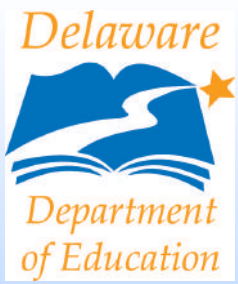# Discipline-Specific Literacy

Module 3

Reading Cadre

Grades 3-5

Agenda

- Defining Content and Disciplinary Literacy

- CCSS Anchor Standards for Literacy in Grades 3-5

- The Shifts Across the Content Areas

- Closer Look at the Standards

- Hands-on Activities with the Shifts

Literacy in History/Social Studies, Science, and Technical Subjects Grades 6-12

- A focus on discipline-specific vocabulary
- An acknowledgement of unique text structures found in informational text
- The expectation that students will read and write in non-ELA classrooms
- The expectation that students will develop informational/technical writing skills
- A focus on critical analysis and evidence

Implications of Discipline-Specific Literacy

- Discipline-specific (DS) literacy is not the same as content knowledge.
  - Content knowledge is a prerequisite for discipline-specific literacy.
- DS literacy is content specific.
- In DS literacy, reading and writing are complimentary tasks.
- The greatest gains can be expected when reading and writing are used in tandem.

International Studies

- 4th grade U.S. students performed among the best in the world
- 8th grade U.S. students performed considerably lower
- 10th grade U.S. students ranked among the lowest of the nations studied

Carnegie Council on Advancing Adolescent Literacy, 2010

Disciplinary Reading

- As students move into college more emphasis is placed on disciplinary texts
- Reading is important, yet…
- Students aren't usually taught how to read in their content classrooms
- Each discipline possesses its own language, purposes, and ways of using text

Disciplinary Reading Cont'd.

- As students begin to confront these kinds of texts (especially in middle and high school), instruction must facilitate their understanding of what it means to read disciplinary texts.

  - *Helping Students Meet the Reading Common Core State Standards in History/Social Studies and the Science,* Cynthia Shanahan
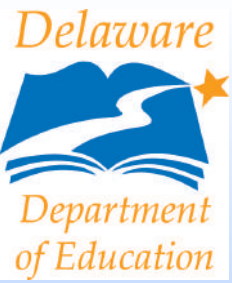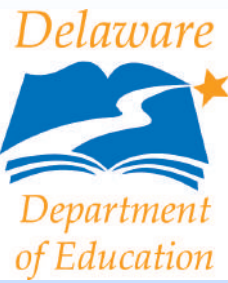
College & Career Anchor Standards for Reading

Standards	Big Ideas
1-Evidence 2-Central Ideas 3-Interaction	Getting deep into the text
4-Vocabulary 5-Text Structure 6-Point of View/Purpose	Author's choices about the text
7-Multimedia 8-Argument (Evaluating Argument) 9-Mutliple Texts	Thinking across texts
10-Range and Complexity	LOTS of in-school reading

College & Career Anchor Standards for Writing

Standards	Big Ideas
1-Write arguments 2-Write to explain/inform 3-Write narratives	Types of writing
4-Write with coherence 5-Plan, revise, rewrite 6-Use technology	Writing Process
7-Short and sustained research 8-Use multiple sources 9-Use text evidence	Research
10-Range of writing	LOTS of in-school writing

College & Career Anchor Standards for Speaking & Listening

Standards	Big Ideas
1-Range of conversations 2-Integrate and evaluate 3-Evaluate speaker's point of view	Comprehension and collaboration (LOTS of in-school discussions)
4-Present information clearly, know your audience 5-Use digital media 6-Adapts speech to context	Presentation of knowledge and ideas

Comparing Content Area Reading and Disciplinary Literacy

	Content Area Reading	Disciplinary Literacy
Source	Reading experts since 1920s	Wider range of experts since 1990s
Nature of Skills	Generalizable	Specialized
Focus	Use of reading and writing to study/learn information	How literacy is used to make meaning within a discipline
Students	Remedial	Whole distribution
Texts	Often encourages use of literary text	Only focuses on disciplinary text
Role of Graphics	Ignored or taught generally	Specific to the discipline

Shanahan and Shanahan (2008)

Content Area Reading

Generalizable skills and activities that can be used in all or most reading:

- KWL
- SQ3R
- Word Maps
- Frayer Model
- Summarization
- QAR

Disciplinary Reading

- Specialized skills and activities
- Idea is to consider the learning demands of subject matter
- Example: text is essential
  - Pictures differ in their role
  - Technical drawings
  - Information may be descriptive, sequential, relational, hierarchical, causal
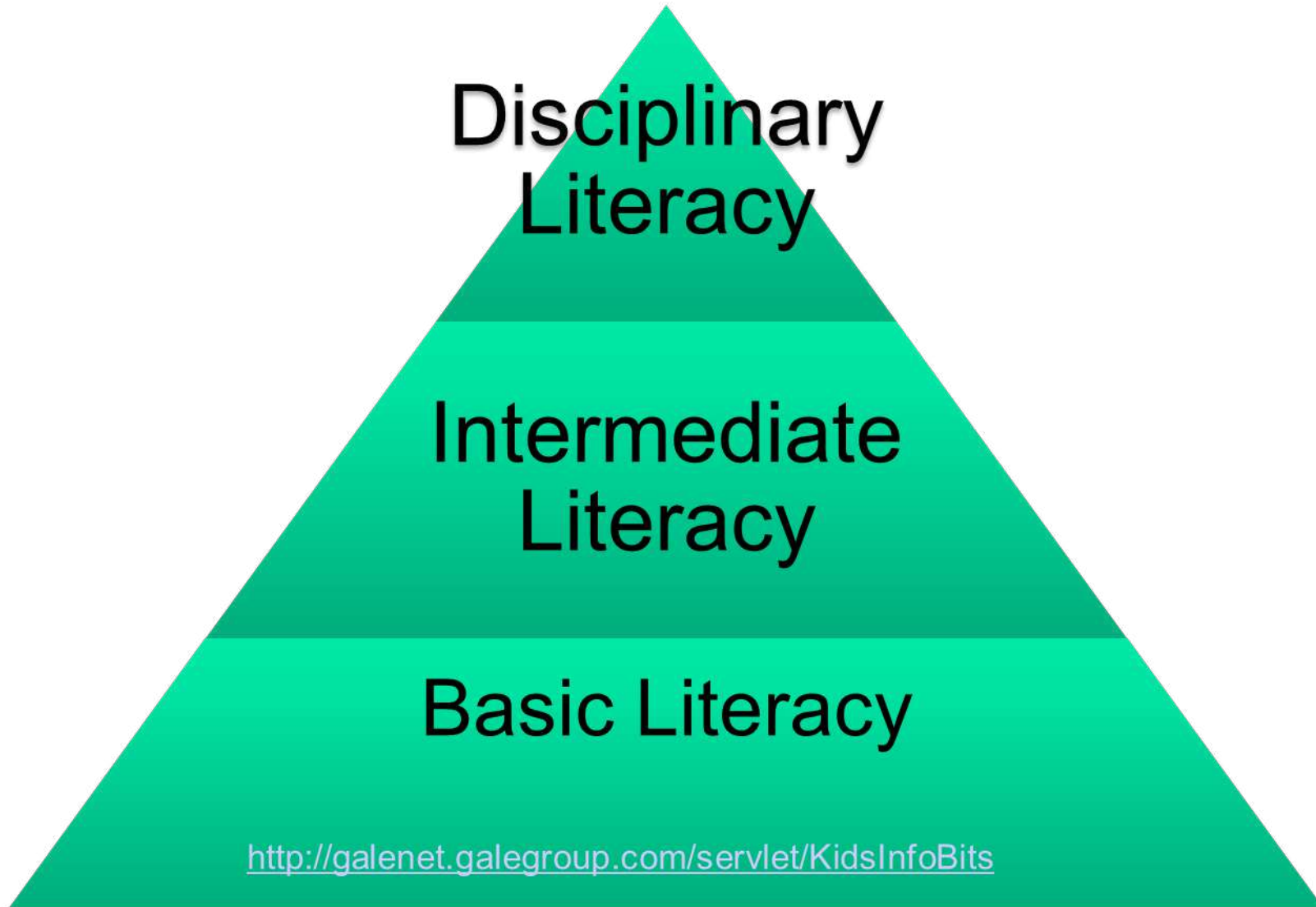
Teaching Text Structures

Structure (Organization)	
Literary	Informational
Story elements: •Characters •Setting •Problem/solution •Plot	•Cause and Effect •Sequence •Problem/Solution •Description •Compare and Contrast

Teaching Text Features

Text Features	
Literary	Informational
•Title •Chapter Index (for Chapter Books) •Illustrations •Bold Print •Continuous Text •Paragraphing •Dialogue	•Title •Table of Contents •Index* •Photos •Captions •Diagrams •Glossary •Date line (periodicals) •Bold Print •Headings •Sub-titles

*The more readers build up knowledge about these elements and underlying structures, the better they can use them as sources of information.

Literacy Development

Disciplinary Literacy

Intermediate Literacy

Basic Literacy

http://galenet.galegroup.com/servlet/KidsInfoBits

Shanahan and Shanahan (2008)

Literacy Development

- Basic: decoding skills, print and literacy conventions, recognition of high frequency words;

- Intermediate: developing cognitive endurance, monitoring comprehension, using fix-up strategies. Access to more complex text organization, use author purpose as a tool for critical response

- Disciplinary: increasingly disciplinary and technical nature of literacy tasks.
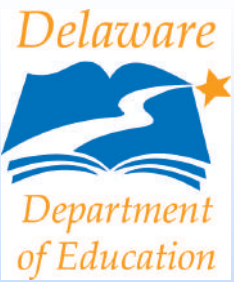
Simon, Seymour. Volcanoes. New York: HarperCollins, 2006. (2006)

In early times, no one knew how volcanoes formed or why they spouted red-hot molten rock. In modern times, scientists began to study volcanoes. They still don't know all the answers, but they know much about how a volcano works.

Our planet is made up of many layers of rock. The top layers of solid rock are called the crust. Deep beneath the crust is the mantle, where it is so hot that some rock melts. The melted, or molten, rock is called magma.

Volcanoes are formed when magma pushes its way up through the crack in Earth's crust. This is called a volcanic eruption. When magma pours forth on the surface, it is called lava.

From CCSS, Appendix B

Examples

- Text-inspired:
  - How would a volcanic eruption affect the people in a nearby town?

- Text-dependent:
  - Based on the text <u>Volcanoes</u>, how has scientists' knowledge about volcanoes changed from early times to modern times? Use evidence from the text to support your answer.

- Cookie cutter:
  - What is magma?

Literacy Development

- Basic: decoding skills, print and literacy conventions, recognition of high frequency words;

- Intermediate: developing cognitive endurance, monitoring comprehension, using fix-up strategies. Access to more complex text organization, use author purpose as a tool for critical response

- Disciplinary: increasingly disciplinary and technical nature of literacy tasks.

Shanahan and Shanahan (2008)

3 Shifts	6 Shifts
1. Building knowledge through content-rich literary nonfiction and informational texts.	**PK-5, Balance of informational and literary text**
	6-12, Building knowledge in the disciplines
2. Reading and writing grounded in evidence from text.	Text-based answers
	Writing to/from sources
3. Regular practice with complex text and its academic vocabulary.	Staircase of complexity
	Academic vocabulary

Instructional Shifts	Assessment Shifts
PK-5, Balancing Informational and Literary Texts	**A balance of authentic informational and literary texts**
6-12, Building Knowledge in the Disciplines	**Knowledge-based questions about discipline-specific, informational text**
Staircase of Complexity	Higher level of text complexity appropriate to grade level
Text-Based Answers	Evidence from text, including paired passages, to make an argument, inform or explain; short, focused research
Writing From Sources	
Academic Vocabulary	Tier Two words which can be discerned from the text.

- Adapted from engageNY

Literacy Design Collaborative (LDC)

- The Literacy Design Collaborative [LDC] offers a fresh approach to incorporating literacy into middle and high school content areas. Designed to make literacy instruction the foundation of the core subjects, LDC allows teachers to build content on top of a coherent approach to literacy.

- http://www.literacydesigncollaborative.org/

- http://collegereadyedu-sharedmedia.posterous.com/literacy-matters

Focus on Informational Text

2011 NAEP Writing Framework: Distribution of Communicative Purposes

Grade	To Persuade	To Explain	To Convey Experience
4	30%	35%	35%
8	35%	35%	30%
12	40%	40%	20%

Source: National Assessment Governing Board. (2007). *Writing framework for the 2011 National Assessment of Educational Progress, http://www.nagb.org/publications/frameworks/writing-2011.doc*

Text Complexity Grade Bands and Associated Lexile Ranges

Text Complexity Grade Band in the Standards	Old Lexile	Lexile Ranges Aligned to CCR Expectations
K – 1	N/A	N/A
2 – 3	450 – 725	420 – 820
4 – 5	645 – 845	740 – 1010
6 – 8	860 – 1010	925 – 1185
9 – 10	960 – 1115	1050 – 1335
11 – CCR	1070 – 1220	1185 - 1385

Performance Tasks: Implications on Instruction

- Examine a Smarter Balanced Performance Task by looking for the following:
  - Which shifts are evident?
  - What are the literacy demands of this task?
  - What types of "text" are being used?

  http://www.smarterbalanced.org/wordpress/wp-content/uploads/2012/09/performance-tasks/tulips.pdf

Shift #1: PK-5, Balance of Informational and Literary Text

- <u>Rationale:</u> Elementary students typically encounter curriculum that is heavily influenced by literary text.

- <u>Implications for Instruction:</u> Elementary students need a balance (50/50); they need to learn the structures of both literary and informational text to deepen comprehension.

3 Main Barriers to Content Area Reading

1. Discipline-specific vocabulary

2. Prior knowledge about the content area subject

3. Understanding of text features and organization of the text

Literacy in the Content Areas

Being science literate entails being able to read and understand a variety of science texts to form valid conclusions and participate in meaningful conversations [discussion] about science.

In Zmach et al., 2006-2007, p. 62

Our democracy's vitality depends on…teaching students to be informed readers, writers and thinkers about the past as well as the present.

In Wineburg and Martin, 2004, p. 45

I can no longer imagine teaching math without making writing an integral aspect of students' learning.

Marilyn Burns

Essential Components…

- Close reading of selected portions of science and social studies textbooks;

- Regular reading and discussion of current science and historical articles;

- Interactive lectures; peer discussion

- Writing – from short, almost daily pieces to longer, more formal pieces;

- A reasonable number of carefully designed science labs, performance tasks, and experiments that reinforce the content being learned;

- Utilize primary and secondary sources to analyze, draw conclusions, make inferences, and develop arguments.

Literacy at the Core

- Students will enjoy tasks and questions if we encourage them to write and respond to the text/questions as experts, with the confidence that comes of having read texts closely, listened, talked, and taken notes.

Video of 5th Grade Classroom

Whole Class Instruction to Support Comparing and Contrasting Sources of Information Related to Immigration (3-5)

http://vimeo.com/55951744

From Teachers College Reading and Writing Project

Elementary Instructional Implications

- Provide students with equal exposure of informational and literary texts in the elementary grades (across disciplines)

- Explicitly teach strategies for informational texts

- Teach through and with informational texts

- Explicitly teach reading comprehension skills in a similar manner across informational text and literature

- Build background knowledge to increase reading skills

Resources

- DOE CCSS Website
  - Literacy Concept Organizers for Social Studies and Science
  - Literacy Standards by Content Areas
  - Literacy Design Collaborative
  - The Teaching Channel
  - AchievetheCore.org
  - Guide to the Shifts
  - HQPD Modules
  - [Pyramid Text](#)

Video Resources

- Shift 1: PK-5 Balancing Informational Text and Literature http://engageny.org/resource/common-core-in-ela-literacy-shift-1-pk-5-balancing-informational-text-and-literature/

- Balance of Informational and Literary Text http://vimeo.com/29532864

- Whole Class Instruction to Support Comparing and Contrasting Sources of Information Related to Immigration (3-5)http://vimeo.com/55951744

Module Extensions

- Ways to identify literacy demands of the content area
- Evidence of the Shifts in Practice
- List of discipline-specific genres (what do scientists read…)
- List of anchor texts (examples of the above)
- Examples of reading like, "a historian", "scientist", "mathematician", etc.
- Using discipline-specific text as models for writing
- Research that supports literacy in this discipline
- Examples of some of the literacy standards

"…ultimately, our students are expected to develop as competent readers, writers, and thinkers in *all* academic disciplines."

Developing Readers in the Academic Disciplines, Doug Buehl