

2012-13

New academic standards

**Common Core State Standards
and NC Essential Standards**

Common Core State Standards

English
Language
Arts

Math

Literacy
in Social Studies,
Science, and
Technical Subjects

Essential Standards

Science

Arts Education

World Language

Social Studies

Healthful Living

Occupational Course of Study – Implemented in 2011-12

Information and Technology Skills – Implemented in 2011-12

Guidance

CTE

The following contents have adopted (or are in the process of being adopted) standards and implementation is scheduled for 2012-13

Common Core State Standards

Overview

Common Core State Standards

- > Demonstrates Independence
- > Builds Strong Content Knowledge
- > Responds to the Varying Demands of Audience, Task, Purpose, and Discipline
- > Comprehends and Critiques
- > Values Evidence
- > Uses Technology and Digital Media Strategically and Capably
- > Understands Other Perspectives and Cultures

Common Core State Standards

Emphasis on 21st century skills

The new **teacher evaluation instrument** will help guide teachers to **improve**, particularly as they scaffold for independence, **teach students to use media effectively** and ethically, and **work with others to learn and create**.

Common Core State Standards

21st Century
Examples

Critical Thinking and Problem Solving

Delineate and evaluate argument and specific claims in a text, assessing whether the reasoning is valid and the evidence is relevant and sufficient.

(Reading Standards for Informational Text Grades 9-10, 8)

Collaboration

Work with peers to promote civil, democratic discussions and decision making, set clear goals and deadlines, and establish individuals as needed.

(Speaking and Listening Grades 11-12, 1b)

Common Core State Standards

English language arts
strands

READING

Text complexity and the growth of the comprehension

SPEAKING AND LISTENING

Flexible communication and collaboration

WRITING

Text types, responding to reading and research

LANGUAGE

Conventions, effective use, and vocabulary

Common Core State Standards

Mathematics
K-5 Domains

- > Counting and cardinality (K only)
- > Operations and algebraic thinking
- > Number and operations in base ten
- > Number and operations/fractions (3-5 only)
- > Measurement and data
- > Geometry

Common Core State Standards

Mathematics
6-8 Domains

- Ratios and proportional relationships (6-7 only)
- Number system
- Expressions and equations
- Geometry
- Statistics and probability
- Functions (8th only)



Common Core State Standards

Mathematics
9-12 Domains

- > Number and Quantity
- > Algebra
- > Functions
- > Modeling
- > Geometry
- > Statistics and Probability

$$1. \quad y = (2x^2 + 1)^4$$
$$\frac{dy}{dx} = 4(2x^2 + 1)^3$$
$$= 16x(2x^2 + 1)$$

E

$$2. \quad \int x\sqrt{x^2+1} \, dx =$$
$$u = x^2 + 1$$
$$du = 2x \, dx$$
$$\frac{1}{2} du = x \, dx$$



North Carolina Essential Standards

CHANGES IN
LEARNING

Additional standards that students should learn in order to take advanced courses such as calculus, advanced statistics, or discrete mathematics are indicated by (+), as in this example:

(+) Represent complex numbers on the complex plane in rectangular and polar form (including real and imaginary numbers).

Math

Content Standards

Content standards include:

- Make sense of problems and persevere in solving them
- Reason abstractly and quantitatively
- Construct viable arguments and critique the reasoning of others
- Model with mathematics
- Use appropriate tools strategically
- Attend to precision
- Look for and make use of structure
- Look for and express regularity in repeated reasoning

Common Core State Standards

Literacy Component for History/Social
Studies, Science, and Technical Subjects K-12

Common Core State Standards

- > Focus on **discipline-specific vocabulary**
- > Acknowledgement of **unique text structures**
- > Expectation for **reading and writing** in non-ELA classrooms
- > Expectation for **development of informational/technical writing skills**
- > Focus on **critical analysis and evidence**
- > **Not replacement** for Essential Standards

Common Core State Standards

K-12 Anchor Standards
for Reading

There are 10 standards organized under the following topics:

Key ideas
and details

Craft and
structure

Integration of
Knowledge
and Ideas

Range of
Reading and
Level of Text
Complexity

Common Core State Standards

Sample
Standard

ANCHOR STANDARD
(Reading)

History/Social
Studies

Science & Technical
Subjects

3. Analyze how and why individuals, events, and ideas develop and interact over the course of a text

RH.6-8.3. Identify key steps in a text's description of a process related to history/social studies (e.g., how a bill becomes a law, how interest rates are raised or lowered)

RST.6-8.3. Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks.

Key Factors in History Reading Standards



Textual evidence/sources

Relationship among events

Importance of author

Thinking across sources

Key Factors in Science/TS Reading Standards

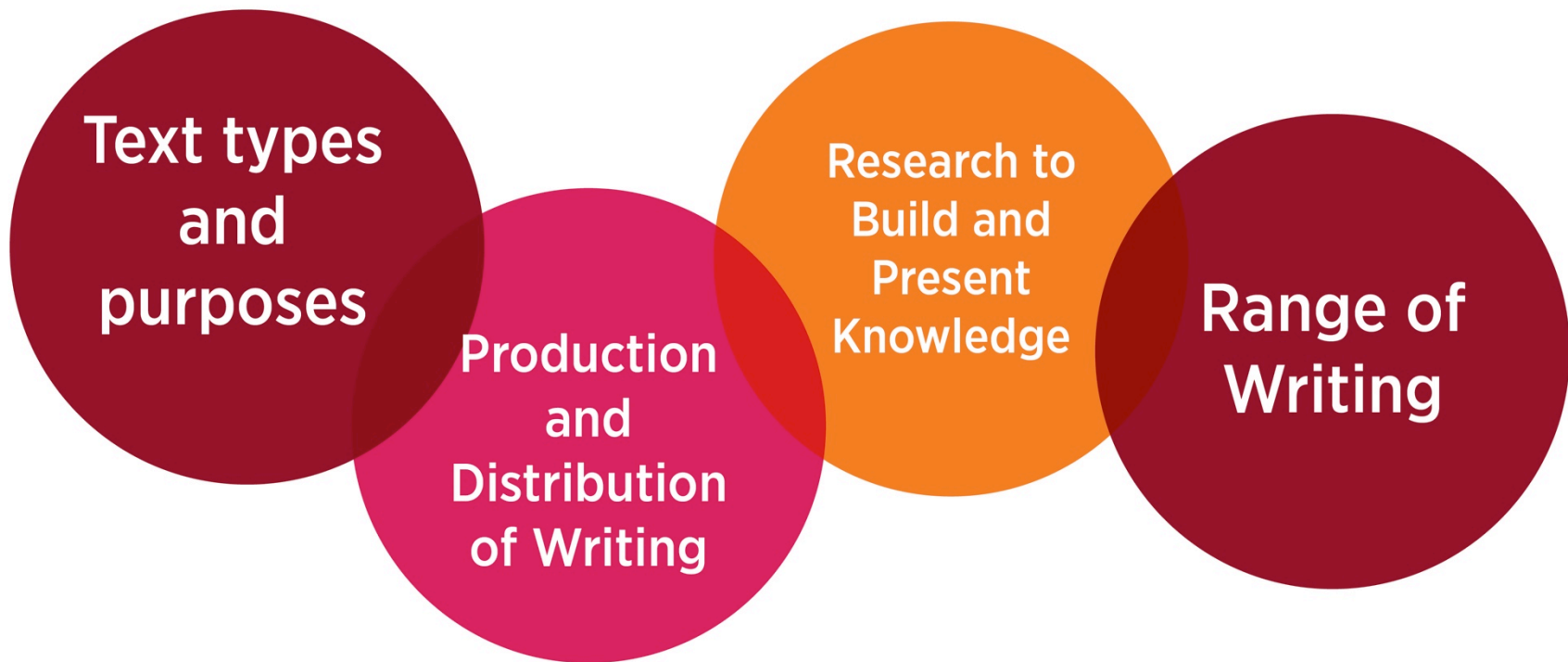
Understanding complex processes (follow precisely)

Translation (compare and contrast information in different forms, synthesize)

Critical thinking (distinguish among, assess, evaluate)

K- 12 Anchor Standards for Writing

There are 10 standards organized under the following topics:

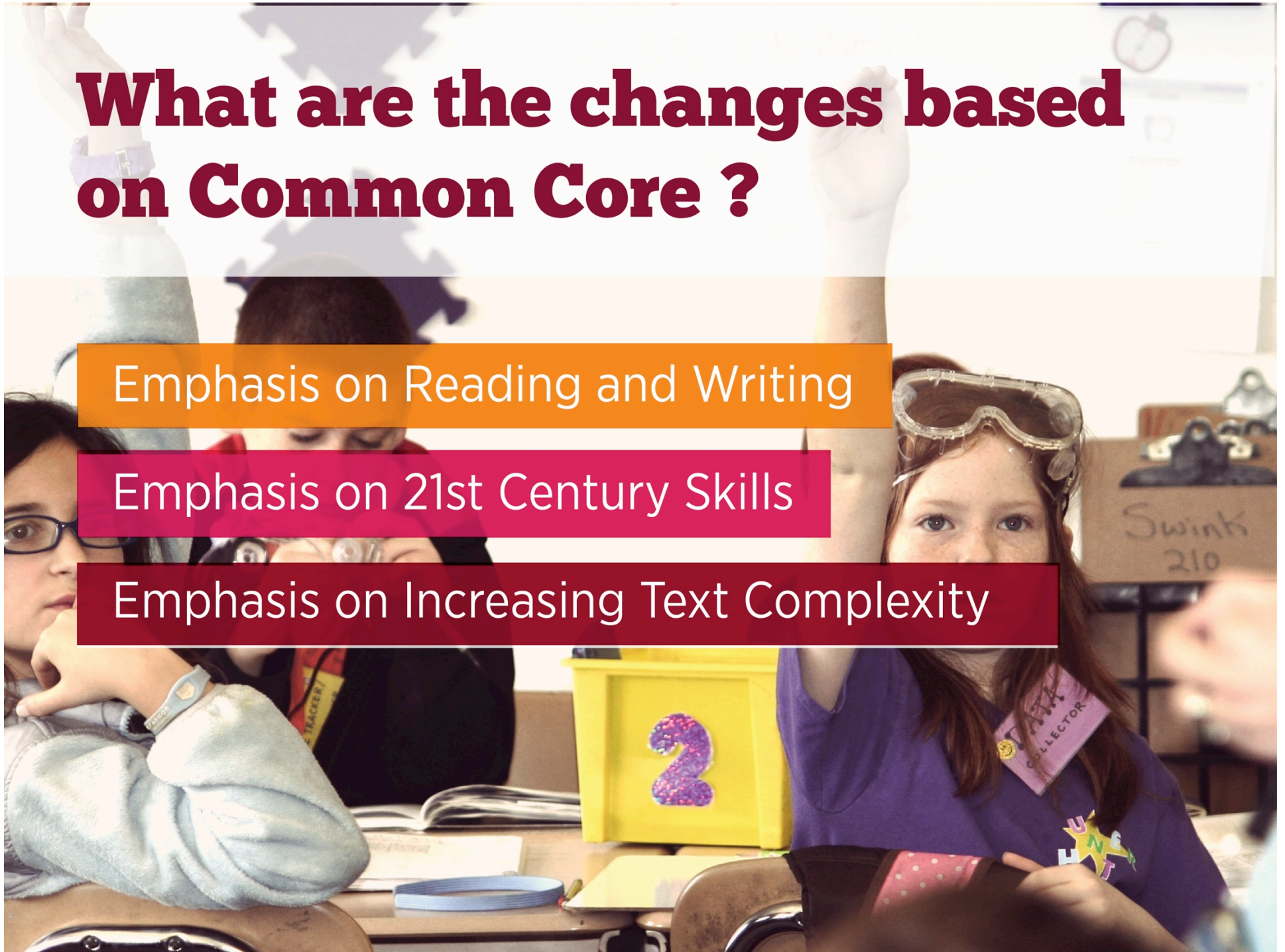


What are the changes based on Common Core ?

Emphasis on Reading and Writing

Emphasis on 21st Century Skills

Emphasis on Increasing Text Complexity



North Carolina Essential Standards

Overview

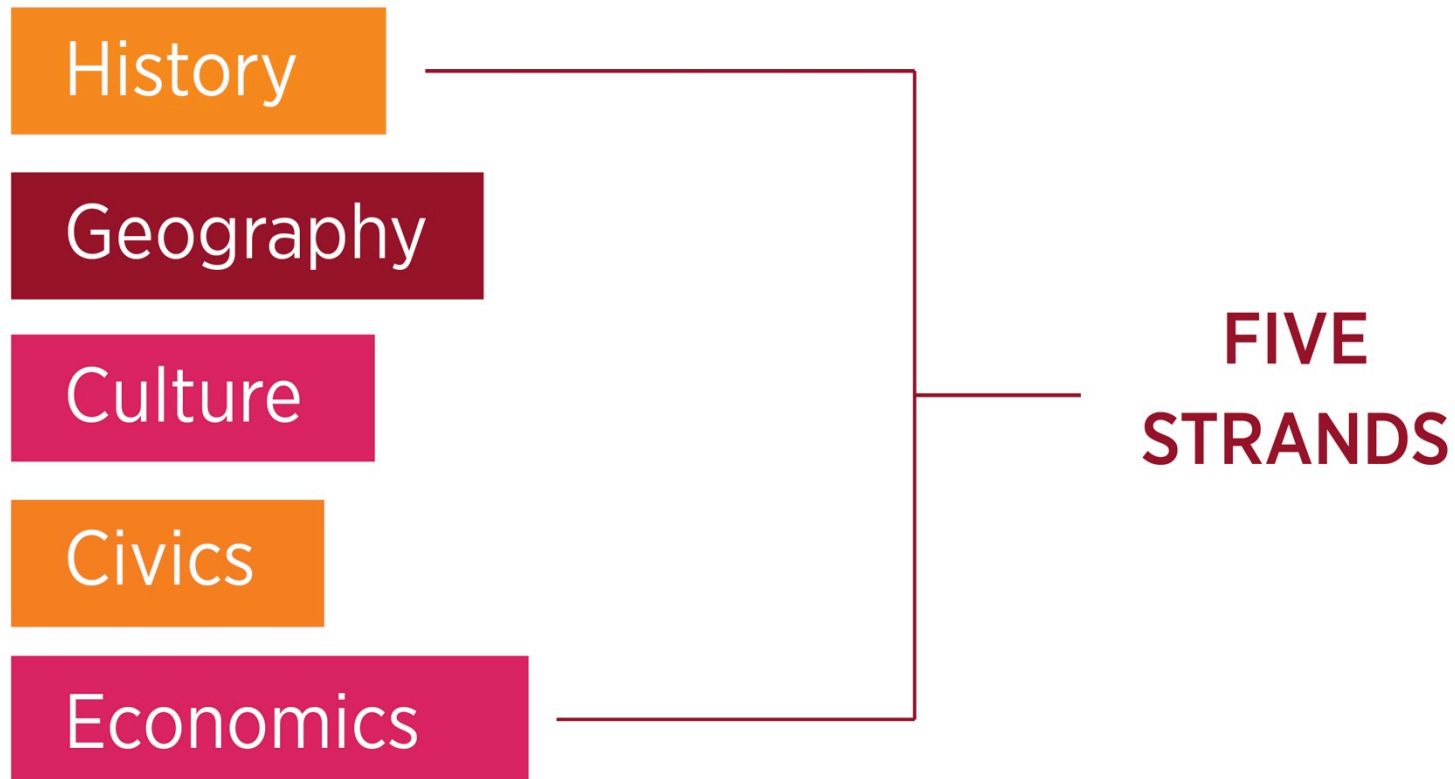
Essential Standards for Social Studies

Reflects a shift to a more conceptual framework –

- > not facts taught in isolation
- > not memorization of names and dates but instead the connections and causality, and
- > Shift from regional coverage of content to chronological

<http://www.youtube.com/watch?v=wWz08mVUIt8>

Essential Standards for Social Studies



Essential Standards for Science



In K-8, students study earth, life, and physical science topics each year

Some topics have shifted from one grade level to another

Inquiry is integrated into each topic

What are the changes in the Essential Standards from the Current SCoS?

- > Identifies essential standards and further clarifies these standards through the objectives
- > Emphasis on depth vs. breadth
- > Based on Revised Bloom's Taxonomy

http://www.odu.edu/educ/roverbau/Bloom/blooms_taxonomy.htm