Preparing for your Core Knowledge Implementation

Alignment Considerations

Core Knowledge Foundation 801 East High Street Charlottesville, VA 22902 434.977.7550 K8schools@coreknowledge.org



Why an Alignment is Needed

Although the cumulative nature of the *Core Knowledge Sequence* lays out specific grade-level content, state standards (e.g., social studies and science) do not always align with this curricular framework. Therefore, the school staff needs to reach consensus as to what content will be taught at each grade before the curriculum plan can be developed.

In this packet, you will be provided with (and directed to) supports that will enable you to complete a high-level alignment between the *Sequence* and your standards. You will be making decisions around what to do when "content-rich" standards do not align and/or when "content neutral" standards should be addressed through *Sequence* topics. By making these decisions upfront, your teachers will be able to develop a solid curriculum plan and one that is in line with your school's position.

Preparing for Your Core Knowledge Implementation Alignment Considerations

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I Alignment Considerations

First, we invite you to watch an on-demand presentation, the **Alignment Considerations Webinar**, which highlights situations where you would need to make decisions around alignment. We recommend that any staff members you choose to include in this alignment process (e.g., a curriculum committee, team leaders, etc.) should view this webinar with you. The alignment considerations have also been summarized on page 3 of this packet.

II Crosswalk Activity

You (and/or any staff members that you include in this process) will then review the *Sequence* topics at each grade level relative to your science and social studies state standards. This activity will identify where alignment exists between science and history/social studies topics at each grade level, and will serve as a reference as you develop a school position statement.

III Position Statement

You will prepare a position statement describing what will drive history and science instruction at your school.

Questions, comments, or need help. We want to hear from you. Please contact us at (434) 977-7550.

Considerations for Aligning Core Knowledge to Your State Standards

"Standards are not curriculum. This is not semantics, it is a crucial distinction. Consider this, auto safety standards do not determine what kind of car you drive. Food safety standards will not determine what you eat for dinner or what you buy at the grocery store tonight. And English Language Arts standards don't tell us what to teach or what kids should read."

- Robert Pondiscio, Senior Fellow and Vice President for External Affairs, Thomas B. Fordham Institute

It is important to recognize that the terms "standards" and "curriculum" are often—and erroneously—used as synonyms for one another. Standards define what children should know and be able to do at the end of each grade. A curriculum, like the one outlined by the *Core Knowledge Sequence*, describes what children need to learn in order to meet standards. Truly, successful implementation of standards depends on a coherent, specific, and content-rich <u>curriculum</u>.

Content-rich versus Content-neutral Standards

As you might expect, some state standards are **content rich**. Such standards note specific topics that are to be assessed at a particular grade. For example, "The student will explain how the contributions of **ancient China and Egypt** have influenced the present world in terms of **architecture**, **inventions**, **the calendar**, **and written language**" (Virginia Standards of Learning, Grade 2). This standard specifies the content to be explored and understood by the end of the grade. Standards such as this make it clear to instructors the kinds of content that will be used as examples during end-of-year assessments.

Other standards can be classified as **content neutral**. That is, some standards are broad and unspecific statements that could be met by studying a variety of topics or people. For instance, "Studying the past makes it possible for us to understand the human story across time" (National Curriculum Standards for Social Studies). This concept of why we study the past (often also known as a **theme**) can be addressed by connecting/discussing how a variety of topics relate. The content used to reach this type of standard is not specified and is, as <u>some have argued</u>, often taken for granted. Here is another example of a content-neutral standard that is rooted in a broad concept/theme:

"Observed patterns of forms and events guide organization and classification, and they prompt questions about relationships and the factors that influence them."

- A Framework for K-12 Science Education

This science concept is broad enough that it could be (and is <u>intended to be</u>) applied to multiple topics such as the classification of animals, the growth rate of plants, and/or even the classification of materials (e.g., wood, rock, metals, or plastic). Content-neutral standards such as these do not make it 100% clear to instructors what will be used as examples during year-end assessments.

Because both content-rich and content-neutral standards exist across our nation's educational landscape, educators must understand and explore the following ideas to prepare for their implementation of Core Knowledge:

- 1) Where does explicit alignment exist between my curriculum and the content-rich standards of my state? and
- 2) Where are the opportunities for application and extension when my state's standards are content neutral?

II. Alignment Crosswalk

Grade 4

An important step to begin (or even evaluate) your Core Knowledge implementation is to compare your curriculum to your grade-level standards. In the following pages you will find a series of high-level "crosswalk" capture sheets for each grade level, kindergarten through eighth grade. These sheets list the science and history domains/topics that are specified by the <u>Core Knowledge Sequence</u>. The crosswalk also offers space for reviewers to take notes, identify potential points of misalignment, and/or capture ideas for integration of standards within the context of Core Knowledge domains. These sheets can be used by one representative from your school or distributed amongst the grade-level teams for a shared effort. Additionally, the end result of the crosswalk will be a clearer view of how the Core Knowledge curriculum framework compares to the history and science expectations set by your state. (This information will be highly useful when determining your School Position Statement as well.)

Quick Links to Crosswalk Sheets

<u>Kindergarten</u>	Grade 5
Grade 1	Grade 6
Grade 2	Grade 7
Grade 3	Grade 8

KINDERGARTEN

STEP 1 — Using your State Standards, check off the Core Knowledge (CK) domains/topics that align at this grade level.* (Use the <u>CK Sequence</u> to help clarify the scope of CK topics, if needed.) You may wish to document specific standards that align for future reference. Next, highlight the domains/topics that remain. This should indicate CK content that goes above and beyond your state standards.

*NOTE: Be sure to refer to the "Considerations for Aligning Core Knowledge to your State Standards" reference sheet.

Core Knowledge Science Topics	Core Knowledge History Topics
☐ Plants and Plant Growth	World History
☐ Animals and their Needs	☐ Geography: Spatial Sense (*Can be integrated with other domains)
☐ The Human Body (Five Senses)	☐ Overview of the Seven Continents (*Can be integrated with other domains)
☐ Introduction to Magnetism	American History
☐ Seasons and Weather	☐ Geography (*Can be integrated with other domains)
☐ Taking Care of the Earth	☐ Native American Peoples, Past and Present
Notes regarding alignment:	☐ Early Exploration and Settlement
	☐ Presidents, Past and Present (*Can be integrated with other domains)
	Symbols and Figures (*Can be integrated with other domains)

FIRST GRADE

STEP 1 – Using your State Standards, check off the Core Knowledge (CK) domains/topics that align at this grade level.* (Use the <u>CK Sequence</u> to help clarify the scope of CK topics, if needed.) You may wish to document specific standards that align for future reference. Next, <u>highlight</u> the domains/topics that remain. This should indicate CK content that goes above and beyond your state standards.

*NOTE: Be sure to refer to the "Considerations for Aligning Core Knowledge to your State Standards" reference sheet.

Core Knowledge Science Topics	Core Knowledge History Topics
☐ Living Things and Their Environment	World History
☐ The Human Body (Body Systems)	☐ Geography: Spatial Sense (*Can be integrated with other domains)
☐ Matter	☐ Early World Civilization
☐ Properties of Matter: Measurement (*Can be integrated with other domains)	☐ Modern: Civilization and Culture: Mexico
☐ Introduction to Electricity	American History
☐ Astronomy	☐ Early People and Civilizations
☐ The Earth	☐ Early Exploration and Settlement
Notes regarding alignment:	☐ From Colonies to Independence: The American Revolution
	☐ Early Exploration of American West
	☐ Symbols and Figures (*Can be integrated with other domains)

SECOND GRADE

STEP 1 – Using your State Standards, check off the Core Knowledge (CK) domains/topics that align at this grade level.* (Use the <u>CK Sequence</u> to help clarify the scope of CK topics, if needed.) You may wish to document specific standards that align for future reference. Next, highlight the domains/topics that remain. This should indicate CK content that goes above and beyond your state standards.

*NOTE: Be sure to refer to the "Considerations for Aligning Core Knowledge to your State Standards" reference sheet.

Core Knowledge Science Topics	Core Knowledge History Topics
☐ Cycles in Nature	World History
□ Seasonal Cycles	☐ Geography: Spatial Sense (*Can be integrated with other domains)
□ Life Cycles	☐ Early Asian Civilizations
□ Water Cycle	☐ Modern Japanese Civilizations
□ Insects	☐ The Ancient Greek Civilization
☐ The Human Body	American History
□ Cells	☐ American Government: The Constitution
□ Digestive and Excretory Systems	☐ The War of 1812
☐ Magnetism	☐ Westward Expansion
☐ Simple Machines	☐ The Civil War
Notes regarding alignment:	☐ Immigration and Citizenship
	☐ Fighting for a Cause
	☐ Geography of the Americas (*Can be integrated with other domains)
	☐ Symbols and Figures (*Can be integrated with other domains)

THIRD GRADE

STEP 1 – Using your State Standards, check off the Core Knowledge (CK) domains/topics that align at this grade level.* (Use the <u>CK Sequence</u> to help clarify the scope of CK topics, if needed.) You may wish to document specific standards that align for future reference. Next, highlight the domains/topics that remain. This should indicate CK content that goes above and beyond your state standards.

*NOTE: Be sure to refer to the "Considerations for Aligning Core Knowledge to your State Standards" reference sheet.

Core Knowledge Science Topics	Core Knowledge History Topics
☐ Introduction to Classification of Animals	World History
☐ The Human Body	☐ World Geography (*Can be integrated within other domains)
☐ Muscular, Skeletal, and Nervous Systems	☐ The Ancient Roman Civilization
□ Vision and Hearing	☐ The Vikings
☐ Light and Optics	American History
□ Sound	☐ The Earliest Americans
□ Ecology	☐ Early Exploration of North America
☐ Astronomy	☐ The Thirteen Colonies: Life and Times before the Revolution
Notes regarding alignment:	

FOURTH GRADE

STEP 1 – Using your State Standards, check off the Core Knowledge (CK) domains/topics that align at this grade level.* (Use the <u>CK Sequence</u> to help clarify the scope of CK topics, if needed.) You may wish to document specific standards that align for future reference. Next, highlight the domains/topics that remain. This should indicate CK content that goes above and beyond your state standards.

*NOTE: Be sure to refer to the "Considerations for Aligning Core Knowledge to your State Standards" reference sheet.

Core Knowledge Science Topics	Core Knowledge History Topics
☐ The Human Body	World History
☐ The Circulatory System	☐ World Geography (Spatial Sense; Mountains) (*Can be integrated with other domains)
☐ The Respiratory System	☐ Europe in the Middle Ages
☐ Chemistry: Basic Terms and Concepts	☐ The Spread of Islam and the "Holy Wars"
□ Electricity	☐ Early and Medieval African Kingdoms
☐ Geology: The Earth and Its Changes	☐ China: Dynasties and Conquerors
☐ Meteorology	American History
Notes regarding alignment:	☐ The American Revolution
	☐ Making a Constitutional Government
	☐ Early Presidents and Politics
	☐ Reformers
	☐ Symbols and Figures (*Can be integrated with other domains)

FIFTH GRADE

STEP 1 – Using your State Standards, check off the Core Knowledge (CK) domains/topics that align at this grade level.* (Use the <u>CK Sequence</u> to help clarify the scope of CK topics, if needed.) You may wish to document specific standards that align for future reference. Next, highlight the domains/topics that remain. This should indicate CK content that goes above and beyond your state standards.

*NOTE: Be sure to refer to the "Considerations for Aligning Core Knowledge to your State Standards" reference sheet.

Core Knowledge Science Topics	Core Knowledge History Topics
☐ Classifying Living Things	World History
☐ Cells: Structures and Processes	☐ World Geography (Spatial Sense; Lakes) (*Can be integrated with other domains)
☐ Plant Structures and Processes	☐ Early American Civilizations
☐ Life Cycles and Reproduction	☐ European Exploration, Trade, and the Clash of Cultures
☐ The Human Body	☐ The Renaissance and the Reformation
☐ The Endocrine System	☐ England from the Golden Age to the Glorious Revolution
☐ The Reproductive System	☐ Russia: Early Growth and Expansion
☐ Chemistry: Matter and Change	☐ Feudal Japan
Notes regarding alignment:	American History
	☐ Westward Expansion
	☐ The Civil War: Causes, Conflicts, Consequences
	☐ Native Americans: Cultures and Conflicts
	☐ U.S. Geography (*Can be integrated with other domains)

SIXTH GRADE

STEP 1 – Using your State Standards, check off the Core Knowledge (CK) domains/topics that align at this grade level.* (Use the <u>CK Sequence</u> to help clarify the scope of CK topics, if needed.) You may wish to document specific standards that align for future reference. Next, highlight the domains/topics that remain. This should indicate CK content that goes above and beyond your state standards.

*NOTE: Be sure to refer to the "Considerations for Aligning Core Knowledge to your State Standards" reference sheet.

Core Knowledge Science Topics	Core Knowledge History Topics
☐ Plate Tectonics	World History
□ Oceans	☐ World Geography (Spatial Sense; Deserts) (*Can be integrated within other domains)
☐ Astronomy: Gravity, Stars, and Galaxies	☐ Lasting Ideas from Ancient Civilizations
☐ Energy, Heat, and Energy Transfer	☐ The Enlightenment
☐ The Human Body: Lymphatic and Immune Systems	☐ The French Revolution
Notes regarding alignment:	☐ Romanticism
	☐ Industrialism, Capitalism, & Socialism
	☐ Latin American Independence Movements
	American History
	☐ Immigration, Industrialization, & Urbanization
	□ Reform

SEVENTH GRADE

STEP 1 – Using your State Standards, check off the Core Knowledge (CK) domains/topics that align at this grade level.* (Use the <u>CK Sequence</u> to help clarify the scope of CK topics, if needed.) You may wish to document specific standards that align for future reference. Next, highlight the domains/topics that remain. This should indicate CK content that goes above and beyond your state standards.

*NOTE: Be sure to refer to the "Considerations for Aligning Core Knowledge to your State Standards" reference sheet.

Core Knowledge Science Topics	Core Knowledge History Topics**
☐ Atomic Structure	☐ America Becomes a World Power
☐ Chemical Bonds and Reactions	☐ World War I: "The Great War," 1914-1918
☐ Cell Division and Genetics	☐ Russian Revolution
☐ History of the Earth and Life Forms	☐ America from the Twenties to the New Deal
☐ Evolution	□ World War II
** In earlier grades, the history guidelines in the Sequence are organized into separate strands on World History and American History. Because the World and American History strands merge chronologically in sixth grade, here in seventh grade the Sequence presents a unified section on History and Geography.	☐ Geography of the United States (*Can be integrated with other domains)
Notes regarding alignment:	

EIGHTH GRADE

STEP 1 – Using your State Standards, check off the Core Knowledge (CK) domains/topics that align at this grade level.* (Use the <u>CK Sequence</u> to help clarify the scope of CK topics, if needed.) You may wish to document specific standards that align for future reference. Next, highlight the domains/topics that remain. This should indicate CK content that goes above and beyond your state standards.

*NOTE: Be sure to refer to the "Considerations for Aligning Core Knowledge to your State Standards" reference sheet.

Core Knowledge Science Topics	Core Knowledge History Topics**
☐ Physics	☐ The Decline of European Colonialism
☐ Electricity and Magnetism	☐ The Cold War
☐ Electromagnetic Radiation and Light	☐ The Civil Rights Movement
☐ Sound Waves	☐ The Vietnam War and the Rise of Social Activism
☐ Chemistry of Food and Respiration	☐ The Middle East and Oil Politics
** In grades K-6, the history guidelines in the Sequence are organized into separate strands on World History and American History. Because the World and American History strands merge chronologically in sixth grade, the Sequence presents a unified section on History and Geography in grades seven and eight.	☐ The End of the Cold War: The Expansion of Democracy and Continuing Challenges
Notes regarding alignment:	☐ Civics: The Constitution—Principles and Structure of American Democracy
	☐ The Geography of Canada and Mexico (*Can be integrated with other domains)

Part III - Position Statement

A. Reviewing the Options

Directions: In this section, you will develop a Position Statement that articulates what will drive implementation of history and science content at your school. Below, we have listed three (3) possible positions that a school could take. We encourage you review each option, and the related considerations, in preparation of developing your school's position. Please note, you are welcome to use (or build on) one of the options below, or create your own unique statement.

OPTION 1 Each grade level will implement history and science topics at the grade levels identified in the *Core Knowledge Sequence*. Although some standards may not align at a particular grade, they will be addressed through the implementation of the *Sequence* as a whole.

Considerations:

• Clarifying when standards are addressed (at different grade levels)

(When: Ongoing)

Teachers, parents, and other stakeholders may be interested to see when content-rich standards are being addressed in different grade levels through the *Sequence*. Consider how you can make this transparent (e.g., spreadsheet, high-level alignment document, etc.) and how you will communicate this information to your staff and school community.

Reinforcing content that is assessed at a later grade level

(When: Ongoing)

If standards are assessing content that is addressed through the *Sequence* at an earlier grade, later grade levels may want to build in time to review previously learned content. In addition, if the standards go beyond what was taught in the earlier grade levels, these teachers should consider how much time they need to introduce the more advanced concepts identified by the standards, which were not address in the earlier grade level(s) of the *Sequence*. If teachers find they need to allocate a week or more of instruction for this purpose, it should be noted on the school's curriculum plan.

OPTION 2 Each grade will address corresponding content-rich history and science state standards on grade level. In addition, implementation will go above and beyond the standards with the inclusion of the *Core Knowledge Sequence* topics outlined for each grade.

Considerations:

Reviewing the amount of content assigned to each grade level

(When: Prior to the start of the school year)

If your teachers are developing instructional units around multiple content-rich standards, in addition to the content of the *Sequence*, it's important to consider the time needed for effective implementation and instruction. The Core Knowledge approach promotes domain immersion—providing students with the time needed to build knowledge and vocabulary around a unit of study (approximately 2–4 weeks). Looking at the content assigned to each grade level, will your teachers have enough time to immerse students in each topic? If not, consider shifting your position to align more with option 1 or 3.

• Identifying overlap between standards and Sequence topics at different grade levels (When: Ongoing)

The content-rich standards of most states are quite often addressed at one or more points in the *Sequence*. If your teachers are addressing grade-level content standards, in addition to the content identified by the *Sequence*, repetition may occur across grades. For example, the topic *astronomy* is addressed explicitly in grades 1, 3, and 6 in the *Sequence* (with opportunities for cross-curricular connections also occurring in other grades such as Grade 5). If a state's science standards call for teachers to focus on *astronomy* in grade 2, there may be content that overlaps with what is taught in grade 1 and/or grade 3. In these situations, it will be helpful for your teachers to discuss the focus of instruction at each grade level, identify overlap, and (with guidance from school administration) make decisions around eliminating repeated instruction.

Review and reinforcement can support students as they connect new ideas and more complex concepts; however, focusing instructional time primarily on previously taught content can serve as a lost opportunity (e.g., the opportunity to learn something new or more complex). Consider how you would guide teachers through such discussions so they can make the most of instructional time.

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OPTION 3 Each grade level will address corresponding content-rich history and science state standards. Select Core Knowledge history and/or science topics will be moved to align with your content-rich standards.

Considerations:

Identifying the specific Sequence topics that will be moved

(When: Prior to the start of the school year)

In order to develop a curriculum plan, your teachers need to know what topics will be addressed at their grade level. Consider how you can make this transparent to teachers (e.g., including this information in your Position Statement, adding this information to the Crosswalk Activity, or developing a separate document to share with teachers). The choice is yours. What's important is that your teachers have a clear understanding of what *Sequence* topics and content-rich standards they need to pace across the academic year.

• Providing guidance around planning Sequence content designed for earlier/later grades (When: Ongoing)

When your teachers move a *Sequence* topic to an earlier grade level, the content may be too complex for the younger students. Likewise, moving a topic to a later grade may not be complex enough. Think about how you will support teachers as they plan their instruction in such cases. A great place to start this conversation is around the domain map while examining the guidelines and vocabulary associated with a domain. Guide your teachers as they plan their instruction to ensure it is rigorous as well as developmentally appropriate for students.

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Part III - Position Statement

B. Recording Your Schools Position and Rationale

Directions: In the space below, develop a Position Statement that articulates what will drive implementation of history and science content at your school. In addition, include your school's **rationale** for this position (i.e., why this position is in the best interest of the students you serve and how it aligns with your school's philosophy and/or district regulations).

POSITION STATEMENT:	
RATIONALE:	
Other Notes for Stakeholders:	