

# Disciplinary Literacy

History/Social Studies  
Science and Technical Subjects



High School Principal Session  
Educator Effectiveness Academy  
2012

# Career Readiness

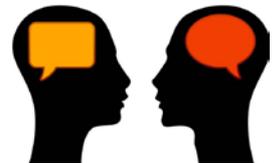
- What skills do 21<sup>st</sup> century careers require?



# WHO AM I?

## Job Responsibilities

- Conduct laboratory tests to determine performance of building materials.
- Compile and communicate data to determine mix design or specifications for material use.
- Requires information processing and computer skills.
- Complete tests at construction sites to ensure quality and compliance with standards.
- Maintain construction standards to ensure structures are strong, durable, and economical.
- Remain current in the latest research and developments in the concrete industry.



# Materials Technician

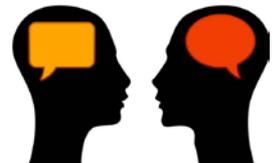


# WHO AM I?

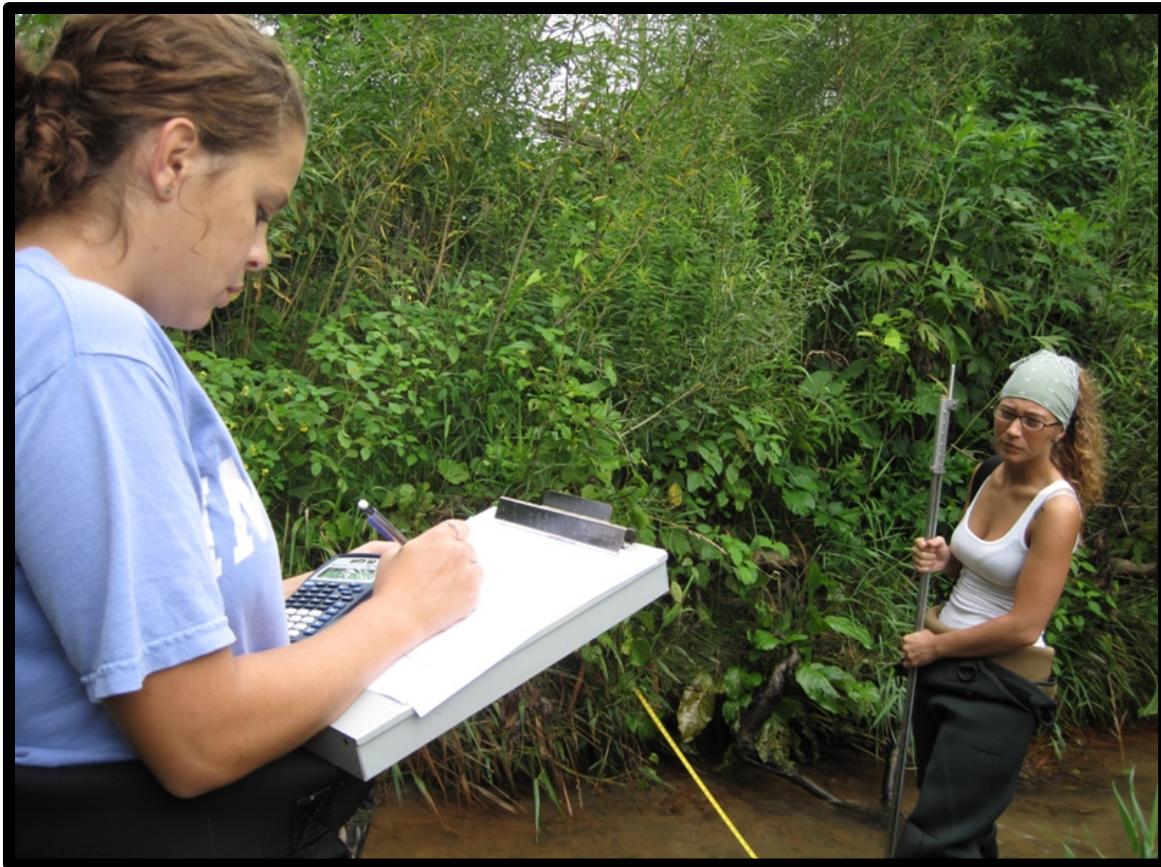


## Job responsibilities:

- Perform statistical analysis.
- Complete technical writing.
- Collect field data.
- Utilize technical instruments and computers.
- Communicate data and findings to peers and public.
- Work in remote locations to monitor pollution or conservation efforts.
- Adhere to professional standards of research.



# Environmental Scientist



# Capacities of Literate Individuals

**INDEPENDENCE**

**STRONG  
CONTENT  
KNOWLEDGE**

**COMPREHEND  
AND CRITIQUE**

**UNDERSTAND  
PERSPECTIVES  
AND CULTURES**

**USE  
TECHNOLOGY**

**RESPOND TO VARIOUS  
DEMANDS**

**VALUE  
EVIDENCE**

# Session Objectives

- Participants will:
  - understand the role of disciplinary literacy in preparing students for college, career, and civic life.
  - define literacy in the STEM classroom.
  - identify shared CCSS and STEM literacy practices

# NOT just Content Area Reading!

**Disciplinary Literacy is not just using “generic reading and writing strategies to learn about science, math, history and literature.”**

McConachie and Petrosky, *Content Matters*, 2010

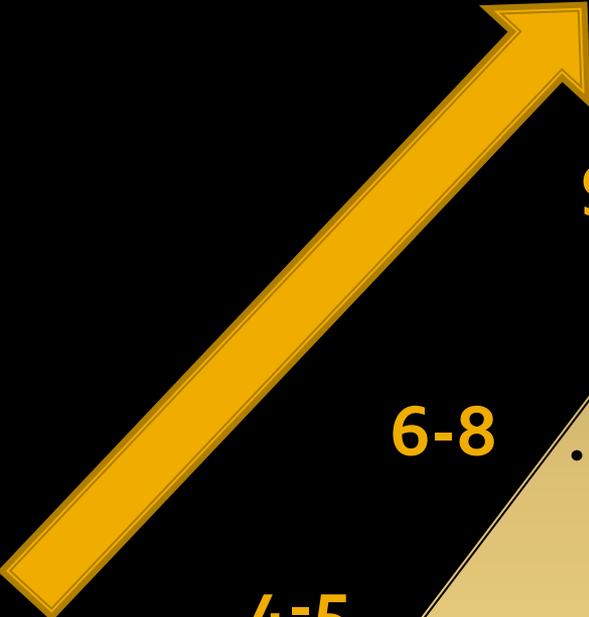
# What is Disciplinary Literacy?

**Disciplinary Literacy is the use of discipline-specific practices to access, apply, and communicate content knowledge.**

# Why Disciplinary Literacy?

- **Each discipline has specialized:**
  - **Ways of thinking**
  - **Language and vocabulary**
  - **Types of text to comprehend**
  - **Ways of communicating in writing**

# THE SHIFT



9-12

Disciplinary  
Literacy

6-8



Intermediate Literacy

4-5

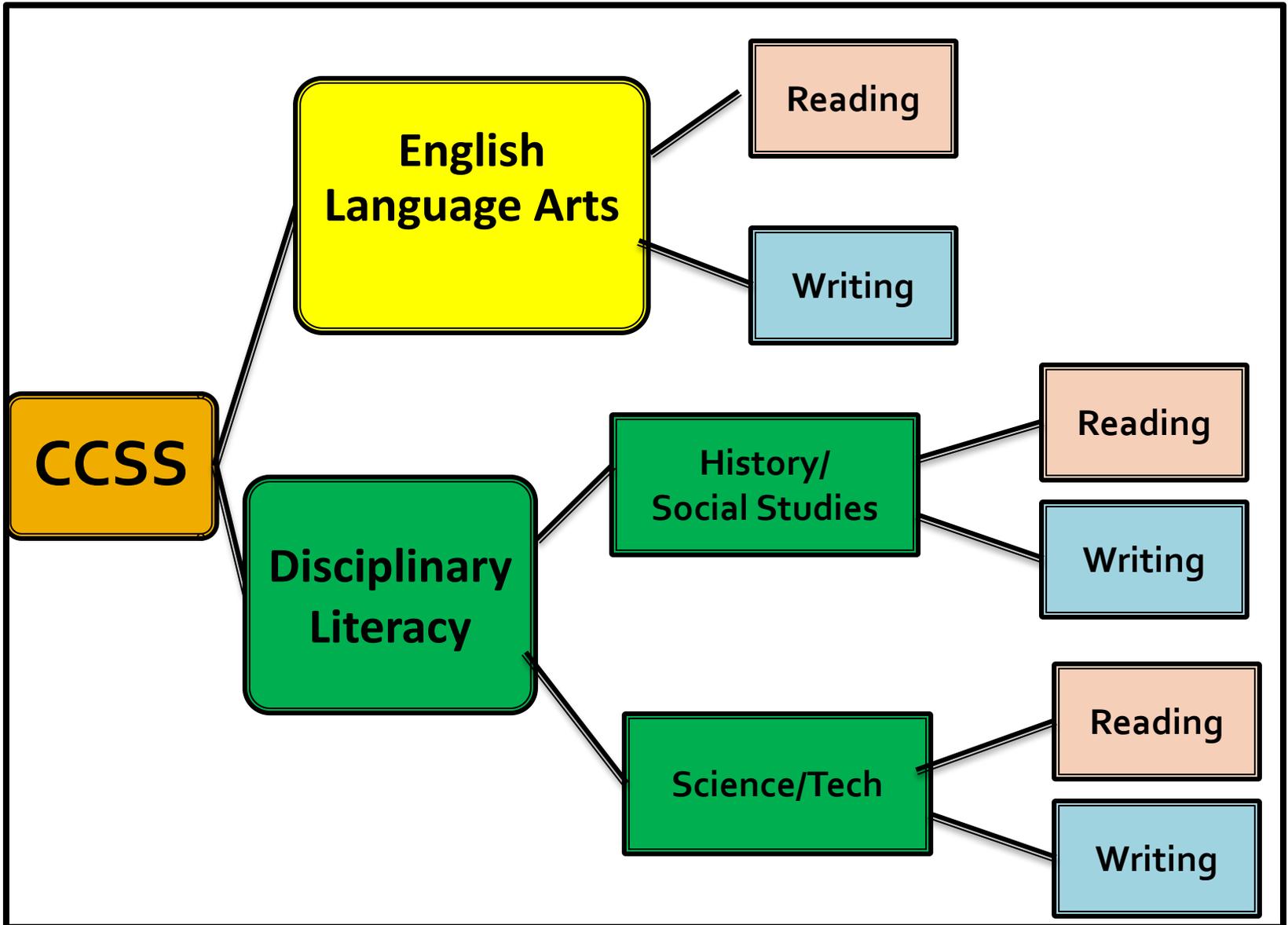
Basic Literacy

Pk-3

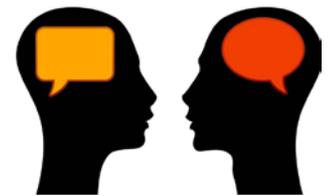
All fields of study demand analysis of complex texts and strong oral and written communication skills using discipline-specific discourse. Because each discipline acquires, develops and shares knowledge in distinct ways, educators in each field must take ownership of building robust instruction around discipline-specific literacy skills to better prepare students for college and careers.

# PARCC Assessments

- Elementary      50% informational  
                         50% literary
- Middle            60% informational  
                         40% literary
- High                70% informational  
                         30% literary



# The Standards Side-by-Side



# DECONSTRUCTING THE FRAMEWORKS

Anchor Standard

Cluster

Grade-level Standard

Essential Skills & Knowledge

Cluster: Craft a structure

CCR Anchor Standard #6 Assess how point of view or purpose shapes the content and style of

Grades 9-10

Grades

RST.9-10.6 Analyze the author's purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, defining the question the author seeks to address.

RST.9-10.6 Analyze the author's purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain to be resolved.

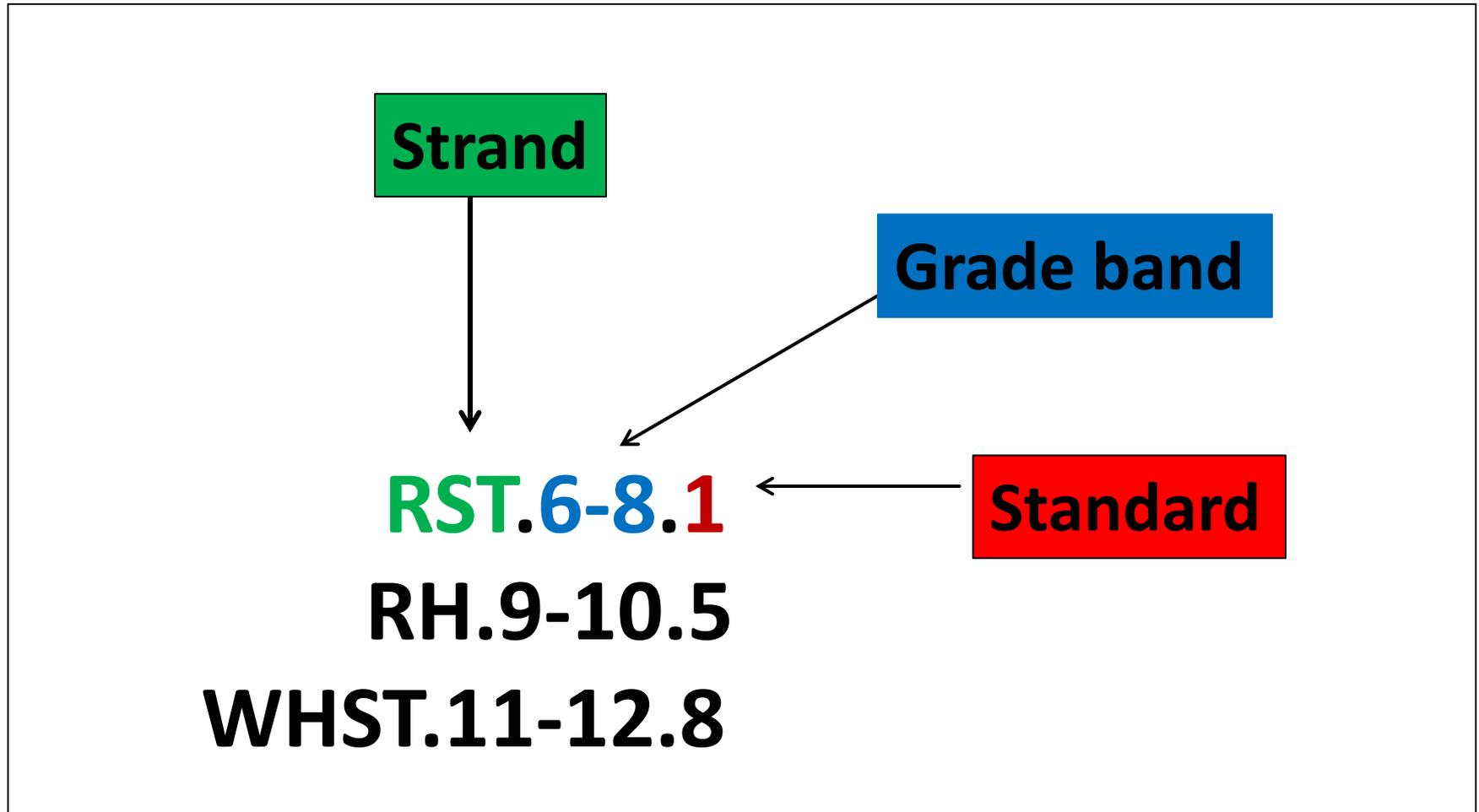
Essential Skills and Knowledge

Essential Skills and Knowledge

- Analyze and explain the structure of an explanation, procedure, or experiment and how it contributes to meaning and/or purpose of the text.
- Determine and examine the relationships between and among ideas throughout the text and how they contribute to meaning.
- Evaluate the effectiveness of the text to address the author's purpose.

- Identify and explain the author's purpose in providing an explanation, describing a procedure, or discussing an experiment in a text.
- Determine and examine the relationships between and among ideas throughout the text how they contribute to meaning.
- Evaluate the text for completeness, and relevance.
- Analyze and explain any inconsistencies, ambiguities, or gaps among information presented in text.

# Deconstructing the Code



**What does Disciplinary Literacy  
look like in a classroom?**

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# Moving.....

## FROM.....

- Writing from a personal perspective... I think, I feel.
- Teacher interpreting text.
- Reading only textbooks.
- Identification and memorization of facts.
- Using a single text to gather information.

## TO.....

- Evidence -based responses both orally and in writing.
- Students immersed in “the work.”
- Increased close reading of a variety of informational texts.
- Analyzing, synthesizing, and critiquing information.
- Multiple sources of information.

**Hoose, Phillip. *The Race to Save Lord God Bird*. New York: Farrar, Straus and Giroux, 2004. (2004)**

To become extinct is the greatest tragedy in nature. Extinction means that all the members of an entire species are dead; that an entire genetic family is gone, forever. Or, as ornithologist William Beebe put it, "When the last individual of a race of living things breathes no more, another heaven and another earth must pass before such a one can be again."

Some might argue that this doesn't seem so tragic. After all, according to scientists, 99 percent of all species that have ever lived are now extinct. And there have already been at least five big waves of mass extinction, caused by everything from meteorites to drought. The fifth and most recent wave, which took place a mere 65 million years ago, destroyed the dinosaurs along with about two-thirds of all animal species alive at that time. In other words, we've been through this before.

But the sixth wave, the one that's happening now, is different. For the first time, a single species, *Homo sapiens*-humankind-is wiping out thousands of life forms by consuming and altering the earth's resources. Humans now use up more than half of the world's fresh water and nearly half of everything that's grown on land. The sixth wave isn't new; it started about twelve thousand years ago when humans began clearing land to plant food crops. But our impact upon the earth is accelerating so rapidly now that thousands of species are being lost every year. Each of these species belongs to a complicated web of energy and activity called an ecosystem. Together, these webs connect the smallest mites to the greatest trees.

## Before Common Core Question

**What does extinction mean?**

**What percent of all species have become extinct?**

## Common Core Sample

Use evidence from the text to explain how multiple species have become extinct.

In this article, the author describes several “waves of extinction.” Use specific information from the article to explain why the author presented the information in this manner.

# Social Studies Before Common Core

The Allied and Associated Governments affirm and Germany accepts the responsibility of Germany and her allies for causing all the loss and damage to which the Allied and Associated Governments and their nationals have been subjected as a consequence of the war imposed upon them by the aggression of Germany and her allies.

The Allied and Associated Governments, however, require, and Germany undertakes, that she will make compensation for all damage done to the civilian population of the Allied and Associated Powers and to their property during the period of the belligerency of each as an Allied or Associated Power against Germany by such aggression by land, by sea and from the air, and in general all damage as defined in Annex I hereto.

Resource: *Treaty of Versailles, Articles 231 and 232 (1919)*

## Before Common Core

**The Treaty of Versailles blamed Germany solely for WWI and insisted that Germany pay massive reparations for the damage caused during the war. Write a five-paragraph essay explaining Germany's role in starting the war.**

# Social Studies with Common Core

There must be justice for the dead and wounded and for those who have been orphaned and bereaved that Europe might be freed from Prussian despotism. There must be justice for the peoples who now stagger under war debts which exceed £30,000,000,000 that liberty might be saved. There must be justice for those millions whose homes and land, ships and property German savagery has spoliated and destroyed.

Resource: Georges Clemenceau, speech at Paris Peace Conference (1919)

The Treaty includes no provision for the economic rehabilitation of Europe - nothing to make the defeated Central Powers into good neighbours, nothing to stabilise the new States of Europe, nothing to reclaim Russia; nor does it promote in any way a compact of economic solidarity amongst the Allies themselves; no arrangement was reached at Paris for restoring the disordered finances of France and Italy, or to adjust the systems of the Old World and the New.

Resource: John Maynard Keynes, *The Economic Consequences of Peace* (1920)

## Common Core

**After analyzing multiple primary source reactions to the Treaty of Versailles, write an argumentative text that evaluates whether the imposition of war reparations on Germany was the best course of action following WWI. Cite evidence from the sources to support your claim, and refute counterclaims.**

**Strive for classrooms that  
look and feel like literacy is a  
vehicle and not an addendum.**



# Suggestions for School-Based PD

- Share this presentation with staff.
- Analyze the MSDE publication, *Literacy in All Subjects*.
- Present 7 Capacities of Literate Individuals for career and college readiness.
- Compare the CCSS side-by-side documents.
- Explore available digital resources.

# Next Steps

- Access the Frameworks Online
- Follow-Up Webinars
- Disciplinary Literacy Conference
- Regional Disciplinary Literacy Workshops

# Contact us!

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# Sites to Explore!

- [www.achievethecore.org](http://www.achievethecore.org)
- <http://www.shanahanonliteracy.com/2008/01/vita-timothy-shanahan-personal.html>
- <http://www.ascd.org/professional-development/webinars/common-core-webinars.aspx#archived>
- <http://www.parcconline.org/parcc-content-frameworks>
- <http://dpi.wi.gov/standards/disciplinaryliteracy.html>

# Thank you!

