting short or more sustained research

Standards:

X*.LST.7.1

X.LST.7.2

X.LST.7.3

**the (X) in front of the standard represents the grade band; 6-8. 9-10, or 11-12*

Content Area Literacy Standards Best Practices:

- Weave the standards throughout lessons when appropriate.
 - NOT a check off list
 - Don't force something, because then it will feel inauthentic and students will be more focused on the completing the task rather than practicing the skill
- View these standards as skills
- Try to have students read and write for you each time you see them
 - You do NOT have to grade all, the mere practice of the skill



Other Sentiments on Disciplinary Literacy ...

- View literacy as another tool to teach your content
- All teachers are the reading and writing experts of their own discipline
 - “Teachers must be free to employ tools, texts, and principles of their discipline to give students opportunities to use and apply knowledge, and that, in most middle and high schools, is a big order. But that big order can be handled by teachers who are expert in their disciplines...” *Lent*
- Be careful to not allow the strategy to become more important than the content in which you are teaching
- Be mindful of assessing a strategy, want to be assessing on the content not the compliance of the strategy



Literacy Infusion: First Steps, Next Steps

- Define literacy for your classroom and your discipline
- Identify what literacy skills you are already teaching and doing in your instruction; how many times a week or lesson are you having your students read and write?
- Think about what is classified as a “text” in your discipline
- Assess what discipline specific texts you have available in your classroom for students to interact with



Literacy Infusion: Next Steps

Next Steps:

- Set reasonable goal for reading and writing instances for the next week
- Consider Content Area Literacy Strategy Springboards
 - *How can I make them discipline specific?*
 - *How does this strategy look differing in my classroom than another program area?*
 - *How relevant is this task/strategy to what a professional would do on a daily basis?*



Content Area Literacy Strategy Springboards

1. RAFT Writing
2. Three Minute Pause
3. Jigsaw Reading
4. Analytical Graphic Organizers
5. Quick Write





RAFT Writing (Role-Audience-Format-Topic)

Description This strategy asks students to creatively analyze and synthesize the information from a particular text or texts by taking on a particular role or perspective, defining the target audience, and choosing an appropriate written format to convey their understanding of the content topic.





RAFT Example

Example of a teacher-created RAFT assignment for Global Warming and Pollution Unit

Directions: Choose a role, audience, format, and topic that interests you from this list or create your own choices that will help you effectively summarize what you learned in this unit.

Role	Audience	Format	Topic
Environmental scientist	U.S. Congress	PowerPoint presentation	The need to immediately enforce pollution laws
CEO of a pollution-producing product	The corporation's lawyer in a class action suit by consumers to halt production	Data charts that show pollution has not caused temperature changes	Product manufacturing is not causing temperature change
Person whose parent died from a pollution-caused illness	Michael Moore	Interview for the movie <i>Sicko</i>	Why global warming is a personal crisis as well as a national and global crisis
Acid rain (personified as if it is a person)	Manufacturing managers at an annual conference	Protest song	The destruction of nature by mankind
Your idea	Your idea	Your idea	Your idea





Three Minute Pause

Description: A Three-Minute Pause is a break in large sections of content. The Three-Minute Pause provides a chance for students to stop, reflect on the concepts and ideas that have just been introduced, make connections to prior knowledge or experience, and seek clarification.





Jigsaw Learning Strategy

Description Jigsaw is a group learning strategy where students read different selections and are responsible to share that information with a small group. It is effective for involving all students in a learning task and provides opportunity for differentiated learning.

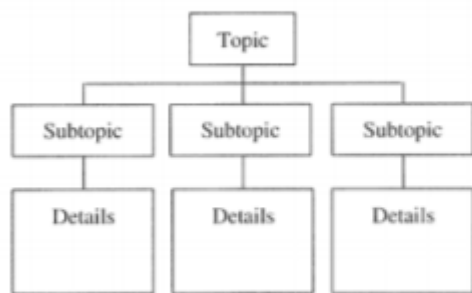
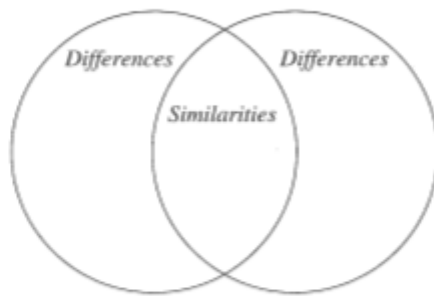
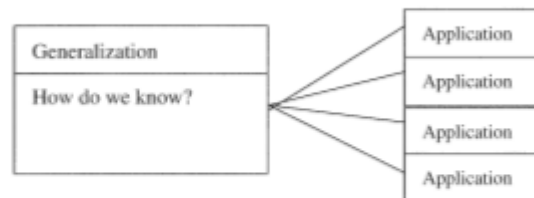




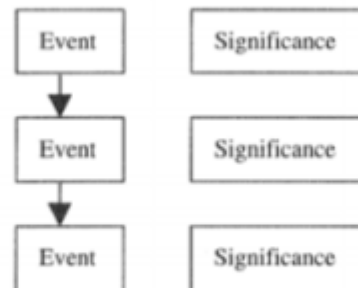
Analytical Graphic Organizers

Description: This strategy involves selecting a visual format like charts, diagrams, and graphs to help students explore the characteristics, relationships, or effects of a complex topic. This helps students organize their thoughts and construct meaning from text. Examples include cause/effect diagrams, compare/contrast charts, and process cycle diagrams.



MAIN IDEAS**COMPARE/CONTRAST****GENERALIZATION****CAUSE/EFFECT**

CAUSE(S)	EFFECT

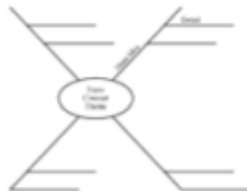
PROCESS CYCLE**SEQUENCE**



CONCEPT DEFINITION

Concept	Definition	Visual Illustration

CONCEPT MAP



PREDICTION ORGANIZER

My Prediction	Evidence For	Evidence Against	Actual Outcome

TRIPLE ENTRY JOURNAL

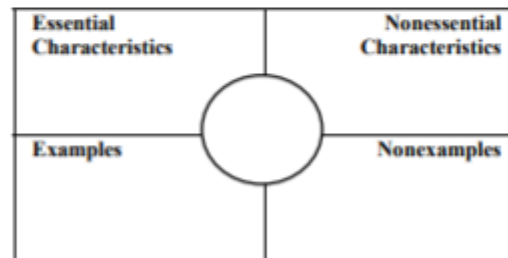
Quote/Page	Reflection	Example/Illustration

PROPOSITION SUPPORT OUTLINE

Proposition:
Support:

1. Facts
2. Statistics
3. Examples
4. Expert Authority
5. Logic and Reasoning

FRAYER MODEL





Quick Writes

Description: A versatile strategy used to develop writing fluency, to build the habit of reflection into a learning experience, and to informally assess student thinking. The strategy asks learners to respond in 2–10 minutes to an open-ended question or prompt posed by the teacher before, during, or after reading.



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BYE!



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TALK
soon



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