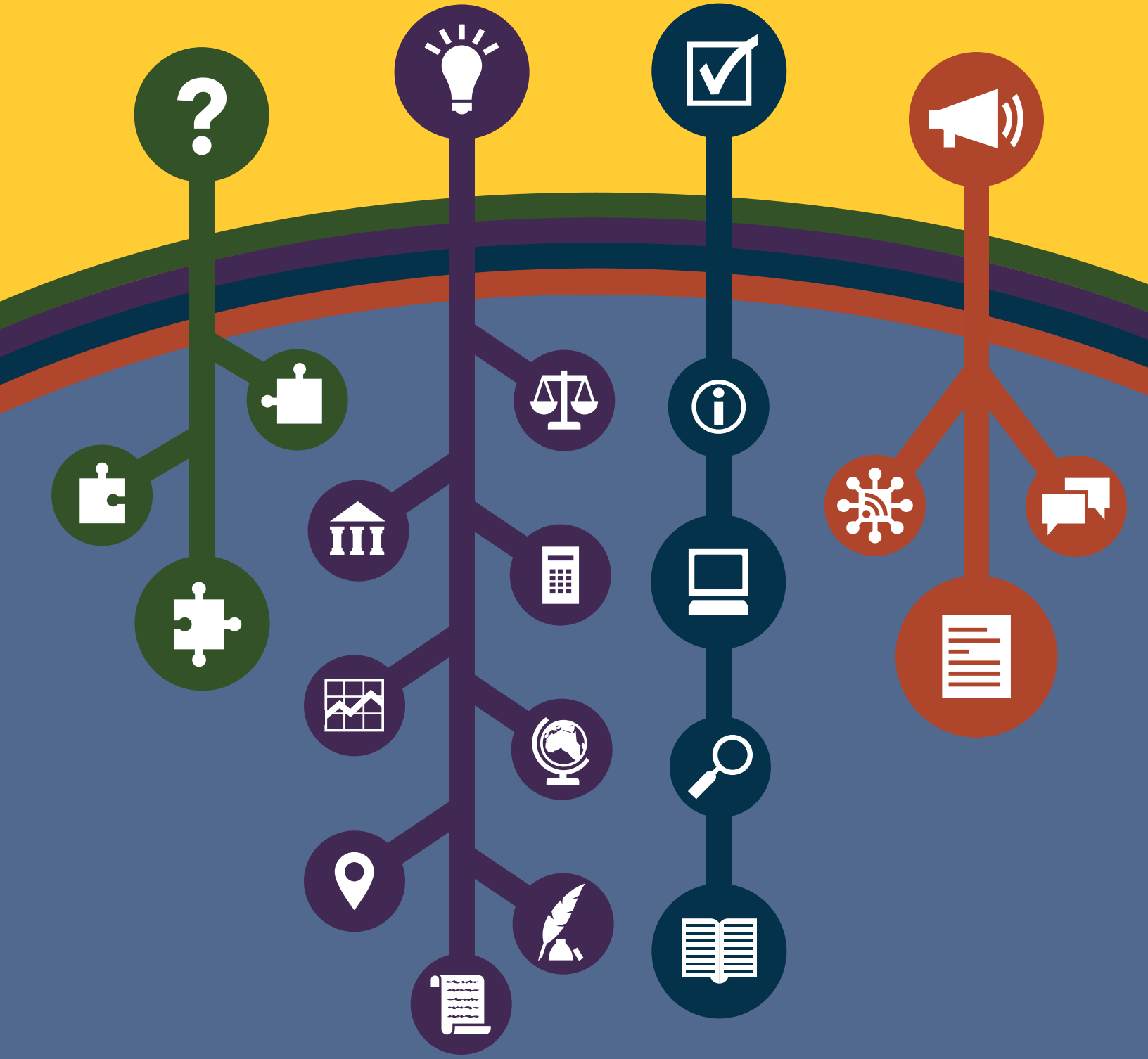
COLLEGE, CAREER & CIVIC LIFE

C3 FRAMEWORK

FOR SOCIAL STUDIES STATE STANDARDS



Guidance for Enhancing the Rigor of K-12 Civics, Economics, Geography, and History

The College, Career, and Civic Life (C3) Framework for Social Studies State Standards: Guidance for Enhancing the Rigor of K-12 Civics, Economics, Geography, and History is the product of a collaboration among the following fifteen professional organizations committed to the advancement of social studies education:

American Bar Association

American Historical Association

Association of American Geographers

Campaign for the Civic Mission of Schools

Center for Civic Education

Constitutional Rights Foundation Chicago

Constitutional Rights Foundation USA

Council for Economic Education

National Council for Geographic Education

National Council for History Education

National Council for the Social Studies

National Geographic Society

National History Day

Street Law, Inc.

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INTRODUCTION

IN THE COLLEGE, CAREER, AND CIVIC LIFE (C3) FRAMEWORK FOR SOCIAL STUDIES STATE STANDARDS, THE CALL FOR STUDENTS TO BECOME MORE PREPARED FOR THE CHALLENGES OF COLLEGE AND CAREER IS UNITED WITH A THIRD CRITICAL ELEMENT: PREPARATION FOR CIVIC LIFE. ADVOCATES OF CITIZENSHIP EDUCATION CROSS THE POLITICAL SPECTRUM, BUT THEY ARE BOUND BY A COMMON BELIEF THAT OUR DEMOCRATIC REPUBLIC WILL NOT SUSTAIN UNLESS STUDENTS ARE AWARE OF THEIR CHANGING CULTURAL AND PHYSICAL ENVIRONMENTS; KNOW THE PAST; READ, WRITE, AND THINK DEEPLY; AND ACT IN WAYS THAT PROMOTE THE COMMON GOOD. **THERE WILL ALWAYS BE DIFFERING PERSPECTIVES ON THESE OBJECTIVES. THE GOAL OF KNOWLEDGEABLE, THINKING, AND ACTIVE CITIZENS, HOWEVER, IS UNIVERSAL.**

NOW MORE THAN EVER, students need the intellectual power to recognize societal problems; ask good questions and develop robust investigations into them; consider possible solutions and consequences; separate evidence-based claims from parochial opinions; and communicate and act upon what they learn. And most importantly, they must possess the capability and commitment to repeat that process as long as is necessary. Young people need strong tools for, and methods of, clear and disciplined thinking in order to traverse successfully the worlds of college, career, and civic life.

Representatives from a group of state education agencies and from the leading organizations in social studies and its individual disciplines collaborated to create a Framework to provide states with voluntary guidance for upgrading existing social studies standards. This Framework does not include all that can or should be included in a set of robust social studies standards, and intentionally preserves the critical choices around the selection of curricular content taught at each grade level as a decision best made by each state. The Framework aims to support states in creating standards that prepare young people for effective and successful participation in college, careers, and civic life.

The C3 Framework[1] is centered on an Inquiry Arc—a set of interlocking and mutually supportive ideas that frame the ways students learn social studies content. By focusing on inquiry, the framework emphasizes the disciplinary concepts and practices that support students as they develop the capacity to know, analyze, explain, and argue about interdisciplinary challenges in our social world. It includes descriptions of the structure and tools of the disciplines, as well as the habits of mind common in those disciplines. Taken together, the C3 Framework provides guidance to states on upgrading state social studies standards to include the application of knowledge within the disciplines of civics, economics, geography, and history as students develop questions and plan inquiries; apply disciplinary concepts and tools; evaluate and use evidence; and communicate conclusions and take informed action.

The C3 Framework focuses on inquiry skills and key concepts, and guides—not prescribes—the choice of curricular content necessary for a rigorous social studies program. Content is critically important to the disciplines within social studies, and individual state leadership will be required to select appropriate and relevant content. States that decide to incorporate the Inquiry Arc and concepts of the C3 Framework into their state standards will then need to engage in a rigorous local process of selecting the appropriate content to be taught at each grade level to ensure that students develop the knowledge and skills to be civic-ready before graduation. The concepts expressed in the C3 Framework illustrate the disciplinary ideas, such as political structures, economic decision making, spatial patterns, and chronological sequencing, that help organize the curriculum and content states select.

As a core area in the K-12 curriculum, social studies prepares students for their postsecondary futures, including the disciplinary practices and literacies needed for college-level work in social studies academic courses, and the critical thinking, problem solving, and collaborative skills needed for the workplace. The C3 Framework encourages the development of state social studies standards that support students in learning to be actively engaged in civic life. Engagement in civic life requires knowledge and experience; children learn to be citizens by working individually and together as citizens. An essential element of social studies education, therefore, is experiential—practicing the arts and habits of civic life.

[1] The abbreviation "C3 Framework" will be used regularly in this document to refer to the College, Career, and Civic Life (C3) Framework for Social Studies State Standards.

Reflecting the shared responsibility for literacy learning put forward by the Common Core State Standards for English Language Arts and Literacy in History/Social Studies, Science, and Technical Subjects (NGA and CCSSO, 2010a),[2] the C3 Framework fully incorporates and extends the expectations from the grades K–5 English Language Arts standards and the grades 6–12 standards for Literacy in History/Social Studies, Science, and Technical Subjects. The C3 Framework also recognizes the importance of literacy within the Common Core State Standards for Mathematics (NGA and CCSSO, 2010b), and acknowledges mathematical practices as they apply to social studies inquiry.

National Council for the Social Studies, one of fifteen collaborating organizations, is publishing the C3 Framework to provide this significant resource for all states to consider in their local processes for upgrading state social studies standards.

The Process of Developing the College, Career, and Civic Life (C3) Framework for Social Studies State Standards

The College, Career, and Civic Life (C3) Framework for Social Studies State Standards was conceptualized by individual state leaders in social studies education and supported by fifteen professional organizations representing four core social studies content areas: civics, economics, geography, and history. The C3 Framework was written by experts in the academic disciplines and social studies education in collaboration with classroom teachers, state social studies education leaders, and representatives of professional organizations.

Work on the C3 Framework began in 2010 with the development of an initial conceptual guidance document written by individuals from the Council of Chief State School Officers (CCSSO) Social Studies Assessment, Curriculum, and Instruction state collaborative and by representatives from the professional associations. The framework writers were selected in consultation with the participating professional associations. Feedback was solicited throughout the process from stakeholders, including invitational reviews with professional organizations, teachers, and critical friends.

C3 Framework Leadership Team

The following members of the C3 Framework Leadership Team worked collaboratively to guide and manage the C3 Framework project:

Project Director and Lead Writer

Kathy Swan, Ph.D.,
Associate Professor,
Social Studies Education,
University of Kentucky

Chair, C3 Framework Task Force of Professional Organizations

Susan Griffin,
Executive Director,
National Council for the Social Studies

Senior Advisors and Contributing Writers

S.G. Grant, Ph.D.,
Founding Dean of the Graduate School of Education,
Binghamton University

John Lee, Ph.D.,
Associate Professor of Social Studies Education,
North Carolina State University

C3 Framework Design Team:
Citizen: Me worked with the Leadership Team to visualize the Inquiry Arc and to design the C3 Framework. Thank you to designers Becky Colley, Sarah O'Connor, and especially to Monica Snellings and DK Holland, for their professionalism, talent and commitment to the teaching of civics in our schools.

C3 Framework Production Team:
Gene Cowan and Monica Snellings

[2] The abbreviations "Common Core Standards for ELA/Literacy" and "ELA/Literacy Common Core Standards" will be used regularly in this document to refer to the Common Core State Standards for English Language Arts and Literacy in History/Social Studies, Science, and Technical Subjects. Citations of the Common Core State Standards in this document identify their publishers and date of publication (NGA and CCSSO, 2010) . The detailed reference information can be found in the References section on page 92 below.

C3 Framework Writing Team

The writing team included experts in K-12 social studies education and the academic disciplines of civics, economics, geography and history. Individuals were selected based on recommendations from the professional associations engaged in the process of developing the C3 Framework. The writing team worked in both disciplinary and interdisciplinary teams, and solicited feedback from stakeholders on drafts at regular intervals throughout the development process. Biographical sketches of the following writing team members are included at the end of this publication:

Kathy Swan, Ph.D. (Lead Writer),
Associate Professor, Social Studies Education, University of Kentucky

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Flannery Burke, Ph.D.,
Associate Professor of History, Saint Louis University

Jim Charkins, Ph.D.,
Professor Emeritus of Economics at California State University, San Bernardino; Executive Director of the California Council on Economic Education

S.G. Grant, Ph.D.,
Founding Dean of the Graduate School of Education, Binghamton University

Susan W. Hardwick, Ph.D.,
Professor Emeritus of Geography at the University of Oregon

John Lee, Ph.D.,
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Meira Levinson, D.Phil.,
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Anand Marri, Ph.D.,
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Bruce VanSledright, Ph.D.,
Professor of History and Social Studies Education, University of North Carolina at Charlotte

Merry Wiesner-Hanks, Ph.D.,
Distinguished Professor and Chair of the Department of History, University of Wisconsin-Milwaukee

Note: A special thank you to Lauren Colley, Rebecca Mueller, and Emma Thacker, Graduate Assistants at the University of Kentucky, who each provided support to the C3 Framework Writers and Team.

C3 Framework Project Participants

The C3 Framework writing team worked in collaboration with the following project participants to refine the document. Representatives from the CCSSO Social Studies Assessment, Curriculum, and Instruction (SSACI) state collaborative, Los Angeles County Office of Education and University of Delaware (which are affiliate members of SSACI), the C3 Framework Task Force of Professional Organizations, and the C3 Framework Teacher Collaborative Council critiqued early drafts and provided feedback to the writers. In the last year of the project, additional stakeholders were asked to provide feedback on the C3 Framework.

C3 FRAMEWORK TASK FORCE OF PROFESSIONAL ORGANIZATIONS

The Task Force of Professional Organizations was formed in 2010, and with the state social studies collaborative, initiated and guided the development of the C3 Framework. Representatives from the Task Force organizations provided feedback to the writers.

American Bar Association

American Historical Association

Association of American Geographers

Campaign for the Civic Mission of Schools

Center for Civic Education

Constitutional Rights Foundation Chicago

Constitutional Rights Foundation USA

Council for Economic Education

National Council for Geographic Education

National Council for History Education

National Council for the Social Studies

National Geographic Society

National History Day

Street Law, Inc.

World History Association

C3 FRAMEWORK ADVISORY WORKING GROUP OF BEHAVIORAL AND SOCIAL SCIENCE PROFESSIONAL ORGANIZATIONS

The Advisory Working Group of Behavioral and Social Science Professional Organizations first met in 2013 to advise on the role of the behavioral and social sciences in the C3 Framework and provide feedback on the document. These organizations worked together to create Appendices B, C, and D as companion documents to the C3 Framework. Although the organizations have contributed these appendices, their participation does not necessarily imply the endorsement of the C3 Framework.

American Anthropological Association

American Psychological Association

American Sociological Association

C3 FRAMEWORK EDITORIAL COMMITTEE

The following state collaborative members and teachers provided additional guidance to the writing team to ensure effective individual state implementation of the Framework:

Editorial Committee Co-Chair
Fay Gore, North Carolina

Editorial Committee Co-Chair
William Muthig, Ohio

Kim Eggborn, Maryland

Maggie Herrick, Arkansas

Mitzie Higa, Hawaii

Marcie Taylor Thoma, Maryland

Jessica Vehlwald, Missouri

C3 FRAMEWORK CRITICAL VOICES

Listed below are the stakeholders contacted for an invitational review prior to publication of the C3 Framework.

American Association of School Administrators

American Association of School Librarians

American Federation of Teachers

American Heritage

Bill of Rights Institute

C-SPAN

Citizen: Me

Center for Economic Education and Entrepreneurship, University of Delaware

Colonial Williamsburg

DBQ Project

Junior Achievement

Federal Judicial Center-History Office

Federal Reserve Bank of St. Louis, Economic Education

Heritage Education Services-National Park Service

Library of Congress

National Archives

National Center for Literacy Education

National Constitution Center

National Council for Accreditation of Teacher Education

Newseum

Partnership for 21st Century Skills

Smithsonian Institution

Smithsonian American Art Museum

National Museum of the American Indian

Teaching for Change

What So Proudly We Hail

C3 FRAMEWORK TEACHER COLLABORATIVE COUNCIL

The state social studies collaborative chose highly qualified K-12 educators from 21 states to provide feedback on early drafts of the C3 Framework. Members of the Teacher Collaborative Council are listed below by state:

Arkansas
Lisa Lacefield
John White

California
Michael A. Long
Rebecca K. Valbuena

Colorado
Charlee Passig Archuleta
Anton Schulzki

Delaware
Wendy Harrington

Georgia
Sally J. Meyer
William S. Rakosnik

Hawaii
Mitzie Higa
Pamela M.T. (Takehiro) King
Carrie Sato

Illinois
Beth Levinsky
Jeffrey W. Lightfoot

Indiana
Michael Hutchison
Callie Marksbary

Iowa
Rob Dittmer
Nancy Peterson

Kansas
Amanda Jessee
James K. Robb

Kentucky
Thad Elmore
Barry Leonard

Maine
Shane Gower
Barbara Perry

Maryland
Kimberly Eggborn
Donna Phillips

Michigan
David Johnson
Raymond Walker

Missouri
Roxanna Mechem
Debra Williams

Nebraska
Lonnie Moore
Mary Lynn Reiser

North Carolina
Traci Barger
Mary G. Stevens

Ohio
Tim Dove
Laura Finney
Gloria Wu

Oklahoma
Pam Merrill

Washington
Tara Gray
Sabrina Shaw

Wisconsin
Tina Flood
Lauren Mitterman

HOW TO READ
THE C3 FRAMEWORK

OVERALL DOCUMENT ORGANIZATION The C3 Framework begins with two narrative explanations: the Inquiry Arc, which provides the organizing structure for the document; and the Overview of English Language Arts/Literacy Common Core Connections, which highlights the important relationship between the C3 Framework and the Common Core State Standards for ELA/Literacy. Next, the C3 Framework presents the following four Dimensions: ❶ **Developing questions and planning inquiries;** ❷ **Applying disciplinary concepts and tools;** ❸ **Evaluating sources and using evidence;** and ❹ **Communicating conclusions and taking informed action.** The C3 Framework closes with five appendices.

Inquiry Arc. The Inquiry Arc highlights the structure of and rationale for the organization of the Framework's four Dimensions. The Arc focuses on the nature of inquiry in general and the pursuit of knowledge through questions in particular.

Overview of the Connections with the ELA/Literacy Common Core Standards. The C3 Framework recognizes the important role that the Common Core State Standards for ELA/Literacy play in defining K-12 literacy expectations in most states. This overview outlines how the C3 Framework connects to and elaborates on the ELA/Literacy Common Core Standards for social studies inquiry.

In addition to the overview of Common Core connections, each of the four Dimensions includes graphical and narrative descriptions of how the C3 Framework connects with the standards to guide states and local jurisdictions in incorporating these expectations as they upgrade their state social studies standards.

Dimensions and Subsections. The C3 Framework is organized into the four Dimensions, which support a robust social studies program rooted in inquiry.

Dimensions 2, 3 and 4 are further broken down into subsections. For example, Dimension 2, Applying Disciplinary Concepts and Tools, includes four subsections—civics, economics, geography, and history—which include descriptions of the structure and tools of the disciplines as well as the habits of mind common in those disciplines. See Table 1 for a graphical representation of the organization of the C3 Framework.

Unique Structure of Dimension 2. Dimension 2 has an additional layer of three to four categories

TABLE 1: C3 Framework Organization

DIMENSION 1: DEVELOPING QUESTIONS AND PLANNING INQUIRIES	DIMENSION 2: APPLYING DISCIPLINARY TOOLS AND CONCEPTS	DIMENSION 3: EVALUATING SOURCES AND USING EVIDENCE	DIMENSION 4: COMMUNICATING CONCLUSIONS AND TAKING INFORMED ACTION
Developing Questions and Planning Inquiries	Civics	Gathering and Evaluating Sources	Communicating and Critiquing Conclusions
	Economics		
	Geography	Developing Claims and Using Evidence	Taking Informed Action
	History		

within each disciplinary subsection. These categories provide an organizing mechanism for the foundational content and skills within each discipline. For example, within the subsection of economics, there are four categories: (1) Economic Decision Making; (2) Exchange and Markets; (3) The National Economy; and (4) The Global Economy. See Table 2 for a graphical representation of the categories within the four disciplinary subsections in Dimension 2.

C3 Framework Indicators and K-12 Pathways. Within each subsection or category is a set of College, Career, and Civic Readiness Indicators for the end of grade 12. For each C3 Indicator, there is a suggested K-12 Pathway for how students might develop proficiency for a particular skill or concept. These Pathways acknowledge students' developing capacity for understanding more sophisticated ideas and completing more demanding inquiries across the grade bands of K–2, 3–5, 6–8, and 9–12. Each Pathway includes three developmental Indicators and the culminating C3 Indicator. The Indicators suggest student proficiency by the end of grades 2, 5, 8, and 12 with an understanding that these skills and concepts will be taught within and throughout the grade band. States will decide how these suggested Pathways inform their processes for developing and upgrading state social studies standards.

Appendices. The C3 Framework concludes with five appendices:

- **Appendix A: C3 Framework Disciplinary Inquiry Matrix**. The Disciplinary Inquiry Matrix articulates how the four Dimensions of the C3 Framework connect to and build upon one another through the use of a content-specific example.
- **Appendix B: Psychology Companion Document for the C3 Framework**. The Psychology Companion Document was created by the American Psychological Association and articulates the key disciplinary tools and concepts central to the discipline of psychology. C3 Indicators are listed for the 9-12 grade band, a corollary for Dimension 2. Psychology adds its unique and important perspective to the content-specific example presented in Appendix A: C3 Framework Disciplinary Inquiry Matrix.
- **Appendix C: Sociology Companion Document for the C3 Framework**. The Sociology Companion Document was created by the American Sociological Association and articulates the key disciplinary tools and concepts central to the discipline of sociology. C3 Indicators are listed for the 9-12 grade band, a corollary for Dimension 2. Sociology adds its unique and important perspective to the content-specific example in Appendix A: C3 Framework Disciplinary Inquiry Matrix.
- **Appendix D: Anthropology Companion Document for the C3 Framework**. The Anthropology Companion Document was created

TABLE 2: Dimension 2—Applying Disciplinary Tools and Concepts

CIVICS	ECONOMICS	GEOGRAPHY	HISTORY
Civic and Political Institutions	Economic Decision Making	Geographic Representations: Spatial Views of the World	Change, Continuity, and Context
Participation and Deliberation: Applying Civic Virtues and Democratic Principles	Exchange and Markets	Human-Environment Interaction: Place, Regions, and Culture	Perspectives
Processes, Rules, and Laws	The National Economy	Human Population: Spatial Patterns and Movements	Historical Sources and Evidence
	The Global Economy	Global Interconnections: Changing Spatial Patterns	Causation and Argumentation

by the American Anthropological Association and articulates the key disciplinary tools and concepts central to the discipline of anthropology. Anthropology adds its unique and important perspective to the content-specific example in Appendix A: C3 Framework Disciplinary Inquiry Matrix.

- **Appendix E: Scholarly Rationale for the C3 Framework.** This appendix articulates the reasoning behind the creation of the C3 Framework and addresses the research base that supports the ideas represented. Now more than ever, students need the intellectual power to recognize societal problems; ask good questions and develop robust investigations into them; consider possible solutions and consequences; separate evidence-based claims from parochial opinions; and communicate and act upon what they learn. And most importantly, they must possess the capability and commitment to repeat that process as long as is necessary. Young people need strong tools for, and methods of, clear and disciplined thinking in order to traverse successfully the worlds of college, career, and civic life. The C3 Framework and its Inquiry Arc mark a significant departure from past attempts to develop a robust social studies program. The scholarly argument supports and underpins the fundamental shift in direction and practice that the C3 Framework embodies.

The appendices are followed by references and two concluding sections.

- **Glossary of Key Terms in the C3 Framework.** The glossary defines and provides examples of key concepts and terms. The examples are illustrative but are not exhaustive. The definitions and examples are intended to encourage a broad exchange of ideas about social studies content, and should contribute to a coherent vision of how social studies might be enlivened and enriched by the use of the C3 Framework.

- **C3 Framework Writing Team Biographical Sketches.** The writing team includes members who have expertise in K-12 social studies education and the academic disciplines of civics, economics, geography, and history. The selection of individuals was based on recommendations from the professional associations and state education agencies engaged in the process of developing the C3 Framework.

What Is Not Covered in the C3 Framework

The C3 Framework is intended to serve as a resource for states to consider as they upgrade their existing state social studies standards. The Framework provides guidance on the key concepts and skills students should develop through a robust social studies program of study, but intentionally does not address all of the elements states will need to consider in developing and upgrading standards. There are three main areas not addressed by the framework:

- **Content Necessary for a Rigorous Social Studies Program.** The C3 Framework focuses on the concepts that underlie a rich program of social studies education. The foundational concepts in Dimension 2 outline the scope of the disciplinary knowledge and tools associated with civics, economics, geography, and history. References are made to a range of ideas, such as the U.S. Constitution, economic scarcity, geographical modeling, and chronological sequences. However, the particulars of curriculum and instructional content—such as how a bill becomes a law or the difference between a map and a globe—are important decisions each state needs to make in the development of local social studies standards.

- **Other Disciplines Beyond Civics, Economics, Geography, and History** The disciplines represented in the C3 Framework are not the only ones relevant to a rich social studies curriculum. Other disciplines, such as anthropology, psychology, and sociology, while not covered in the main body of the C3 Framework, are important lenses for understanding the human experience (see Appendices B, C, and D). Anthropology is the scientific study of humans, past and present; psychology is the scientific study of the mind and behavior; and sociology is the scientific study of the social lives of people, groups and societies. All have countless applications to everyday life. Indeed, the study of the behavioral and social sciences enhances student preparation for college, careers, and civic life by promoting critical thinking, inquiry, problem-solving, evidence-based reasoning and communication

skills, as well as multi-cultural and global understandings, the ability to work with diverse groups, and a deep sense of personal and social responsibility (American Anthropological Association, 2013; American Psychological Association, 2011; American Sociological Association 2009). [3]

The behavioral and social sciences align well to the C3 Framework, which focuses on the four core social studies disciplines, but some are not included in the body of the framework. These behavioral and social sciences are most frequently taught at the high school level, though efforts are underway to better integrate behavioral and social science concepts in the K-8 age bands. The C3 Framework has been constructed as a K-12 Framework offering specific guidance across the grade bands of K-2, 3-5, 6-8, and 9-12. The tough decision was made early in the development of this framework to focus only on the four federally defined core social studies areas (i.e., civics, economics, geography, and history) to streamline the development process and produce a concise document.

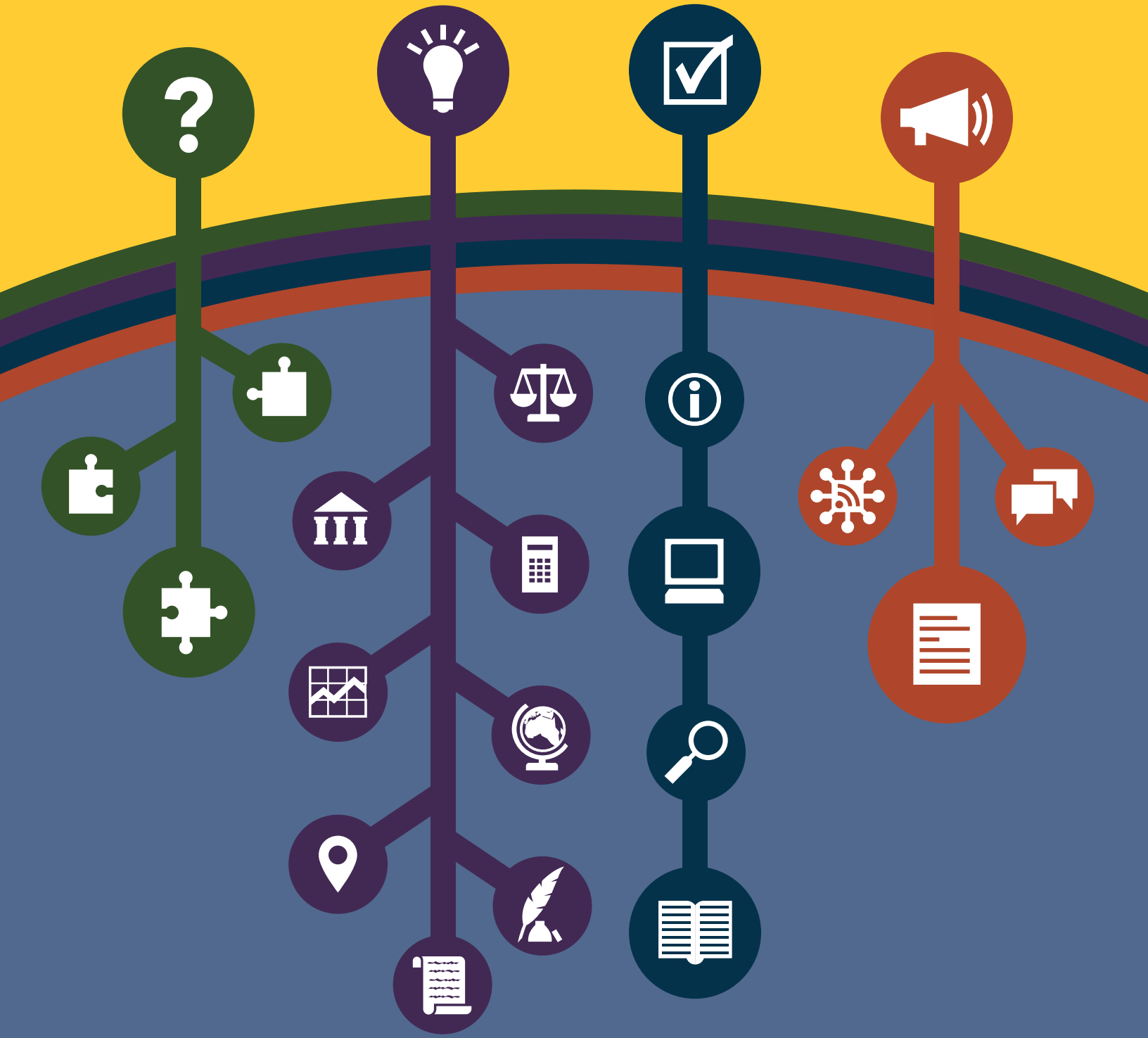
The exclusion of some behavioral and social sciences from the main body of this document should not be seen as minimizing the importance of these other disciplines in a robust social studies curriculum. To that extent, professional organizations affiliated with these areas have been consulted and have created discipline-specific resources to align to this framework document. For example, Appendices B and C were created by the American Psychological Association and American Sociological Association to align with Dimension 2 as well as other aspects of the C3 Framework. Appendix D is a parallel companion document created by the American Anthropological Association. These supporting documents should be seen as an extension of this framework, as complementary materials that will further the intention of preparing students for civic life. We encourage all readers to refer to and use these additional resources.

- **The Different Abilities Children Bring to their Schooling.** The C3 Framework is largely silent on the different abilities children bring to their schooling. The C3 Indicators and K-12 Pathways individually and together describe the concepts and skills students develop in a rich, ambitious program of studies. Some students will need far more assistance and support than others in reaching the aims of each Dimension. All children deserve the opportunity to learn. To be successful, students will need varying degrees of scaffolding to support their learning. Smart, thoughtful, and imaginative teachers are widely recognized as key to powerful learning experiences; for English language learners, students with special needs, and struggling readers and writers, such teachers are invaluable.

[3] The detailed reference information for works cited can be found in the References section on page 92 below.

YOUNG PEOPLE need strong tools for, and methods of, clear and disciplined thinking in order to traverse successfully **the worlds of college, career, and civic life.**

THE INQUIRY ARC OF THE C3 FRAMEWORK



THE PRIMARY PURPOSE of the College, Career, and Civic Life (C3) Framework for Social Studies State Standards is to provide guidance to states on the concepts, skills, and disciplinary tools necessary to prepare students for college, career, and civic life. In doing so, the C3 Framework offers guidance and support for rigorous student learning. That guidance and support takes form in an Inquiry Arc—a set of interlocking and mutually reinforcing ideas that feature the four Dimensions of informed inquiry in social studies: ❶ Developing questions and planning inquiries; ❷ Applying disciplinary concepts and tools; ❸ Evaluating sources and using evidence; and ❹ Communicating conclusions and taking informed action.

Dimension 1 features the development of questions and the planning of inquiries. With the entire scope of human experience as its backdrop, the content of social studies consists of a rich array of facts, concepts, and generalizations. The way to tie all of this content together is through the use of compelling and supporting questions.

Questioning is key to student learning. The C3 Framework encourages the use of compelling and supporting questions, both teacher- and student-generated, as a central element of the teaching and learning process. For example, a compelling question like "Was the American Revolution revolutionary?" is both intriguing to students and intellectually honest. Such a question can be vigorously explored through the disciplines of civics, economics, geography, and history. It is also sensitive to the idea that students are interested in how and why events are characterized as they are. Supporting questions assist students in addressing their compelling questions. For example, questions like "What were the regulations imposed on the colonists under the Townshend Acts?" will help students understand the many dimensions of the war as they form their conclusions about the magnitude of change associated with those Acts.

Developing compelling and supporting questions is challenging, and teachers will need to provide guidance and support in crafting them, especially for young learners. The Indicators for Dimension 1 present a developmentally appropriate, scalable, and assessable set of ideas through which students can demonstrate their increasingly independent facility with recognizing, developing, and articulating powerful questions.

Dimension 2, Applying Disciplinary Concepts and Tools, provides the backbone for the Inquiry Arc. Working with a robust compelling question and a set of discrete supporting questions, teachers and students determine the kind of content they need in order to develop their inquiries. This process is an artful balancing act because the interplay between Dimensions 1 and 2 is dynamic: students access disciplinary knowledge both to develop questions and to pursue those questions using disciplinary concepts and tools.

Children typically begin proposing solutions to compelling questions based on their experiences. Because social studies content is based in human experience, students will have hunches about the questions under study. Rich social studies teaching, however, offers students opportunities to investigate those questions more thoroughly through disciplinary (civic, economic, geographical, or historical) and multi-disciplinary means. Dimension 2 sets forth the conceptual content that defines the disciplines, such as the historian's habit of describing how the perspectives of people in the present shape their interpretations of the past. This practice, along with the curricular content and the distinctive habits of mind from the other social science disciplines, informs students' investigations and contributes to an inquiry process for social studies.

In some cases, the compelling questions posed will draw on content largely from a single discipline. Teachers and students may pull primarily from

economics, for example, to answer the compelling question, "How will an increase in the minimum wage affect local job opportunities for teens?" "Why are there rules?" invites inquiry into key civics concepts. Many compelling questions, however, can best be explored through the use of multiple disciplines. Recall the question, "Was the American Revolution revolutionary?" Students will need to examine a range of economic, geographic, historical, and civic concepts in order to craft a full-bodied, evidence-based response to this question. In similar fashion, a contemporary environmental question such as "What path should a new transcontinental pipeline take?" or "Should the pipeline be built at all?" demands the use of economic, historical, and civic as well as spatial concepts and tools.

With compelling and supporting questions in hand and a sense of the relevant concepts and ideas, the Inquiry Arc of the C3 Framework turns toward the matter of sources and evidence. Social studies is an evidence-based field. The disciplinary concepts represented in Dimension 2 provide a solid base from which students can begin constructing answers to their questions. Equally important, however, is knowing how to fill in the gaps in their knowledge by learning how to work from sources and evidence in order to develop claims and counter-claims.

Sources come in many forms, including historical and contemporary documents, data from direct observation, graphics, economic statistics, maps, legislative actions, objects, and court rulings. Access to these and other digital sources is now more readily available than ever. The availability of source materials, however, does not translate automatically into their wise use. Students must be mindful that not all sources are equal in value and use and that sources do not, by themselves, constitute evidence. Rather, evidence consists of the material students select to support claims and counter-claims in order to construct accounts, explanations, and arguments. Helping students develop a capacity for gathering and evaluating sources and then using evidence in disciplinary ways is a central feature of the Inquiry Arc represented by **Dimension 3,** Evaluating Sources and Using Evidence.

A compelling question such as "Was the Civil Rights Movement of the 1960s a success?" demands that students draw evidence from more than one or two sources. A wide range of perspectives is available in both primary and secondary form. Having students gather, evaluate, and use a rich subset of those sources offers them opportunities to identify claims and counter-claims and to support those claims with evidence. Making and supporting evidence-based claims and counter-claims is key to student capacity to construct explanations and arguments.

HELPING STUDENTS DEVELOP **a capacity for gathering and evaluating sources and then using evidence in disciplinary ways** is a central feature of the Inquiry Arc represented by Dimension 3, Evaluating Sources and Using Evidence.

Developing explanations and making and supporting arguments can take form in individual essays, group projects, and other classroom-based written assessments, both formal and informal. But students need not be limited to those avenues. Although there is no substitute for thoughtful and persuasive writing, the Framework advocates expanding the means by which students communicate their preliminary and final conclusions. As the Indicators for **Dimension 4** (Communicating Conclusions and Taking Informed Action) demonstrate, those means include a range of venues and a variety of forms (e.g., discussions, debates, policy analyses, video productions, and portfolios). Moreover, the manner in which students work to create their solutions can differ. Students need opportunities to work individually, with partners, in small groups, and within whole class settings. Readiness for college, career, and civic life is as much about the experiences students have as it is about learning any particular set of concepts or tools. Thus, the learning environments that teachers create are critical to student success. Students will flourish to the extent that their independent and collaborative efforts are guided, supported, and honored.

Active and responsible citizens identify and analyze public problems; deliberate with other people about how to define and address issues; take constructive, collaborative action; reflect on their actions; create and sustain groups; and influence institutions both large and small. They vote, serve on juries, follow the news and current events, and participate in voluntary groups and efforts. Teaching students to act in these ways—as citizens—significantly enhances preparation for college and career. Many of the same skills that are needed for active and responsible citizenship—working effectively with other people, deliberating and reasoning quantitatively about issues, following the news, and forming and sustaining groups—are also crucial to success in the 21st century workplace and in college. Individual mastery of content often no longer suffices; students should also develop the capacity to work together to apply knowledge to real problems. Thus, a rich social studies education is an education for college, career, and civic life.

In one sense, Dimension 4 closes the Inquiry Arc. But learning is reflexive and recursive—new disciplinary knowledge can be the source of new questions, communicating ideas in one setting can lead to new ideas about evidence, and new historical sources can lead to new disciplinary and interdisciplinary concepts. The Inquiry Arc of the C3 Framework offers states guidance for developing standards with multiple opportunities for students to develop as thoughtful, engaged citizens.

ACTIVE AND RESPONSIBLE CITIZENS identify and analyze public problems; deliberate with other people about how to define and address issues; take constructive, collaborative action; reflect on their actions; create and sustain groups; **and influence institutions both large and small**.

OVERVIEW OF THE CONNECTIONS WITH THE ENGLISH LANGUAGE ARTS/LITERACY COMMON CORE STANDARDS

The Common Core State Standards for English Language Arts and Literacy in History/Social Studies, Science, and the Technical Subjects call on social studies teachers to share in the responsibilities for literacy instruction in K-12 education (NGA and CCSSO, 2010a). The expectations for literacy learning in grades K–5 are established through the four strands of Reading, Writing, Speaking and Listening, and Language. For grades 6–12, the ELA/Literacy Common Core Standards provide specific literacy standards for Reading and Writing in History/Social Studies. The C3 Framework fully incorporates and extends the expectations for literacy learning put forward in the Common Core Standards for ELA/Literacy on three levels (Table 3).

Connections between the C3 Framework and the College and Career Readiness (CCR) Anchor Standards. Each strand of the Common Core State Standards for English Language Arts/Literacy is headed by a set of College and Career Readiness (CCR) Anchor Standards that are identical across all grades and content areas, including social studies. The authors of the C3 Framework view the literacy skills detailed in the ELA/Literacy Common Core College and Career Readiness (CCR) Anchor Standards as establishing a foundation for inquiry in social studies, and as such all CCR Anchor Standards should be an indispensable part of any state's social studies standards. Many specific CCR Anchor Standards are directly supportive of the C3 Framework,

TABLE 3: Connections between the C3 Framework and the CCR Anchor Standards in the ELA/Literacy Common Core Standards

FOUNDATIONAL	All ELA/Literacy Common Core Standards
SUPPORTIVE	Reading 1-10; Writing 1, 7-9; Speaking and Listening 1-6; Language 6
VITAL	Reading 1; Writing 7; Speaking and Listening 1

TABLE 4: Connections between the C3 Framework and the CCR Anchor Standards in the ELA/Literacy Common Core Standards

DIMENSION 1	ANCHOR STANDARDS	DIMENSION 2	ANCHOR STANDARDS	DIMENSION 3	ANCHOR STANDARDS	DIMENSION 4	ANCHOR STANDARDS
Developing Questions and Planning Inquiries	R1 W7 SL1	Civics	R1-10 W7 SL1 L6	Gathering and Evaluating Sources	R1-10 W1, 2, 7-10 SL1	Communicating and Critiquing Conclusions	R1 W 1-8 SL1-6
		Economics					
		Geography		Developing Claims and Using Evidence		Taking Action	
		History					

while three of these CCR Anchor Standards are vital to social studies inquiry.

The connections between the C3 Framework and the ELA/Literacy Common Core Standards are comprehensive and consistent. The CCR Anchor Standards for the ELA/Literacy Common Core Standards, particularly those in the Reading, Writing, and Speaking and Listening strands, provide a useful context for illustrating the broader connections across and within each Dimension. These supportive connections are detailed for each of the Dimensions in Table 4.[4]

The CCR Anchor Standards in Table 4 focus on a wide range of inquiry practices that contribute to the literacy foundations in social studies. Social studies students should use and attend to the skills described in these standards to assist them in focusing their inquiries and research practices. The C3 Framework emphasizes and elaborates on those skills in the Common Core Standards that explicitly connect to inquiry, and recognizes the shared responsibility social studies plays in honing key literacy skills.

Three CCR Anchor Standards (and their corresponding grade-specific standards) are particularly vital to social studies inquiry. Common Core Anchor Standard for Reading 1 asks students to read texts closely to both determine "explicit" information lodged within the body of the text as well as draw "logical inferences" based on the text (NGA and CCSSO, 2010a, p. 10). Students are also expected to "cite specific textual evidence when writing or speaking to support conclusions drawn from the text" (NGA and CCSSO, 2010a, p. 10). The C3 Framework stresses the role evidence plays in the four Dimensions: explicitly in Dimension 3, which focuses on developing claims and using evidence, and inferentially in developing questions answered with evidence in Dimension 1 or communicating conclusions supported by evidence in Dimension 4. The emphasis on evidence also connects the disciplines in Dimension 2.

Additionally, Common Core Anchor Standard for Writing 7 is broadly relevant for inquiry in social studies. Writing Standard 7 calls on students to "conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation" (NGA and CCSSO, 2010a, p. 18). The C3 Framework elevates research as a process of inquiry that informs the Indicators in all four Dimensions. Dimension 2 establishes the tools and concepts from the social studies disciplines that are relevant for inquiry. Dimensions 1, 3, and 4 describe the general social studies inquiry skills and processes that support argumentation, explanation, and taking informed action.

Finally, Common Core Anchor Standard for Speaking and Listening 1 has broad application across the four Dimensions. Speaking and Listening Standard 1 calls on students to "prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively" (NGA and CCSSO, 2010a, p. 22). Indicators in the C3 Framework describe the types of collaboration needed for specific skills and understandings. For example, a Dimension 1 Indicator states, "By the end of grade 2, individually and with others, students construct compelling questions…." The C3 Framework acknowledges civil and democratic discourse within a diverse, collaborative context as both a purpose and outcome of a strong, meaningful, and substantive social studies education.

Shared Language. Language and concepts from the ELA/Literacy Common Core Standards were deliberately used in specific Indicators across the C3 Framework Dimensions. For example, the terms *argument* and *explanation; claim* and *counterclaim; information* and *evidence;* and *point of view* and *opinion* appear regularly in the ELA/Literacy Common Core Standards and throughout the Dimensions of the C3 Framework.[5]

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[4] As Common Core states upgrade their social studies standards, they will want to incorporate the grade-specific standards for K-5 and the grade-band specific standards for literacy in social studies for grades 6-12 that correspond to the CCR anchor standard with the same number.

[5] Although the ELA/Literacy Common Core Standards and the C3 Framework both emphasize the unique skill of constructing evidence-based arguments, different terms are used: ***opinion*** in the ELA/Literacy Common Core Standards for grades K–5 and ***argument*** throughout the C3 Framework.

Dimension 1

Developing **Questions** & PLANNING INQUIRIES

QUESTIONS AND THE DESIRE TO ANSWER THEM give life to inquiry and thus to the C3 Framework. Questions arise from students' innate curiosity about the world and from their efforts to make sense of how that world works.

Central to a rich social studies experience is the capability for developing questions that can frame and advance an inquiry. Those questions come in two forms: compelling and supporting questions. Compelling questions focus on enduring issues and concerns. They deal with curiosities about how things work; interpretations and applications of disciplinary concepts; and unresolved issues that require students to construct arguments in response. In contrast, supporting questions focus on descriptions, definitions, and processes on which there is general agreement within the social studies disciplines, and require students to construct explanations that advance claims of understanding in response.

Consider an example relevant to early elementary students. A compelling question that students might generate is, "Why do we need rules?" This question reflects the two primary qualities of a compelling question: (1) It reflects a social concern that students find engaging; and (2) It reflects an enduring issue in the field of civics. A teacher and her students might take such a question in a number of directions, but for curricular purposes, it makes sense to define some parameters that give shape to the inquiry. Supporting questions help define those curriculum parameters. Examples of supporting questions include, "What are some rules that families follow?" "What are some school rules?" or "What classroom rules have you

followed in the past?" Supporting questions, then, help guide the development of an inquiry into a compelling question.

The development of compelling and supporting questions is a sophisticated intellectual activity. Students, particularly before middle school, will need considerable guidance and support from adults to construct questions that are suitable for inquiry. Beginning in grade 6, students should be able to take increasing responsibility for their learning so that by grade 12 they are able to construct questions and plan inquiries more independently.

Questions are just the starting point for an inquiry. To develop an inquiry, students will also determine the data sources needed to help answer compelling and supporting questions. The five indicators in Dimension 1 describe the questioning and planning skills needed to initiate inquiry.

CENTRAL **to a rich social studies experience** is the capability for developing questions that CAN FRAME AND ADVANCE AN INQUIRY. Those questions come in two forms: **compelling** and **supporting questions.**

Constructing Compelling Questions

The construction of compelling questions should include the following Indicators, which are detailed in the suggested K-12 Pathway for College, Career, and Civic Readiness in Table 5.

TABLE 5: Suggested K-12 Pathway for College, Career, and Civic Readiness
Dimension 1, Constructing Compelling Questions

BY THE END OF GRADE 2*	BY THE END OF GRADE 5*	BY THE END OF GRADE 8	BY THE END OF GRADE 12
INDIVIDUALLY AND WITH OTHERS, STUDENTS CONSTRUCT COMPELLING QUESTIONS, AND …			
D1.1.K-2. Explain why the compelling question is important to the student.	D1.1.3-5. Explain why compelling questions are important to others (e.g., peers, adults).	D1.1.6-8. Explain how a question represents key ideas in the field.	D1.1.9-12. Explain how a question reflects an enduring issue in the field.
D1.2.K-2. Identify disciplinary ideas associated with a compelling question.	D1.2.3-5. Identify disciplinary concepts and ideas associated with a compelling question that are open to different interpretations.	D1.2.6-8. Explain points of agreement experts have about interpretations and applications of disciplinary concepts and ideas associated with a compelling question.	D1.2.9-12. Explain points of agreement and disagreement experts have about interpretations and applications of disciplinary concepts and ideas associated with a compelling question.

* Students, particularly before middle school, will need considerable guidance and support from adults to construct questions that are suitable for inquiry.

Constructing Supporting Questions

The construction of supporting questions includes the following Indicators, which are detailed in the suggested K-12 Pathway for College, Career, and Civic Readiness in Table 6.

TABLE 6: Suggested K-12 Pathway for College, Career, and Civic Readiness Dimension 1, Constructing Supporting Questions

BY THE END OF GRADE 2*	BY THE END OF GRADE 5*	BY THE END OF GRADE 8	BY THE END OF GRADE 12
INDIVIDUALLY AND WITH OTHERS, STUDENTS CONSTRUCT COMPELLING QUESTIONS, AND …			
D1.3.K-2. Identify facts and concepts associated with a supporting question.	D1.3.3-5. Identify the disciplinary concepts and ideas associated with a supporting question that are open to interpretation.	D1.3.6-8. Explain points of agreement experts have about interpretations and applications of disciplinary concepts and ideas associated with a supporting question.	D1.3.9-12. Explain points of agreement and disagreement experts have about interpretations and applications of disciplinary concepts and ideas associated with a supporting question.
D1.4.K-2. Make connections between supporting questions and compelling questions.	D1.4.3-5. Explain how supporting questions help answer compelling questions in an inquiry.	D1.4.6-8. Explain how the relationship between supporting questions and compelling questions is mutually reinforcing.	D1.4.9-12. Explain how supporting questions contribute to an inquiry and how, through engaging source work, new compelling and supporting questions emerge.

* Students, particularly before middle school, will need considerable guidance and support from adults to construct questions that are suitable for inquiry.

Determining Helpful Sources

The third set of Indicators for Dimension 1 is detailed in the suggested K-12 Pathway for College, Career, and Civic Readiness in Table 7: Determine the kinds of sources that will be helpful in answering compelling and supporting questions, taking into consideration the multiple points of view represented in an argument, the structure of an explanation, the types of sources available, and the potential uses of the sources.

TABLE 7: Suggested K-12 Pathway for College, Career, and Civic Readiness Dimension 1, Determining Helpful Sources

BY THE END OF GRADE 2	BY THE END OF GRADE 5	BY THE END OF GRADE 8	BY THE END OF GRADE 12
INDIVIDUALLY AND WITH OTHERS, STUDENTS …			
D1.5.K-2. Determine the kinds of sources that will be helpful in answering compelling and supporting questions.	D1.5.3-5. Determine the kinds of sources that will be helpful in answering compelling and supporting questions, taking into consideration the different opinions people have about how to answer the questions.	D1.5.6-8. Determine the kinds of sources that will be helpful in answering compelling and supporting questions, taking into consideration multiple points of views represented in the sources.	D1.5.9-12. Determine the kinds of sources that will be helpful in answering compelling and supporting questions, taking into consideration multiple points of view represented in the sources, the types of sources available, and the potential uses of the sources.

ENGLISH LANGUAGE ARTS/LITERACY COMMON CORE CONNECTIONS: DIMENSION 1

Questioning plays an important role in social studies as well as in the ELA/Literacy Common Core Standards. Expectations for using questions to interrogate texts are consistently communicated in the ELA/Literacy Common Core Standards. One of the key design features of the ELA/Literacy Common Core Standards is to emphasize research skills throughout the standards. Specifically, the Common Core Standards argue, "to be ready for college, workforce training, and life in a technological society, students need the ability to gather, comprehend, evaluate, synthesize, and report on information and ideas, to conduct original research in order to answer questions" (NGA and CCSSO, 2010a, p. 4). The C3 Framework elaborates on the emphasis of the ELA/Literacy Common Core Standards on answering questions by establishing specific Indicators for students constructing compelling questions to initiate inquiry and supporting questions to sustain that inquiry.

Table 8 details connections between Dimension 1 and the College and Career Readiness Anchor Standards in the ELA/Literacy Common Core Standards. These connections are further elaborated with examples.

Connections between the C3 Framework and the College and Career Readiness Anchor Standards. While the connections between the C3 Framework and the ELA/Literacy Common Core Standards are comprehensive and consistent, three CCR Anchor Standards (and their corresponding grade-specific standards) within the ELA/Literacy Common Core Standards have deeper connections within Dimension 1.

Common Core Anchor Reading Standard 1 clearly indicates the importance of evidence in framing and answering questions about the texts students are reading and researching. This crucial standard asks students to look for "explicit" information lodged within the body of the text as well as to draw "logical inferences" based on what they read (NGA and CCSSO, 2010a, p. 10). Reading Standard 1 also expects students to "cite specific textual evidence when writing or speaking to support conclusions drawn from the text" (NGA and CCSSO, 2010a, p. 10). The C3 Framework stresses this focus on evidence by prioritizing a wide range of inquiry-based activities that result in information gathering on the part of students in response to planning and developing lines of inquiry.

Common Core Anchor Writing Standard 7 is particularly relevant for posing questions as an initial activity in research and inquiry in social studies. Writing Standard 7 calls on students to base their research on "focused questions, demonstrating understanding of the subject under investigation" (NGA and CCSSO, 2010a, p. 18). The C3 Framework elaborates on the process of developing questions by making distinctions about the types of questions useful for initiating and sustaining an inquiry, and by having students explain how the construction of compelling and supporting questions is connected to the disciplinary process of inquiry.

TABLE 8: Connections between Dimension 1 and the CCR Anchor Standards in the ELA/Literacy Common Core Standards

ELA/LITERACY CCR ANCHOR STANDARDS CONNECTIONS	Anchor Reading Standard 1 Anchor Writing Standard 7 Anchor Speaking and Listening Standard 1
SHARED LANGUAGE	Questioning; Argument; Explanation; Point of View

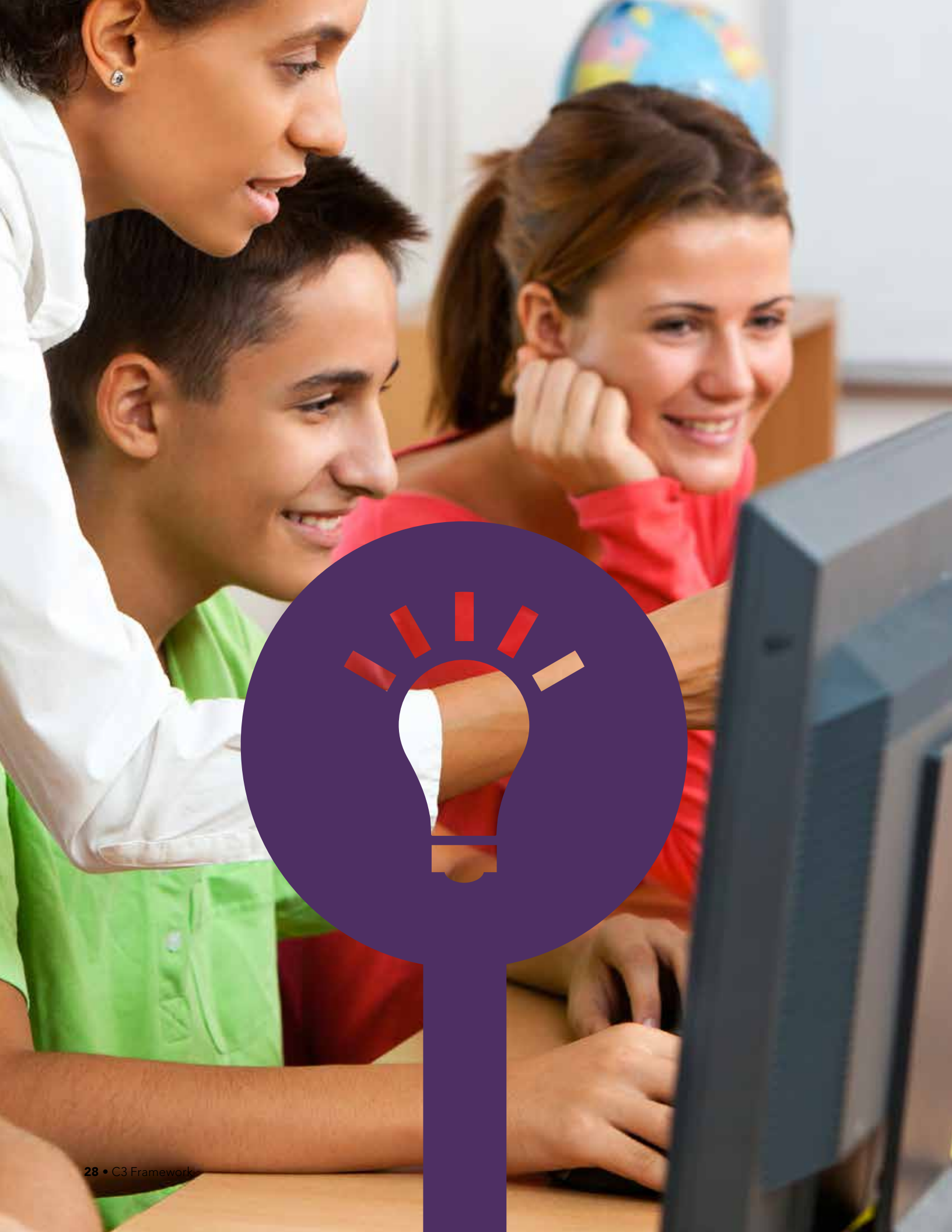
Common Core Anchor Speaking and Listening Standard 1 also has broad application for Dimension 1. Speaking and Listening Standard 1 calls on students to "prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively" (NGA and CCSSO, 2010a, p. 22). Dimension 1 asks students to engage in the sophisticated intellectual activity of constructing compelling and supporting questions. Students, particularly before middle school, will need considerable guidance and support from adults and peers to construct suitable questions for inquiry. Such guidance and support will play out through conversations and collaboration. Learning in social studies is an inherently collaborative activity, and Speaking and Listening Standard 1 is thus especially relevant in Dimension 1.

A student's ability to ask and answer questions when reading, writing, and speaking and listening is an important part of literacy and represents a foundation for learning in social studies. Throughout the C3 Framework, students are expected to practice and improve the questioning skills specified in the ELA/Literacy Common Core Standards. In Dimension 1 of the C3 Framework, students turn to questions as a way to initiate and sustain inquiry, and connect these questioning literacies to those suggested by ELA/Literacy Common Core Writing Standard 7. In alignment with the Common Core Standards, the C3 Framework views the skill of asking questions and the desire to answer them as being so fundamental to the inquiry process that inquiry cannot begin until students have developed questioning skills.

The questioning skills emphasized in the C3 Framework reflect the academic intentions of the disciplines that make up social studies and the special purposes of social studies as preparation for civic life. Social studies teachers have an important role to play in supporting students as they develop the literacy questioning skills found in the ELA/Literacy Common Core Standards, and can do this most effectively through helping their students learn the habits and skills needed to conduct inquiry in social studies and to live productively as democratic citizens.

Shared Language. The ELA/Literacy Common Core Standards closely align with the Indicators in Dimension 1. In places, the connections between the Common Core Standards and the C3 Framework Indicators are so close that the same language is used. The concept of questioning is part of this shared language, but in addition, the terms *argument, explanation,* and *point of view* are consistently used in both the ELA/Literacy Common Core Standards and Dimension 1.

The ELA/Literacy Common Core Standards emphasize questioning as a mechanism for supporting reading and as a tool to prompt research. The C3 Framework emphasizes the use of questioning as a prompt for disciplinary inquiry. A unique distinction is made in the C3 Framework between compelling and supporting questions. This distinction is closely tied to the types of thinking and student-generated products that result from inquiry. In distinguishing these products, the C3 Framework utilizes the distinction between argumentation and explanation as described in ELA/Literacy Common Core Writing Anchor Standards 1 and 2. Thus, by design, compelling questions lead to arguments, and supporting questions lead to explanations.



Dimension 2

Applying **Disciplinary Concepts** & TOOLS

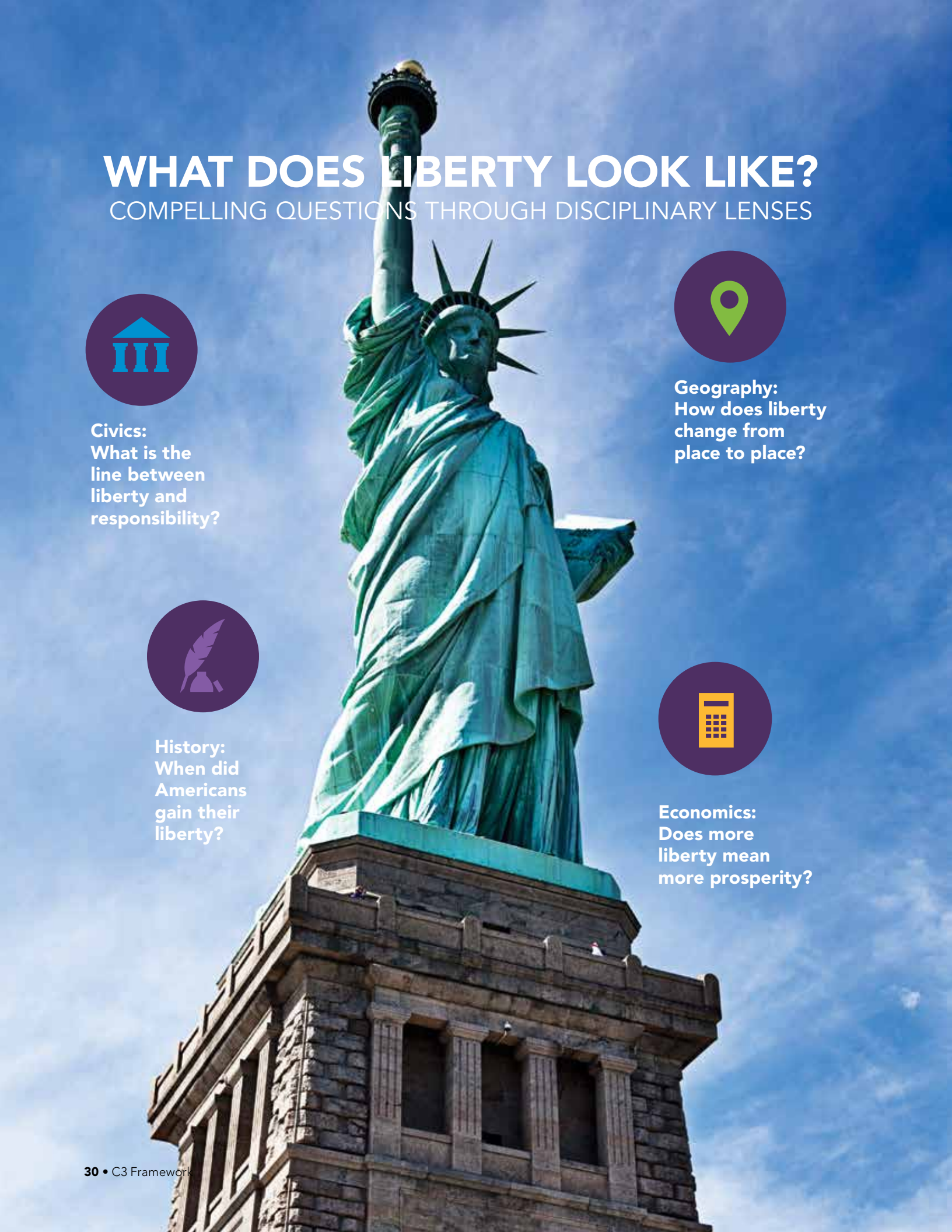
THE FOUR CORE DISCIPLINES within social studies provide the intellectual context for studying how humans have interacted with each other and with the environment over time. Each of these disciplines—civics, economics, geography, and history—offers a unique way of thinking and organizing knowledge as well as systems for verifying knowledge. Dimension 2 focuses on the disciplinary concepts and tools students need to understand and apply as they study the specific content typically described in state standards. These disciplinary ideas are the lenses students use in their inquiries, and the consistent and coherent application of these lenses throughout the grades should lead to deep and enduring understanding.

A key distinction between a framework and a set of content standards is the difference between conceptual and curricular content. Curricular content specifies the particular ideas to be taught and the grade levels at which to teach them; conceptual content is the bigger set of ideas that frame the curricular content. For example, rather than identify every form of governmental power, the C3 Framework expects students in grades 6–8 to "explain the powers and limits of the three branches of government, public officials, and bureaucracies at different levels in the United States and in other countries." Similarly, rather than delineate every kind of map, the C3 Framework expects students in grades 3–5 to "create maps and other graphic representations of both familiar and unfamiliar places."

The C3 Framework takes this approach of describing concepts and skills rather than curricular content because there are significant differences among states in terms of what is taught and when. If and when the Irish potato famine might be taught, for example, is a decision best left to state and local decision makers. The C3 Framework in general, and Dimension 2 in particular, is intended to serve as a frame for organizing curricular content, rather than a prescription for the specific content to be taught.

WHAT DOES LIBERTY LOOK LIKE?

COMPELLING QUESTIONS THROUGH DISCIPLINARY LENSES



Civics:
What is the line between liberty and responsibility?

Geography:
How does liberty change from place to place?

History:
When did Americans gain their liberty?

Economics:
Does more liberty mean more prosperity?

CIVICS

IN A CONSTITUTIONAL DEMOCRACY, productive civic engagement requires knowledge of the history, principles, and foundations of our American democracy, and the ability to participate in civic and democratic processes. People demonstrate civic engagement when they address public problems individually and collaboratively and when they maintain, strengthen, and improve communities and societies. Thus, civics is, in part, the study of how people participate in governing society.

Because government is a means for addressing common or public problems, the political system established by the U.S. Constitution is an important subject of study within civics. Civics requires other knowledge too; students should also learn about state and local governments; markets; courts and legal systems; civil society; other nations' systems and practices; international institutions; and the techniques available to citizens for preserving and changing a society.

Civics is not limited to the study of politics and society; it also encompasses participation in classrooms and schools, neighborhoods, groups, and organizations. Not all participation is beneficial. This framework makes frequent reference to civic *virtues* and principles that guide participation and to the norm of *deliberation* (which means discussing issues and making choices and judgments with information and evidence, civility and respect, and concern for fair procedures). What defines civic virtue, which democratic principles apply in given situations, and when discussions are deliberative are not easy questions, but they are topics for inquiry and reflection. In civics, students learn to contribute appropriately to public processes and discussions of real issues. Their contributions to public discussions may take many forms, ranging from personal testimony to abstract arguments. They will also learn civic practices such as voting, volunteering, jury service, and joining with others to improve society. Civics enables students not only to study how others participate, but also to practice participating and taking informed action themselves.

Civic and Political Institutions

In order to act responsibly and effectively, citizens must understand the important institutions of their society and the principles that these institutions are intended to reflect. That requires mastery of a body of knowledge about law, politics, and government.

Indicators of Dimension 2—Civic and Political Institutions—are detailed in the suggested K-12 Pathway for College, Career, and Civic Readiness in Table 9.

TABLE 9: Suggested K-12 Pathway for College, Career, and Civic Readiness Dimension 2, Civic and Political Institutions

BY THE END OF GRADE 2	BY THE END OF GRADE 5	BY THE END OF GRADE 8	BY THE END OF GRADE 12
INDIVIDUALLY AND WITH OTHERS, STUDENTS…			
D2.Civ.1.K-2. Describe roles and responsibilities of people in authority.	**D2.Civ.1.3-5.** Distinguish the responsibilities and powers of government officials at various levels and branches of government and in different times and places.	**D2.Civ.1.6-8.** Distinguish the powers and responsibilities of citizens, political parties, interest groups, and the media in a variety of governmental and nongovernmental contexts.	**D2.Civ.1.9-12.** Distinguish the powers and responsibilities of local, state, tribal, national, and international civic and political institutions.
D2.Civ.2.K-2. Explain how all people, not just official leaders, play important roles in a community.	**D2.Civ.2.3-5.** Explain how a democracy relies on people's responsible participation, and draw implications for how individuals should participate.	**D2.Civ.2.6-8.** Explain specific roles played by citizens (such as voters, jurors, taxpayers, members of the armed forces, petitioners, protesters, and office-holders).	**D2.Civ.2.9-12.** Analyze the role of citizens in the U.S. political system, with attention to various theories of democracy, changes in Americans' participation over time, and alternative models from other countries, past and present.
D2.Civ.3.K-2. Explain the need for and purposes of rules in various settings inside and outside of school.	**D2.Civ.3.3-5.** Examine the origins and purposes of rules, laws, and key U.S. constitutional provisions.	**D2.Civ.3.6-8.** Examine the origins, purposes, and impact of constitutions, laws, treaties, and international agreements.	**D2.Civ.3.9-12.** Analyze the impact of constitutions, laws, treaties, and international agreements on the maintenance of national and international order.
D2.Civ.4.K-2. *Begins in grades 3–5*	**D2.Civ.4.3-5.** Explain how groups of people make rules to create responsibilities and protect freedoms.	**D2.Civ.4.6-8.** Explain the powers and limits of the three branches of government, public officials, and bureaucracies at different levels in the United States and in other countries.	**D2.Civ.4.9-12.** Explain how the U.S. Constitution establishes a system of government that has powers, responsibilities, and limits that have changed over time and that are still contested.
D2.Civ.5.K-2. Explain what governments are and some of their functions.	**D2.Civ.5.3-5.** Explain the origins, functions, and structure of different systems of government, including those created by the U.S. and state constitutions.	**D2.Civ.5.6-8.** Explain the origins, functions, and structure of government with reference to the U.S. Constitution, state constitutions, and selected other systems of government.	**D2.Civ.5.9-12.** Evaluate citizens' and institutions' effectiveness in addressing social and political problems at the local, state, tribal, national, and/or international level.
D2.Civ.6.K-2. Describe how communities work to accomplish common tasks, establish responsibilities, and fulfill roles of authority.	**D2.Civ.6.3-5.** Describe ways in which people benefit from and are challenged by working together, including through government, workplaces, voluntary organizations, and families.	**D2.Civ.6.6-8.** Describe the roles of political, civil, and economic organizations in shaping people's lives.	**D2.Civ.6.9-12.** Critique relationships among governments, civil societies, and economic markets.

Participation and Deliberation: Applying Civic Virtues and Democratic Principles

Civics teaches the principles—such as adherence to the social contract, consent of the governed, limited government, legitimate authority, federalism, and separation of powers—that are meant to guide official institutions such as legislatures, courts, and government agencies. It also teaches the virtues—such as honesty, mutual respect, cooperation, and attentiveness to multiple perspectives—that citizens should use when they interact with each other on public matters. Principles such as equality, freedom, liberty, respect for individual rights, and deliberation apply to both official institutions and informal interactions among citizens. Learning these virtues and principles requires obtaining factual knowledge of written provisions found in important texts such as the founding documents of the United States. It also means coming to understand the diverse arguments that have been made about these documents and their meanings. Finally, students understand virtues and principles by applying and reflecting on them through actual civic engagement—their own and that of other people from the past and present.

Indicators of Dimension 2—Participation and Deliberation—are detailed in the suggested K-12 Pathway for College, Career, and Civic Readiness in Table 10.

TABLE 10: Suggested K-12 Pathway for College, Career, and Civic Readiness Dimension 2, Participation and Deliberation

BY THE END OF GRADE 2	BY THE END OF GRADE 5	BY THE END OF GRADE 8	BY THE END OF GRADE 12
INDIVIDUALLY AND WITH OTHERS, STUDENTS…			
D2.Civ.7.K-2. Apply civic virtues when participating in school settings.	**D2.Civ.7.3-5.** Apply civic virtues and democratic principles in school settings.	**D2.Civ.7.6-8.** Apply civic virtues and democratic principles in school and community settings.	**D2.Civ.7.9-12.** Apply civic virtues and democratic principles when working with others.
D2.Civ.8.K-2. Describe democratic principles such as equality, fairness, and respect for legitimate authority and rules.	**D2.Civ.8.3-5.** Identify core civic virtues and democratic principles that guide government, society, and communities.	**D2.Civ.8.6-8.** Analyze ideas and principles contained in the founding documents of the United States, and explain how they influence the social and political system.	**D2.Civ.8.9-12.** Evaluate social and political systems in different contexts, times, and places, that promote civic virtues and enact democratic principles.
D2.Civ.9.K-2. Follow agreed-upon rules for discussions while responding attentively to others when addressing ideas and making decisions as a group.	**D2.Civ.9.3-5.** Use deliberative processes when making decisions or reaching judgments as a group.	**D2.Civ.9.6-8.** Compare deliberative processes used by a wide variety of groups in various settings.	**D2.Civ.9.9-12.** Use appropriate deliberative processes in multiple settings.
D2.Civ.10.K-2. Compare their own point of view with others' perspectives.	**D2.Civ.10.3-5.** Identify the beliefs, experiences, perspectives, and values that underlie their own and others' points of view about civic issues.	**D2.Civ.10.6-8.** Explain the relevance of personal interests and perspectives, civic virtues, and democratic principles when people address issues and problems in government and civil society.	**D2.Civ.10.9-12.** Analyze the impact and the appropriate roles of personal interests and perspectives on the application of civic virtues, democratic principles, constitutional rights, and human rights.

Processes, Rules, and Laws

Civics is the discipline of the social studies most directly concerned with the processes and rules by which groups of people make decisions, govern themselves, and address public problems. People address problems at all scales, from a classroom to the agreements among nations. Public policies are among the tools that governments use to address public problems. Students must learn how various rules, processes, laws, and policies actually work, which requires factual understanding of political systems and is the focus of this section. They must also obtain experience in defining and addressing public problems, as prompted in Dimension 4—Taking Informed Action.

Indicators of Dimension 2—Processes, Rules, and Laws—are detailed in the suggested K-12 Pathway for College, Career, and Civic Readiness in Table 11.

TABLE 11: Suggested K-12 Pathway for College, Career, and Civic Readiness Dimension 2, Processes, Rules, and Laws

BY THE END OF GRADE 2	BY THE END OF GRADE 5	BY THE END OF GRADE 8	BY THE END OF GRADE 12
INDIVIDUALLY AND WITH OTHERS, STUDENTS…			
D2.Civ.11.K-2. Explain how people can work together to make decisions in the classroom.	**D2.Civ.11.3-5.** Compare procedures for making decisions in a variety of settings, including classroom, school, government, and/or society.	**D2.Civ.11.6-8.** Differentiate among procedures for making decisions in the classroom, school, civil society, and local, state, and national government in terms of how civic purposes are intended.	**D2.Civ.11.9-12.** Evaluate multiple procedures for making governmental decisions at the local, state, national, and international levels in terms of the civic purposes achieved.
D2.Civ.12.K-2. Identify and explain how rules function in public (classroom and school) settings.	**D2.Civ.12.3-5.** Explain how rules and laws change society and how people change rules and laws.	**D2.Civ.12.6-8.** Assess specific rules and laws (both actual and proposed) as means of addressing public problems.	**D2.Civ.12.9-12.** Analyze how people use and challenge local, state, national, and international laws to address a variety of public issues.
Begins in grades 3–5	**D2.Civ.13.3-5.** Explain how policies are developed to address public problems.	**D2.Civ.13.6-8.** Analyze the purposes, implementation, and consequences of public policies in multiple settings.	**D2.Civ.13.9-12.** Evaluate public policies in terms of intended and unintended outcomes, and related consequences.
D2.Civ.14.K-2. Describe how people have tried to improve their communities over time.	**D2.Civ.14.3-5.** Illustrate historical and contemporary means of changing society.	**D2.Civ.14.6-8.** Compare historical and contemporary means of changing societies, and promoting the common good.	**D2.Civ.14.9-12.** Analyze historical, contemporary, and emerging means of changing societies, promoting the common good, and protecting rights.

ECONOMICS

EFFECTIVE ECONOMIC DECISION making requires that students have a keen understanding of the ways in which individuals, businesses, governments, and societies make decisions to allocate human capital, physical capital, and natural resources among alternative uses. This economic reasoning process involves the consideration of costs and benefits with the ultimate goal of making decisions that will enable individuals and societies to be as well off as possible. The study of economics provides students with the concepts and tools necessary for an economic way of thinking and helps students understand the interaction of buyers and sellers in markets, workings of the national economy, and interactions within the global marketplace.

Economics is grounded in knowledge about how people choose to use resources. Economic understanding helps individuals, businesses, governments, and societies choose what resources to devote to work, to school, and to leisure; how many dollars to spend, and how many to save; and how to make informed decisions in a wide variety of contexts. Economic reasoning and skillful use of economic tools draw upon a strong base of knowledge about human capital, land, investments, money, income and production, taxes, and government expenditures.

Economic Decision Making

People make decisions about how to use scarce resources to maximize the well-being of individuals and society. Economic decision making involves setting goals and identifying the resources available to achieve those goals. Alternative ways to use the resources are investigated in terms of their advantages and disadvantages. Since most choices involve a little more of one thing and a little less of something else, economic decision making includes weighing the additional benefit of an action against the additional cost. Investigating the incentives that motivate people is an essential part of analyzing economic decision making.

Indicators of Dimension 2—Economic Decision Making—are detailed in the suggested K-12 Pathway for College, Career, and Civic Readiness in Table 12.

TABLE 12: Suggested K-12 Pathway for College, Career, and Civic Readiness Dimension 2, Economic Decision Making

BY THE END OF GRADE 2	BY THE END OF GRADE 5	BY THE END OF GRADE 8	BY THE END OF GRADE 12
INDIVIDUALLY AND WITH OTHERS, STUDENTS…			
D2.Eco.1.K-2. Explain how scarcity necessitates decision making.	**D2.Eco.1.3-5.** Compare the benefits and costs of individual choices.	**D2.Eco.1.6-8.** Explain how economic decisions affect the well-being of individuals, businesses, and society.	**D2.Eco.1.9-12.** Analyze how incentives influence choices that may result in policies with a range of costs and benefits for different groups.
D2.Eco.2.K-2. Identify the benefits and costs of making various personal decisions.	**D2.Eco.2.3-5.** Identify positive and negative incentives that influence the decisions people make.	**D2.Eco.2.6-8.** Evaluate alternative approaches or solutions to current economic issues in terms of benefits and costs for different groups and society as a whole.	**D2.Eco.2.9-12.** Use marginal benefits and marginal costs to construct an argument for or against an approach or solution to an economic issue.

Exchange and Markets

People voluntarily exchange goods and services when both parties expect to gain as a result of the trade. Markets exist to facilitate the exchange of goods and services. When buyers and sellers interact in well-functioning, competitive markets, prices are determined that reflect the relative scarcity of the goods and services in the market. The principles of markets apply to markets for goods and services, labor, credit, foreign exchange, and others. Comparison of benefits and costs helps identify the circumstances under which government action in markets is in the best interest of society and when it is not.

Indicators of Dimension 2—Exchange and Markets—are detailed in the suggested K-12 Pathway for College, Career, and Civic Readiness in Table 13.

TABLE 13: Suggested K-12 Pathway for College, Career, and Civic Readiness Dimension 2, Exchange and Markets

BY THE END OF GRADE 2	BY THE END OF GRADE 5	BY THE END OF GRADE 8	BY THE END OF GRADE 12
INDIVIDUALLY AND WITH OTHERS, STUDENTS…			
D2.Eco.3.K-2. Describe the skills and knowledge required to produce certain goods and services.	**D2.Eco.3.3-5.** Identify examples of the variety of resources (human capital, physical capital, and natural resources) that are used to produce goods and services.	**D2.Eco.3.6-8.** Explain the roles of buyers and sellers in product, labor, and financial markets.	**D2.Eco.3.9-12.** Analyze the ways in which incentives influence what is produced and distributed in a market system.
D2.Eco.4.K-2. Describe the goods and services that people in the local community produce and those that are produced in other communities.	**D2.Eco.4.3-5.** Explain why individuals and businesses specialize and trade.	**D2.Eco.4.6-8.** Describe the role of competition in the determination of prices and wages in a market economy.	**D2.Eco.4.9-12.** Evaluate the extent to which competition among sellers and among buyers exists in specific markets.
D2.Eco.5.K-2. Identify prices of products in a local market.	**D2.Eco.5.3-5.** Explain the role of money in making exchange easier.	**D2.Eco.5.6-8.** Explain ways in which money facilitates exchange by reducing transactional costs.	**D2.Eco.5.9-12.** Describe the consequences of competition in specific markets.
D2.Eco.6.K-2. Explain how people earn income.	**D2.Eco.6.3-5.** Explain the relationship between investment in human capital, productivity, and future incomes.	**D2.Eco.6.6-8.** Explain how changes in supply and demand cause changes in prices and quantities of goods and services, labor, credit, and foreign currencies.	**D2.Eco.6.9-12.** Generate possible explanations for a government role in markets when market inefficiencies exist.
D2.Eco.7.K-2. Describe examples of costs of production.	**D2.Eco.7.3-5.** Explain how profits influence sellers in markets.	**D2.Eco.7.6-8.** Analyze the role of innovation and entrepreneurship in a market economy.	**D2.Eco.7.9-12.** Use benefits and costs to evaluate the effectiveness of government policies to improve market outcomes.
Begins in grades 3-5	**D2.Eco.8.3-5.** Identify examples of external benefits and costs.	**D2.Eco.8.6-8.** Explain how external benefits and costs influence market outcomes.	**D2.Eco.8.9-12.** Describe the possible consequences, both intended and unintended, of government policies to improve market outcomes.
D2.Eco.9.K-2. Describe the role of banks in an economy.	**D2.Eco.9.3-5.** Describe the role of other financial institutions in an economy.	**D2.Eco.9.6-8.** Describe the roles of institutions such as corporations, non-profits, and labor unions in a market economy.	**D2.Eco.9.9-12.** Describe the roles of institutions such as clearly defined property rights and the rule of law in a market economy.

The National Economy

Changes in the amounts and qualities of human capital, physical capital, and natural resources influence current and future economic conditions and standards of living. All markets working together influence economic growth and fluctuations in well-being. Monetary and fiscal policies are often designed and used in attempts to moderate fluctuations and encourage growth under a wide variety of circumstances. Policies changing the growth in the money supply and overall levels of spending in the economy are aimed at reducing inflationary or deflationary pressures; increasing employment or decreasing unemployment levels; and increasing economic growth over time. Policies designed to achieve alternative goals often have unintended effects on levels of inflation, employment, and growth.

Indicators of Dimension 2—The National Economy—are detailed in the suggested K-12 Pathway for College, Career, and Civic Readiness in Table 14.

TABLE 14: Suggested K-12 Pathway for College, Career, and Civic Readiness Dimension 2, The National Economy

BY THE END OF GRADE 2	BY THE END OF GRADE 5	BY THE END OF GRADE 8	BY THE END OF GRADE 12
INDIVIDUALLY AND WITH OTHERS, STUDENTS…			
D2.Eco.10.K-2. Explain why people save.	**D2.Eco.10.3-5.** Explain what interest rates are.	**D2.Eco.10.6-8.** Explain the influence of changes in interest rates on borrowing and investing.	**D2.Eco.10.9-12.** Use current data to explain the influence of changes in spending, production, and the money supply on various economic conditions.
Begins in grades 3–5	**D2.Eco.11.3-5.** Explain the meaning of inflation, deflation, and unemployment.	**D2.Eco.11.6-8.** Use appropriate data to evaluate the state of employment, unemployment, inflation, total production, income, and economic growth in the economy.	**D2.Eco.11.9-12.** Use economic indicators to analyze the current and future state of the economy.
D2.Eco.12.K-2. Describe examples of the goods and services that governments provide.	**D2.Eco.12.3-5.** Explain the ways in which the government pays for the goods and services it provides.	**D2.Eco.12.6-8.** Explain how inflation, deflation, and unemployment affect different groups.	**D2.Eco.12.9-12.** Evaluate the selection of monetary and fiscal policies in a variety of economic conditions.
D2.Eco.13.K-2. Describe examples of capital goods and human capital.	**D2.Eco.13.3-5.** Describe ways people can increase productivity by using improved capital goods and improving their human capital.	**D2.Eco.13.6-8.** Explain why standards of living increase as productivity improves.	**D2.Eco.13.9-12.** Explain why advancements in technology and investments in capital goods and human capital increase economic growth and standards of living.

The Global Economy

Economic globalization occurs with cross-border movement of goods, services, technology, information, and human, physical, and financial capital. Understanding why people specialize and trade, and how that leads to increased economic interdependence, are fundamental steps in understanding how the world economy functions. While trade provides significant benefits, it is not without costs. Comparing those benefits and costs is essential in evaluating policies to influence trade among individuals and businesses in different countries.

Indicators of Dimension 2—The Global Economy—are detailed in the suggested K-12 Pathway for College, Career, and Civic Readiness in Table 15.

TABLE 15: Suggested K-12 Pathway for College, Career, and Civic Readiness Dimension 2, The Global Economy

BY THE END OF GRADE 2	BY THE END OF GRADE 5	BY THE END OF GRADE 8	BY THE END OF GRADE 12
INDIVIDUALLY AND WITH OTHERS, STUDENTS…			
D2.Eco.14.K-2. Describe why people in one country trade goods and services with people in other countries.	**D2.Eco.14.3-5.** Explain how trade leads to increasing economic interdependence among nations.	**D2.Eco.14.6-8.** Explain barriers to trade and how those barriers influence trade among nations.	**D2.Eco.14.9-12.** Analyze the role of comparative advantage in international trade of goods and services.
D2.Eco.15.K-2. Describe products that are produced abroad and sold domestically and products that are produced domestically and sold abroad.	**D2.Eco.15.3-5.** Explain the effects of increasing economic interdependence on different groups within participating nations.	**D2.Eco.15.6-8.** Explain the benefits and the costs of trade policies to individuals, businesses, and society.	**D2.Eco.15.9-12.** Explain how current globalization trends and policies affect economic growth, labor markets, rights of citizens, the environment, and resource and income distribution in different nations.

GEOGRAPHY

EACH PLACE ON EARTH has a unique set of local conditions and connections to other places. Some activities are appropriate in a given place and other activities are not. Events in one place influence events in other places. Geographic knowledge helps people to make decisions about "Where can I be safe, successful, and happy in my daily activities?" and "How can my community create and sustain a healthy environment?" Such knowledge is critically important to understanding what activities might be harmful to a place or what hazards might be encountered there. Geographic inquiry helps people understand and appreciate their own place in the world, and fosters curiosity about Earth's wide diversity of environments and cultures.

Geographic reasoning rests on deep knowledge of Earth's physical and human features, including the locations of places and regions, the distribution of landforms and water bodies, and historic changes in political boundaries, economic activities, and cultures.

Geographic reasoning requires using spatial and environmental perspectives, skills in asking and answering questions, and being able to apply geographic representations including maps, imagery, and geospatial technologies. A spatial perspective is about whereness. Where are people and things located? Why there? What are the consequences? An environmental perspective views people as living in interdependent relationships within diverse environments. Thinking geographically requires knowing that the world is a set of complex ecosystems interacting at multiple scales that structure the spatial patterns and processes that influence our daily lives. Geographic reasoning brings societies and nature under the lens of spatial analysis, and aids in personal and societal decision making and problem solving.

Geographic Representations: Spatial Views of the World

Creating maps and using geospatial technologies requires a process of answering geographic questions by gathering relevant information; organizing and analyzing the information; and using effective means to communicate the findings. Once a map or other representation is created, it prompts new questions concerning the locations, spaces, and patterns portrayed. Creating maps and other geographical representations is an essential and enduring part of seeking new geographic knowledge that is personally and socially useful and that can be applied in making decisions and solving problems.

Indicators of Dimension 2—Geographic Representations—are detailed in the suggested K-12 Pathway for College, Career, and Civic Readiness in Table 16.

TABLE 16: Suggested K-12 Pathway for College, Career, and Civic Readiness Dimension 2, Geographic Representations

BY THE END OF GRADE 2	BY THE END OF GRADE 5	BY THE END OF GRADE 8	BY THE END OF GRADE 12
INDIVIDUALLY AND WITH OTHERS, STUDENTS…			
D2.Geo.1.K-2. Construct maps, graphs, and other representations of familiar places.	**D2.Geo.1.3-5.** Construct maps and other graphic representations of both familiar and unfamiliar places.	**D2.Geo.1.6-8.** Construct maps to represent and explain the spatial patterns of cultural and environmental characteristics.	**D2.Geo.1.9-12.** Use geospatial and related technologies to create maps to display and explain the spatial patterns of cultural and environmental characteristics.
D2.Geo.2.K-2. Use maps, graphs, photographs, and other representations to describe places and the relationships and interactions that shape them.	**D2.Geo.2.3-5.** Use maps, satellite images, photographs, and other representations to explain relationships between the locations of places and regions and their environmental characteristics.	**D2.Geo.2.6-8.** Use maps, satellite images, photographs, and other representations to explain relationships between the locations of places and regions, and changes in their environmental characteristics.	**D2.Geo.2.9-12.** Use maps, satellite images, photographs, and other representations to explain relationships between the locations of places and regions and their political, cultural, and economic dynamics.
D2.Geo.3.K-2. Use maps, globes, and other simple geographic models to identify cultural and environmental characteristics of places.	**D2.Geo.3.3-5.** Use maps of different scales to describe the locations of cultural and environmental characteristics.	**D2.Geo.3.6-8.** Use paper based and electronic mapping and graphing techniques to represent and analyze spatial patterns of different environmental and cultural characteristics.	**D2.Geo.3.9-12.** Use geographic data to analyze variations in the spatial patterns of cultural and environmental characteristics at multiple scales.

Human-Environment Interaction: Place, Regions, and Culture

Human-environment interactions are essential aspects of human life in all societies and they occur at local-to-global scales. Human-environment interactions happen both in specific places and across broad regions. Culture influences the locations and the types of interactions that occur. Earth's human systems and physical systems are in constant interaction and have reciprocal influences flowing among them. These interactions result in a variety of spatial patterns that require careful observation, investigation, analysis, and explanation.

Indicators of Dimension 2—Human-Environment Interaction—are detailed in the suggested K-12 Pathway for College, Career, and Civic Readiness in Table 17.

TABLE 17: Suggested K-12 Pathway for College, Career, and Civic Readiness Dimension 2, Human-Environment Interaction

BY THE END OF GRADE 2	BY THE END OF GRADE 5	BY THE END OF GRADE 8	BY THE END OF GRADE 12
INDIVIDUALLY AND WITH OTHERS, STUDENTS…			
D2.Geo.4.K-2. Explain how weather, climate, and other environmental characteristics affect people's lives in a place or region.	**D2.Geo.4.3-5.** Explain how culture influences the way people modify and adapt to their environments.	**D2.Geo.4.6-8.** Explain how cultural patterns and economic decisions influence environments and the daily lives of people in both nearby and distant places.	**D2.Geo.4.9-12.** Analyze relationships and interactions within and between human and physical systems to explain reciprocal influences that occur among them.
D2.Geo.5.K-2. Describe how human activities affect the cultural and environmental characteristics of places or regions.	**D2.Geo.5.3-5.** Explain how the cultural and environmental characteristics of places change over time.	**D2.Geo.5.6-8.** Analyze the combinations of cultural and environmental characteristics that make places both similar to and different from other places.	**D2.Geo.5.9-12.** Evaluate how political and economic decisions throughout time have influenced cultural and environmental characteristics of various places and regions.
D2.Geo.6.K-2. Identify some cultural and environmental characteristics of specific places.	**D2.Geo.6.3-5.** Describe how environmental and cultural characteristics influence population distribution in specific places or regions.	**D2.Geo.6.6-8.** Explain how the physical and human characteristics of places and regions are connected to human identities and cultures.	**D2.Geo.6.9-12.** Evaluate the impact of human settlement activities on the environmental and cultural characteristics of specific places and regions.

Human Population: Spatial Patterns and Movements

The size, composition, distribution, and movement of human populations are fundamental and active features on Earth's surface. The expansion and redistribution of the human population affects patterns of settlement, environmental changes, and resource use. The spatial patterns and movements of population also relate to physical phenomena including climate variability, landforms, and locations of various natural hazards. Further, political, economic, and technological changes sometimes have dramatic effects on population size, composition, and distribution. Past, present, and future conditions on Earth's surface cannot be fully understood without asking and answering questions about the spatial patterns of human population.

Indicators of Dimension 2—Human Population: Spatial Patterns and Movements—are detailed in the suggested K-12 Pathway for College, Career, and Civic Readiness in Table 18.

TABLE 18: Suggested K-12 Pathway for College, Career, and Civic Readiness Dimension 2, Human Population: Spatial Patterns and Movements

BY THE END OF GRADE 2	BY THE END OF GRADE 5	BY THE END OF GRADE 8	BY THE END OF GRADE 12
INDIVIDUALLY AND WITH OTHERS, STUDENTS…			
D2.Geo.7.K-2. Explain why and how people, goods, and ideas move from place to place.	**D2.Geo.7.3-5.** Explain how cultural and environmental characteristics affect the distribution and movement of people, goods, and ideas.	**D2.Geo.7.6-8.** Explain how changes in transportation and communication technology influence the spatial connections among human settlements and affect the diffusion of ideas and cultural practices.	**D2.Geo.7.9-12.** Analyze the reciprocal nature of how historical events and the spatial diffusion of ideas, technologies, and cultural practices have influenced migration patterns and the distribution of human population.
D2.Geo.8.K-2. Compare how people in different types of communities use local and distant environments to meet their daily needs.	**D2.Geo.8.3-5.** Explain how human settlements and movements relate to the locations and use of various natural resources.	**D2.Geo.8.6-8.** Analyze how relationships between humans and environments extend or contract spatial patterns of settlement and movement.	**D2.Geo.8.9-12.** Evaluate the impact of economic activities and political decisions on spatial patterns within and among urban, suburban, and rural regions.
D2.Geo.9.K-2. Describe the connections between the physical environment of a place and the economic activities found there.	**D2.Geo.9.3-5.** Analyze the effects of catastrophic environmental and technological events on human settlements and migration.	**D2.Geo.9.6-8.** Evaluate the influences of long-term human-induced environmental change on spatial patterns of conflict and cooperation.	**D2.Geo.9.9-12.** Evaluate the influence of long-term climate variability on human migration and settlement patterns, resource use, and land uses at local-to-global scales.

Global Interconnections: Changing Spatial Patterns

Global interconnections occur in both human and physical systems. Earth is a set of interconnected ecosystems of which humans are an influential part. Many natural phenomena have no perceptible boundaries. For example, the oceans are one dynamic system. The atmosphere covers the entire planet. Land and water forms shift over geological eons. Many life forms diffuse from place to place and bring environmental changes with them. Humans have spread across the planet, along with their cultural practices, artifacts, languages, diseases, and other attributes. All of these interconnections create complex spatial patterns at multiple scales that continue to change over time. Global-scale issues and problems cannot be resolved without extensive collaboration among the world's peoples, nations, and economic organizations. Asking and answering questions about global interconnections and spatial patterns are a necessary part of geographic reasoning.

Indicators of Dimension 2—Global Interconnections—are detailed in the suggested K-12 Pathway for College, Career, and Civic Readiness in Table 19.

TABLE 19: Suggested K-12 Pathway for College, Career, and Civic Readiness Dimension 2, Global Interconnections

BY THE END OF GRADE 2	BY THE END OF GRADE 5	BY THE END OF GRADE 8	BY THE END OF GRADE 12
INDIVIDUALLY AND WITH OTHERS, STUDENTS…			
D2.Geo.10.K-2. Describe changes in the physical and cultural characteristics of various world regions.	**D2.Geo.10.3-5.** Explain why environmental characteristics vary among different world regions.	**D2.Geo.10.6-8.** Analyze the ways in which cultural and environmental characteristics vary among various regions of the world.	**D2.Geo.10.9-12.** Evaluate how changes in the environmental and cultural characteristics of a place or region influence spatial patterns of trade and land use.
D2.Geo.11.K-2. Explain how the consumption of products connects people to distant places.	**D2.Geo.11.3-5.** Describe how the spatial patterns of economic activities in a place change over time because of interactions with nearby and distant places.	**D2.Geo.11.6-8.** Explain how the relationship between the environmental characteristics of places and production of goods influences the spatial patterns of world trade.	**D2.Geo.11.9-12.** Evaluate how economic globalization and the expanding use of scarce resources contribute to conflict and cooperation within and among countries.
D2.Geo.12.K-2. Identify ways that a catastrophic disaster may affect people living in a place.	**D2.Geo.12.3-5.** Explain how natural and human-made catastrophic events in one place affect people living in other places.	**D2.Geo.12.6-8.** Explain how global changes in population distribution patterns affect changes in land use in particular places.	**D2.Geo.12.9-12.** Evaluate the consequences of human-made and natural catastrophes on global trade, politics, and human migration.

HISTORY

HISTORICAL THINKING REQUIRES understanding and evaluating change and continuity over time, and making appropriate use of historical evidence in answering questions and developing arguments about the past. It involves going beyond simply asking, "What happened when?" to evaluating why and how events occurred and developments unfolded. It involves locating and assessing historical sources of many different types to understand the contexts of given historical eras and the perspectives of different individuals and groups within geographic units that range from the local to the global. Historical thinking is a process of chronological reasoning, which means wrestling with issues of causality, connections, significance, and context with the goal of developing credible explanations of historical events and developments based on reasoned interpretation of evidence.

Historical inquiry involves acquiring knowledge about significant events, developments, individuals, groups, documents, places, and ideas to support investigations about the past. Acquiring relevant knowledge requires assembling information from a wide variety of sources in an integrative process. Students might begin with key events or individuals introduced by the teacher or identified by educational leaders at the state level, and then investigate them further. Or they might take a source from a seemingly insignificant individual and make connections between that person and larger events, or trace the person's contributions to a major development. Scholars, teachers, and students form an understanding of what is and what is not significant from the emergence of new sources, from current events, from their locale, and from asking questions about changes that affected large numbers of people in the past or had enduring consequences. Developing historical knowledge in connection with historical investigations not only helps students remember the content better because it has meaning, but also allows students to become better thinkers.

Change, Continuity, and Context

At its heart, chronological reasoning requires understanding processes of change and continuity over time, which means assessing similarities and differences between historical periods and between the past and present. It also involves coming to understand how a change in one area of life relates to a change in other areas, thus bringing together political, economic, intellectual, social, cultural, and other factors. Understanding the interrelation of patterns of change requires evaluating the context within which events unfolded in order not to view events in isolation, and to be able to assess the significance of specific individuals, groups, and developments.

Indicators of Dimension 2—Change, Continuity and Context—are detailed in the suggested K-12 Pathway for College, Career, and Civic Readiness in Table 20.

Table 20: Suggested K-12 Pathway for College, Career, and Civic Readiness Dimension 2, Change, Continuity, and Context

BY THE END OF GRADE 2	BY THE END OF GRADE 5	BY THE END OF GRADE 8	BY THE END OF GRADE 12
INDIVIDUALLY AND WITH OTHERS, STUDENTS…			
D2.His.1.K-2. Create a chronological sequence of multiple events.	**D2.His.1.3-5.** Create and use a chronological sequence of related events to compare developments that happened at the same time.	**D2.His.1.6-8.** Analyze connections among events and developments in broader historical contexts.	**D2.His.1.9-12.** Evaluate how historical events and developments were shaped by unique circumstances of time and place as well as broader historical contexts.
D2.His.2.K-2. Compare life in the past to life today.	**D2.His.2.3-5.** Compare life in specific historical time periods to life today.	**D2.His.2.6-8.** Classify series of historical events and developments as examples of change and/or continuity.	**D2.His.2.9-12.** Analyze change and continuity in historical eras.
D2.His.3.K-2. Generate questions about individuals and groups who have shaped a significant historical change.	**D2.His.3.3-5.** Generate questions about individuals and groups who have shaped significant historical changes and continuities.	**D2.His.3.6-8.** Use questions generated about individuals and groups to analyze why they, and the developments they shaped, are seen as historically significant.	**D2.His.3.9-12.** Use questions generated about individuals and groups to assess how the significance of their actions changes over time and is shaped by the historical context.

Perspectives

History is interpretive. Even if they are eyewitnesses, people construct different accounts of the same event, which are shaped by their perspectives—their ideas, attitudes, and beliefs. Historical understanding requires recognizing this multiplicity of points of view in the past, which makes it important to seek out a range of sources on any historical question rather than simply use those that are easiest to find. It also requires recognizing that perspectives change over time, so that historical understanding requires developing a sense of empathy with people in the past whose perspectives might be very different from those of today.

Indicators of Dimension 2—Perspectives—are detailed in the suggested K-12 Pathway for College, Career, and Civic Readiness in Table 21.

TABLE 21: Suggested K-12 Pathway for College, Career, and Civic Readiness Dimension 2, Perspectives

BY THE END OF GRADE 2	BY THE END OF GRADE 5	BY THE END OF GRADE 8	BY THE END OF GRADE 12
INDIVIDUALLY AND WITH OTHERS, STUDENTS…			
D2.His.4.K-2. Compare perspectives of people in the past to those of people in the present.	**D2.His.4.3-5.** Explain why individuals and groups during the same historical period differed in their perspectives.	**D2.His.4.6-8.** Analyze multiple factors that influenced the perspectives of people during different historical eras.	**D2.His.4.9-12.** Analyze complex and interacting factors that influenced the perspectives of people during different historical eras.
Begins in grades 3–5	**D2.His.5.3-5.** Explain connections among historical contexts and people's perspectives at the time.	**D2.His.5.6-8.** Explain how and why perspectives of people have changed over time.	**D2.His.5.9-12.** Analyze how historical contexts shaped and continue to shape people's perspectives.
D2.His.6.K-2. Compare different accounts of the same historical event.	**D2.His.6.3-5.** Describe how people's perspectives shaped the historical sources they created.	**D2.His.6.6-8.** Analyze how people's perspectives influenced what information is available in the historical sources they created.	**D2.His.6.9-12.** Analyze the ways in which the perspectives of those writing history shaped the history that they produced.
Begins in grades 9–12	*Begins in grades 9–12*	*Begins in grades 9–12*	**D2.His.7.9-12.** Explain how the perspectives of people in the present shape interpretations of the past.
Begins in grades 9–12	*Begins in grades 9–12*	*Begins in grades 9–12*	**D2.His.8.9-12.** Analyze how current interpretations of the past are limited by the extent to which available historical sources represent perspectives of people at the time.

Historical Sources and Evidence

Historical inquiry is based on materials left from the past that can be studied and analyzed. Such materials, referred to as historical sources or primary sources, include written documents, but also objects, artistic works, oral accounts, landscapes that humans have modified, or even materials contained within the human body, such as DNA. These sources become evidence once they are selected to answer a historical question, a process that involves taking into account features of the source itself, such as its maker or date.

The selection process also requires paying attention to the wider historical context in order to choose sources that are relevant and credible. Examining sources often leads to further questions as well as answers in a spiraling process of inquiry.

Indicators of Dimension 2—Historical Sources and Evidence—are detailed in the suggested K-12 Pathway for College, Career, and Civic Readiness in Table 22.

TABLE 22: Suggested K-12 Pathway for College, Career, and Civic Readiness Dimension 2, Historical Sources and Evidence

BY THE END OF GRADE 2	BY THE END OF GRADE 5	BY THE END OF GRADE 8	BY THE END OF GRADE 12
INDIVIDUALLY AND WITH OTHERS, STUDENTS…			
D2.His.9.K-2. Identify different kinds of historical sources.	**D2.His.9.3-5.** Summarize how different kinds of historical sources are used to explain events in the past.	**D2.His.9.6-8.** Classify the kinds of historical sources used in a secondary interpretation.	**D2.His.9.9-12.** Analyze the relationship between historical sources and the secondary interpretations made from them.
D2.His.10.K-2. Explain how historical sources can be used to study the past.	**D2.His.10.3-5.** Compare information provided by different historical sources about the past.	**D2.His.10.6-8.** Detect possible limitations in the historical record based on evidence collected from different kinds of historical sources.	**D2.His.10.9-12.** Detect possible limitations in various kinds of historical evidence and differing secondary interpretations.
D2.His.11.K-2. Identify the maker, date, and place of origin for a historical source from information within the source itself.	**D2.His.11.3-5.** Infer the intended audience and purpose of a historical source from information within the source itself.	**D2.His.11.6-8.** Use other historical sources to infer a plausible maker, date, place of origin, and intended audience for historical sources where this information is not easily identified.	**D2.His.11.9-12.** Critique the usefulness of historical sources for a specific historical inquiry based on their maker, date, place of origin, intended audience, and purpose.
D2.His.12.K-2. Generate questions about a particular historical source as it relates to a particular historical event or development.	**D2.His.12.3-5.** Generate questions about multiple historical sources and their relationships to particular historical events and developments.	**D2.His.12.6-8.** Use questions generated about multiple historical sources to identify further areas of inquiry and additional sources.	**D2.His.12.9-12.** Use questions generated about multiple historical sources to pursue further inquiry and investigate additional sources.
Begins at grade 3–5	**D2.His.13.3-5.** Use information about a historical source, including the maker, date, place of origin, intended audience, and purpose to judge the extent to which the source is useful for studying a particular topic.	**D2.His.13.6-8.** Evaluate the relevancy and utility of a historical source based on information such as maker, date, place of origin, intended audience, and purpose.	**D2.His.13.9-12.** Critique the appropriateness of the historical sources used in a secondary interpretation.

Causation and Argumentation

No historical event or development occurs in a vacuum; each one has prior conditions and causes, and each one has consequences. Historical thinking involves using evidence and reasoning to draw conclusions about probable causes and effects, recognizing that these are multiple and complex. It requires understanding that the outcome of any historical event may not be what those who engaged in it intended or predicted, so that chains of cause and effect in the past are unexpected and contingent, not pre-determined. Along with claims about causes and effects, historical arguments can also address issues of change over time, the relevance of sources, the perspectives of those involved, and many other topics, but must be based on evidence that is used in a critical, coherent, and logical manner.

Indicators of Dimension 2—Causation and Argumentation—are detailed in the suggested K-12 Pathway for College, Career, and Civic Readiness in Table 23.

TABLE 23: Suggested K-12 Pathway for College, Career, and Civic Readiness Dimension 2, Causation and Argumentation

BY THE END OF GRADE 2	BY THE END OF GRADE 5	BY THE END OF GRADE 8	BY THE END OF GRADE 12
INDIVIDUALLY AND WITH OTHERS, STUDENTS…			
D2.His.14.K-2. Generate possible reasons for an event or development in the past.	**D2.His.14.3-5.** Explain probable causes and effects of events and developments.	**D2.His.14.6-8.** Explain multiple causes and effects of events and developments in the past.	**D2.His.14.9-12.** Analyze multiple and complex causes and effects of events in the past.
Begins in grades 6–8	*Begins in grades 6–8*	**D2.His.15.6-8.** Evaluate the relative influence of various causes of events and developments in the past.	**D2.His.15.9-12.** Distinguish between long-term causes and triggering events in developing a historical argument.
D2.His.16.K-2. Select which reasons might be more likely than others to explain a historical event or development.	**D2.His.16.3-5.** Use evidence to develop a claim about the past.	**D2.His.16.6-8.** Organize applicable evidence into a coherent argument about the past.	**D2.His.16.9-12.** Integrate evidence from multiple relevant historical sources and interpretations into a reasoned argument about the past.
Begins in grades 3–5	**D2.His.17.3-5.** Summarize the central claim in a secondary work of history.	**D2.His.17.6-8.** Compare the central arguments in secondary works of history on related topics in multiple media.	**D2.His.17.9-12.** Critique the central arguments in secondary works of history on related topics in multiple media in terms of their historical accuracy.

ENGLISH LANGUAGE ARTS/LITERACY COMMON CORE CONNECTIONS: DIMENSION 2

The ELA/Literacy Common Core Standards emphasize analysis, argumentation, and the use of evidence throughout the standards. As noted in the ELA/Literacy Common Core Standards, students who are college and career ready can independently "construct effective arguments and convey intricate or multifaceted information" and "use relevant evidence" when making arguments (NGA and CCSSO, 2010a, p. 7). Dimension 2 in the C3 Framework describes the concepts and tools in civics, economics, geography, and history that are needed to use evidence to make disciplinary arguments. The ELA/Literacy Common Core Standards also describe how students develop language skills and build vocabulary. College and career readiness requires the ability to independently "use a wide-ranging vocabulary" (NGA and CCSSO, 2010a, p. 7). The C3 framework emphasizes disciplinary vocabulary through the introduction of new concepts and the language of the disciplines.

Table 24 details connections between Dimension 2 and the College and Career Readiness Anchor Standards in the ELA/Literacy Common Core Standards. These connections are further elaborated with examples.

Connections between the C3 Framework and the College and Career Readiness Anchor Standards. While the connections between the C3 Framework and the ELA/Literacy Common Core Standards are comprehensive and consistent, thirteen CCR Anchor Standards within the ELA/Literacy Common Core Standards have broader connections within Dimension 2.

Anchor Reading Standards 1–10 are closely aligned with Dimension 2. As students use the disciplinary tools and develop knowledge about the disciplinary concepts highlighted in Dimension 2, they will engage with a variety of sources requiring a wide range of reading skills. During these experiences, students will need to use the full complement of skills highlighted in the reading standards. They will need to read closely for meaning, while determining main ideas, details, structure, purpose, source type, and claims emitting from the sources, and comparing multiple sources. All of these reading activities are regulated by the clear expectations of Anchor Reading Standards 1-10: the demand that answers to questions be backed up by evidence either explicitly drawn from the text or inferred from it, and the requirement that the text under study be of the appropriate level of complexity for the grade band in question.

Anchor Writing Standard 7 is focused on the research process. All four social studies disciplines represented in Dimension 2, as well as the behavioral and social sciences of psychology, sociology, and anthropology, emphasize research-based analytical skills using disciplinary concepts and tools.

TABLE 24: Connections between Dimension 2 and the CCR Anchor Standards in the ELA/Literacy Common Core Standards

ELA/LITERACY CCR ANCHOR STANDARDS CONNECTIONS	Civics	Anchor Reading Standards 1–10 Anchor Writing Standard 7 Anchor Speaking and Listening Standard 1 Anchor Language Standard 6
	Economics	
	Geography	
	History	
SHARED LANGUAGE		Analysis; Argument; Evidence; Questioning

Anchor Speaking and Listening Standard 1 calls on students to "prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively" (NGA and CCSSO, 2010a, p. 22). Dimension 2 asks students to engage disciplinary tools and concepts in collaborative settings working "individually and with others."

Anchor Language Standard 6 requires that students "acquire and use accurately a range of general academic and domain-specific words and phrases" (NGA and CCSSO, 2010a, p. 51). The C3 Framework supports this language standard by setting forth expectations that students will develop conceptual knowledge within the disciplines. The development and expansion of vocabulary is an important part of the ELA/Literacy Common Core Standards and the C3 Framework; Language Standard 6 requires that students acquire and use academic and domain-specific words and phrases—words such as *virtue, fiscal, spatial,* and *perspective* that are included in the Indicators of Dimension 2.

Shared Language. The ELA/Literacy Common Core Standards closely align with Indicators in Dimension 2. In places, the connections between the Common Core Standards and C3 Framework Indicators are so close that the same language is used. Dimension 2 and the ELA/Literacy Common Core Standards regularly use terms such as *analysis, argument, evidence,* and *questioning.*

Dimension 3

Evaluating **Sources &** USING EVIDENCE

DIMENSION 3 INCLUDES the skills students need to analyze information and come to conclusions in an inquiry. These skills focus on gathering and evaluating sources, and then developing claims and using evidence to support those claims.

Students should use various technologies and skills to find information and to express their responses to compelling and supporting questions through well-reasoned explanations and evidence-based arguments. Through the rigorous analysis of sources and application of information from those sources, students should make the evidence-based claims that will form the basis for their conclusions.

Although Dimension 3 includes a sophisticated set of skills, even the youngest children understand the need to give reasons for their ideas. As they progress through the grades, students learn more advanced approaches related to these skills. In the subsection Developing Claims and Using Evidence below, students generate claims and identify evidence to support those claims.

The specific skills described in Dimension 3 support the examination of content using concepts and tools from the social studies disciplines.

Gathering and Evaluating Sources

Whether students are constructing opinions, explanation, or arguments, they will gather information from a variety of sources and evaluate the relevance of that information. In this section, students are asked to work with the sources that they gather and/or are provided for them. It is important for students to use online and print sources, and they need to be mindful that not all sources are relevant to their task. They also need to understand that there are general Common Core literacy skills, such as identifying an author's purpose, main idea, and point of view, that will help in evaluating the usefulness of a source.

Indicators of Dimension 3—Gathering and Evaluating Sources—are detailed in the suggested K-12 Pathway for College, Career, and Civic Readiness in Table 25.

TABLE 25: Suggested K-12 Pathway for College, Career, and Civic Readiness Dimension 3, Gathering and Evaluating Sources

BY THE END OF GRADE 2	BY THE END OF GRADE 5	BY THE END OF GRADE 8	BY THE END OF GRADE 12
INDIVIDUALLY AND WITH OTHERS, STUDENTS…			
D3.1.K-2. Gather relevant information from one or two sources while using the origin and structure to guide the selection.	**D3.1.3-5.** Gather relevant information from multiple sources while using the origin, structure, and context to guide the selection.	**D3.1.6-8.** Gather relevant information from multiple sources while using the origin, authority, structure, context, and corroborative value of the sources to guide the selection.	**D3.1.9-12.** Gather relevant information from multiple sources representing a wide range of views while using the origin, authority, structure, context, and corroborative value of the sources to guide the selection.
D3.2.K-2. Evaluate a source by distinguishing between fact and opinion.	**D3.2.3-5.** Use distinctions among fact and opinion to determine the credibility of multiple sources.	**D3.2.6-8.** Evaluate the credibility of a source by determining its relevance and intended use.	**D3.2.9-12.** Evaluate the credibility of a source by examining how experts value the source.

Developing Claims and Using Evidence

This subsection focuses on argumentation. In contrast to opinions and explanations, argumentation involves the ability to understand the source-to-evidence relationship. That relationship emphasizes the development of claims and counterclaims and the purposeful selection of evidence in support of those claims and counterclaims. Students will learn to develop claims using evidence, but their initial claims will often be tentative and probing. As students delve deeper into the available sources, they construct more sophisticated claims and counterclaims that draw on evidence from multiple sources. Whether those claims are implicitly or explicitly stated in student products, they will reflect the evidence students have selected from the sources they have consulted.

Indicators of Dimension 3—Developing Claims and Using Evidence—are detailed in the suggested K-12 Pathway for College, Career, and Civic Readiness in Table 26.

TABLE 26: Suggested K-12 Pathway for College, Career, and Civic Readiness Dimension 3, Developing Claims and Using Evidence

BY THE END OF GRADE 2	BY THE END OF GRADE 5	BY THE END OF GRADE 8	BY THE END OF GRADE 12
INDIVIDUALLY AND WITH OTHERS, STUDENTS…			
Begins in grades 3–5	**D3.3.3-5.** Identify evidence that draws information from multiple sources in response to compelling questions.	**D3.3.6-8.** Identify evidence that draws information from multiple sources to support claims, noting evidentiary limitations.	**D3.3.9-12.** Identify evidence that draws information directly and substantively from multiple sources to detect inconsistencies in evidence in order to revise or strengthen claims.
Begins in grades 3–5	**D3.4.3-5.** Use evidence to develop claims in response to compelling questions.	**D3.4.6-8.** Develop claims and counterclaims while pointing out the strengths and limitations of both.	**D3.4.9-12.** Refine claims and counterclaims attending to precision, significance, and knowledge conveyed through the claim while pointing out the strengths and limitations of both.

ENGLISH LANGUAGE ARTS/LITERACY COMMON CORE CONNECTIONS: DIMENSION 3

The ELA/Literacy Common Core Standards focus broadly on evaluating sources and using evidence as skills that are fundamental to success in college and career. According to the Common Core Standards,"students need the ability to gather, comprehend, evaluate, synthesize, and report on information and ideas" (NGA and CCSSO, 2010a, p. 4). Students are expected to "use relevant evidence when supporting their own points in writing and speaking, making their reasoning clear to the reader or listener, and they constructively evaluate others' use of evidence" (NGA and CCSSO, 2010a, p. 7). The ELA/Literacy Common Core Standards also make clear that these skills connect to civic life, arguing that students must "reflexively demonstrate the cogent reasoning and use of evidence that is essential to both private deliberation and responsible citizenship in a democratic republic" (NGA and CCSSO, 2010a, p. 3).

Through research, students hone their ability to gather and evaluate information and then use that information as evidence in a wide range of endeavors. The ELA/Literacy Common Core Standards emphasize these skills as key to an integrated model of literacy. The C3 Framework and the Indicators in Dimension 3 apply this model to social studies inquiry.

Table 27 details connections between Dimension 3 and the College and Career Readiness Anchor Standards in the ELA/Literacy Common Core Standards. These connections are further elaborated with examples.

Connections between the C3 Framework and the College and Career Readiness Anchor Standards. While the connections between the C3 Framework and the ELA/Literacy Common Core Standards are comprehensive and consistent, seventeen CCR Anchor Standards within the ELA/Literacy Common Core Standards have broader connections within Dimension 3.

Anchor Reading Standards 1–10 are closely aligned with Dimension 3. As students gather and evaluate information, develop claims, and use evidence, they will engage with a variety of sources requiring a wide range of reading skills. During these experiences, students will need to use the full complement of skills highlighted in the Reading Standards by reading closely for meaning, while determining main ideas, details, structure, purpose, source type, and claims emitting from the sources, and comparing among multiple sources. The ten Anchor Reading Standards offer a foundation for social studies inquiry. Together, the standards offer a comprehensive picture of a skilled reader who is prepared to engage sources during the process of inquiry. For example, Reading Standard 1 requires students to "cite specific textual evidence when writing or speaking" (NGA and CCSSO, 2010a, p. 10).

This skill is an important part of evaluating the credibility of a source, something that the C3 Framework calls on students to do in Dimension 3. Additionally, in Reading Standard 8, students are expected to

Table 27: Connections between Dimension 3 and the CCR Anchor Standards in the ELA/Literacy Common Core Standards

ELA/LITERACY CCR ANCHOR STANDARDS CONNECTIONS	Gathering and Evaluating Sources	Reading 1–10 Writing 1, 2, 7–10 Speaking and Listening 1
	Developing Claims and Using Evidence	
SHARED LANGUAGE		Argument; Sources; Evidence; Claims, Counterclaims; Gather

evaluate arguments and claims in a text, given the "relevance and sufficiency of the evidence" (NGA and CCSSO, 2010a, p. 8). By developing these skills, students become familiar with how others use evidence and understand the importance of evidence in arguments. The C3 Framework asks students to apply these skills in the process of inquiry, so they are able to construct disciplinary explanations and arguments.

Students evaluate sources and use evidence regularly when conducting inquiry. Anchor Writing Standard 1 sets an expectation that students will use "valid reasoning and relevant and sufficient evidence" when writing arguments (NGA and CCSSO, 2010a, p. 18). Standard 2 for writing requires students to "write informative/explanatory texts to examine and convey complex ideas" (NGA and CCSSO, 2010a, p. 18). Writing Standards 7-9 offer a range of specific activities that undergird student expectations for this Dimension of the C3 Framework: Writing Standard 7 focuses on "short as well as more sustained research projects based on focused questions" (NGA and CCSSO, 2010a, p. 18); Writing Standard 8 calls on students to "gather relevant information" and "assess the credibility and accuracy of each source" (NGA and CCSSO, 2010a, p. 18); and Writing Standard 9 asks students to draw evidence from (in this case) informational texts "to support analysis, reflection, and research" (NGA and CCSSO, 2010a, p. 18). The C3 Framework extends all of these skills for the purpose of disciplinary inquiry and civic engagement.

Inquiry in social studies is an inherently collaborative activity, and thus, Anchor Speaking and Listening Standard 1 is particularly relevant in Dimension 3. Speaking and Listening Standard 1 calls on students to "prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively" (NGA and CCSSO, 2010a, p. 22). The C3 Framework assumes a collaborative environment as students work through their inquiries. As students gather and evaluate sources for relevant information and determine credibility toward building claims with evidence, they should have multiple opportunities to practice civil, democratic discourse with diverse partners.

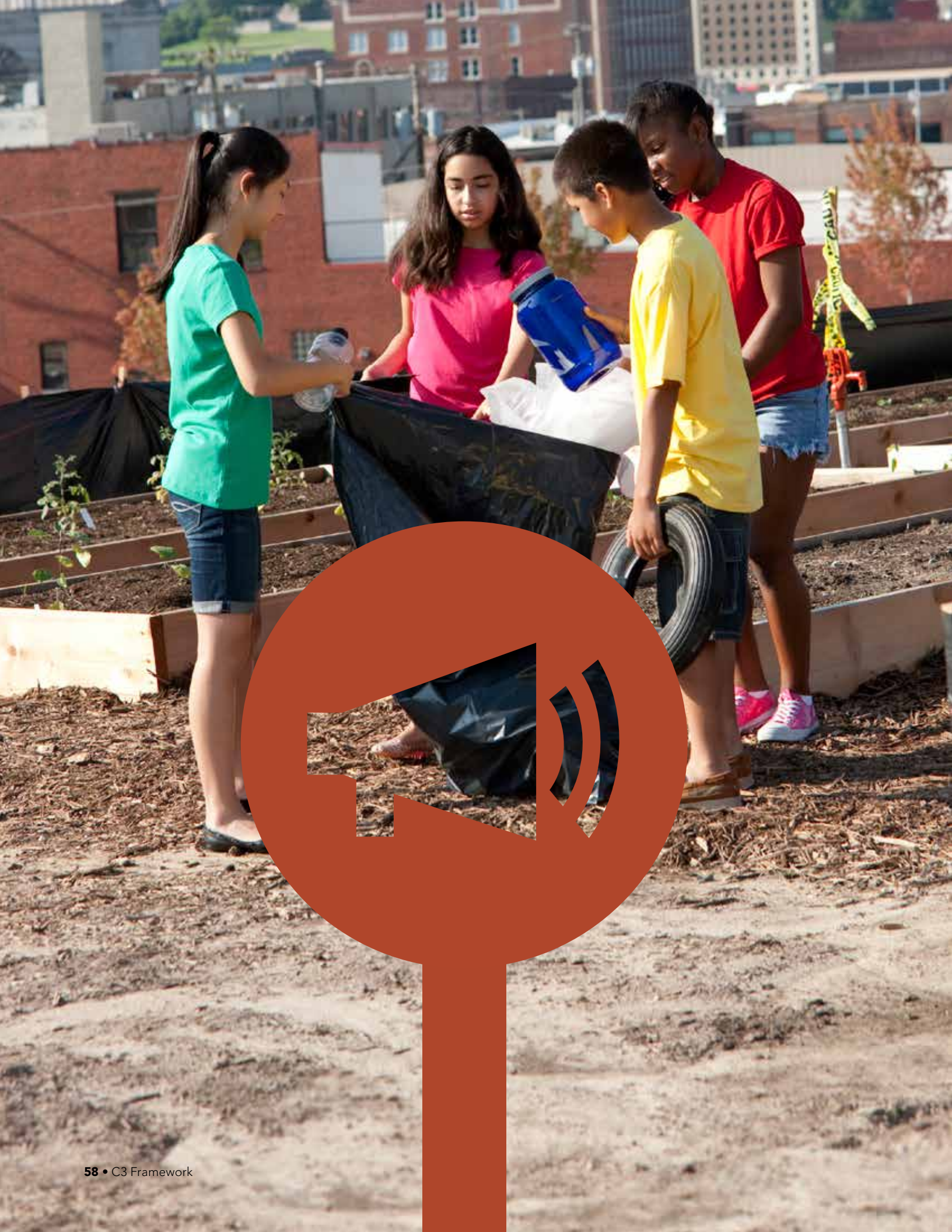
Shared Language. The ELA/Literacy Common Core Standards closely align with Indicators in Dimension 3. In places, the connections between the Common Core Standards and C3 Framework Indicators are so close that we used the same language. For example, the terms *argument, sources, evidence, claims, counterclaims*, and *gather* are used consistently in both the ELA/Literacy Common Core Standards and the C3 Framework.

It is important to note that the ELA/Literacy Common Core Standards emphasize the unique skill of argumentation in preparing students for college and career. The disciplines that make up the social studies, including the behavioral and social sciences, stress the importance of arguments, and in particular, the necessity of constructing them in ways that make use of sources and data as evidence. While in grades K–5, the ELA/Literacy Common Core Standards employ the term *opinion* to refer to a developing form of argument, the C3 Framework uses the term *argument* consistently throughout the K-12 grade bands.

The Common Core Standards use the terms *sources* and *gather* regularly with regard to locating, evaluating, making claims, and using evidence. In places, the ELA/Literacy Common Core Standards distinguish sources as print or digital, as visual, quantitative and/or textual sources, and as primary or secondary sources.

In social studies these distinctions are made manifest in spatial sources such as maps, quantitative information reflecting economic data and trends, and even physical sources such as historical artifacts. Dimension 3 explicitly references the distinction between primary and secondary sources, based on the intended use by students.

Lastly, it is important to note that Anchor Writing Standard 8 of the Common Core Standards calls attention to the issue of plagiarism and proper citation of sources—a key concern for the C3 Framework and for social studies teachers.



Dimension 4

Communicating **Conclusions &** Taking INFORMED ACTION

THE C3 FRAMEWORK PROVIDES GUIDANCE to states on framing social studies standards that ask students to develop questions, apply disciplinary knowledge and concepts, gather and evaluate sources, and then develop claims and use evidence to support those claims. In addition, state social studies standards should consider including expectations for students to collaborate with others as they communicate and critique their conclusions in public venues.

These venues may range from the school classroom to the larger public community. Collaborative efforts may range from teaming up to work on a group presentation with classmates to actual work on a local issue that could involve addressing real-world problems that students analyze through the methods and concepts informed by their work in the disciplines that constitute the social studies.

Most inquiries will culminate in a range of activities and assessments that support the goals of college and career readiness. They should also support the third feature of the C3 Framework: readiness for civic life. Civic engagement in the social studies may take many forms, from making independent and collaborative decisions within the classroom, to starting and leading student organizations within schools, to conducting community-based research and presenting findings to external stakeholders. The subsection on page 62 below, Taking Informed Action, provides students opportunities to adapt and apply their work in the disciplines that constitute the social studies in order to develop the skills and dispositions necessary for an active civic life. In this respect, civic engagement is both a means of learning and applying social studies knowledge.

Communicating and Critiquing Conclusions

Having worked independently and collaboratively through the development of questions, the application of disciplinary knowledge and concepts, and the gathering of sources and use of evidence and information, students formalize their arguments and explanations. Products such as essays, reports, and multimedia presentations offer students opportunities to represent their ideas in a variety of forms and communicate their conclusions to a range of audiences. Students' primary audiences will likely be their teachers and classmates, but even young children benefit from opportunities to share their conclusions with audiences outside their classroom doors.

Indicators of Dimension 4—Communicating Conclusions—are detailed in the suggested K-12 Pathway for College, Career, and Civic Readiness in Table 28.

TABLE 28: Suggested K-12 Pathway for College, Career, and Civic Readiness Dimension 4, Communicating Conclusions

BY THE END OF GRADE 2	BY THE END OF GRADE 5	BY THE END OF GRADE 8	BY THE END OF GRADE 12
INDIVIDUALLY AND WITH OTHERS, STUDENTS USE WRITING, VISUALIZING, AND SPEAKING TO…			
D4.1.K-2. Construct an argument with reasons.	**D4.1.3-5.** Construct arguments using claims and evidence from multiple sources.	**D4.1.6-8.** Construct arguments using claims and evidence from multiple sources, while acknowledging the strengths and limitations of the arguments.	**D4.1.9-12.** Construct arguments using precise and knowledgeable claims, with evidence from multiple sources, while acknowledging counterclaims and evidentiary weaknesses.
D4.2.K-2. Construct explanations using correct sequence and relevant information.	**D4.2.3-5.** Construct explanations using reasoning, correct sequence, examples, and details with relevant information and data.	**D4.2.6-8.** Construct explanations using reasoning, correct sequence, examples, and details with relevant information and data, while acknowledging the strengths and weaknesses of the explanations.	**D4.2.9-12.** Construct explanations using sound reasoning, correct sequence (linear or non-linear), examples, and details with significant and pertinent information and data, while acknowledging the strengths and weaknesses of the explanation given its purpose (e.g., cause and effect, chronological, procedural, technical).
D4.3.K-2. Present a summary of an argument using print, oral, and digital technologies.	**D4.3.3-5.** Present a summary of arguments and explanations to others outside the classroom using print and oral technologies (e.g., posters, essays, letters, debates, speeches, and reports) and digital technologies (e.g., Internet, social media, and digital documentary).	**D4.3.6-8.** Present adaptations of arguments and explanations on topics of interest to others to reach audiences and venues outside the classroom using print and oral technologies (e.g., posters, essays, letters, debates, speeches, reports, and maps) and digital technologies (e.g., Internet, social media, and digital documentary).	**D4.3.9-12.** Present adaptations of arguments and explanations that feature evocative ideas and perspectives on issues and topics to reach a range of audiences and venues outside the classroom using print and oral technologies (e.g., posters, essays, letters, debates, speeches, reports, and maps) and digital technologies (e.g., Internet, social media, and digital documentary).

The inquiry process, as described in the C3 Framework, should include regular opportunities for students to critique their work as well as the work of others. Critiquing conclusions requires an examination of sources, consideration of how evidence is being used to support claims, and an appraisal of the structure and form of arguments and explanations. The critiquing of arguments and explanations deepens students' understanding of concepts and tools in the disciplines, and helps students strengthen their conclusions. While the two indicators for critiquing conclusions appear in Dimension 4, students should begin the process of critiquing their emerging conclusions early in the inquiry process, and continue that process even after communicating conclusions.

Indicators of Dimension 4-Critiquing Conclusions are detailed in the suggested K-12 Pathway for College, Career, and Civic Readiness in Table 29.

TABLE 29: Suggested K-12 Pathway for College, Career, and Civic Readiness Dimension 4, Critiquing Conclusions

BY THE END OF GRADE 2	BY THE END OF GRADE 5	BY THE END OF GRADE 8	BY THE END OF GRADE 12
INDIVIDUALLY AND WITH OTHERS, STUDENTS…			
D4.4.K-2. Ask and answer questions about arguments.	**D4.4.3-5.** Critique arguments.	**D4.4.6-8.** Critique arguments for credibility.	**D4.4.9-12.** Critique the use of claims and evidence in arguments for credibility.
D4.5.K-2. Ask and answer questions about explanations.	**D4.5.3-5.** Critique explanations.	**D4.5.6-8.** Critique the structure of explanations.	**D4.5.9-12.** Critique the use of the reasoning, sequencing, and supporting details of explanations.

Taking Informed Action

Social studies is the ideal staging ground for taking informed action because of its unique role in preparing students for civic life. In social studies, students use disciplinary knowledge, skills, and perspectives to inquire about problems involved in public issues; deliberate with other people about how to define and address issues; take constructive, independent, and collaborative action; reflect on their actions; and create and sustain groups. It is important to note that taking informed action intentionally comes at the end of Dimension 4, as student action should be grounded in and informed by the inquiries initiated and sustained within and among the disciplines. In that way, action is then a purposeful, informed, and reflective experience.

Indicators of Dimension 4—Taking Informed Action—are detailed in the suggested K-12 Pathway for College, Career, and Civic Readiness in Table 30.

TABLE 30: Suggested K-12 Pathway for College, Career, and Civic Readiness Dimension 4, Taking Informed Action

BY THE END OF GRADE 2	BY THE END OF GRADE 5	BY THE END OF GRADE 8	BY THE END OF GRADE 12
INDIVIDUALLY AND WITH OTHERS, STUDENTS…			
D4.6.K-2. Identify and explain a range of local, regional, and global problems, and some ways in which people are trying to address these problems.	**D4.6.3-5.** Draw on disciplinary concepts to explain the challenges people have faced and opportunities they have created, in addressing local, regional, and global problems at various times and places.	**D4.6.6-8.** Draw on multiple disciplinary lenses to analyze how a specific problem can manifest itself at local, regional, and global levels over time, identifying its characteristics and causes, and the challenges and opportunities faced by those trying to address the problem.	**D4.6.9-12.** Use disciplinary and interdisciplinary lenses to understand the characteristics and causes of local, regional, and global problems; instances of such problems in multiple contexts; and challenges and opportunities faced by those trying to address these problems over time and place.
D4.7.K-2. Identify ways to take action to help address local, regional, and global problems.	**D4.7.3-5.** Explain different strategies and approaches students and others could take in working alone and together to address local, regional, and global problems, and predict possible results of their actions.	**D4.7.6-8.** Assess their individual and collective capacities to take action to address local, regional, and global problems, taking into account a range of possible levers of power, strategies, and potential outcomes.	**D4.7.9-12.** Assess options for individual and collective action to address local, regional, and global problems by engaging in self-reflection, strategy identification, and complex causal reasoning.
D4.8.K-2. Use listening, consensus-building, and voting procedures to decide on and take action in their classrooms.	**D4.8.3-5.** Use a range of deliberative and democratic procedures to make decisions about and act on civic problems in their classrooms and schools.	**D4.8.6-8.** Apply a range of deliberative and democratic procedures to make decisions and take action in their classrooms and schools, and in out-of-school civic contexts.	**D4.8.9-12.** Apply a range of deliberative and democratic strategies and procedures to make decisions and take action in their classrooms, schools, and out-of-school civic contexts.

ENGLISH LANGUAGE ARTS/LITERACY COMMON CORE CONNECTIONS: DIMENSION 4

The ELA/Literacy Common Core Standards emphasize products of learning and communication in a variety of ways. As noted in the introduction to the ELA/Literacy Common Core Standards, "the need to conduct research and to produce and consume media is embedded into every aspect of today's curriculum" (NGA and CCSSO, 2010a, p. 4). The production and presentation of knowledge is central to the design of the ELA/Literacy Common Core Standards. Production and Distribution of Writing is one of four categories in the Writing strand of the standards, and Presentation of Knowledge and Ideas is one of three categories in the Speaking and Listening strand. Through Communicating Conclusions and Taking Informed Action, Dimension 4 in the C3 Framework extends the notion of publishing the products of students' inquiry for disciplinary and civic purposes in social studies.

Table 31 details connections between Dimension 4 and the College and Career Readiness Anchor Standards in the ELA/Literacy Common Core Standards. These connections are further elaborated with examples.

Connections between the C3 Framework and the College and Career Readiness Anchor Standards. While the connections between the C3 Framework and the ELA/Literacy Common Core Standards are comprehensive and consistent, fifteen CCR Anchor Standards within the ELA/Literacy Common Core Standards have broader connections within Dimension 4.

Anchor Reading Standard 1 indicates the importance of employing evidence when communicating conclusions as well as forming a plan of action based on information and data. Both making decisions and presenting results stem from students being able to both identify and use "explicit" information found within texts, as well as draw and act upon "logical inferences" made from what they read (NGA and CCSSO, 2010a, p. 10). Reading Standard 1 also expects students to "cite specific textual evidence when writing or speaking to support conclusions drawn from the text" (NGA and CCSSO, 2010a, p. 10). The C3 Framework utilizes this focus on evidence by emphasizing that conclusions based on evidence should be framed and communicated using information gathered while students read. The Framework also views informed decision making and action stemming from those decisions as driven by data and information that flows from evidence that has been collected by students.

Anchor Writing Standards 1–8 describe skills students need to construct arguments, explanations, and narratives. Writing Standards 4–6 focus on the production and distribution of student writing. Standard 4 describes skills related to the production of "clear and coherent writing" that is "appropriate to task, purpose, and audience" (NGA and CCSSO, 2010a, p.

TABLE 31: Connections between Dimension 4 and the CCR Anchor Standards in the ELA/Literacy Common Core Standards

ELA/LITERACY CCR ANCHOR STANDARDS CONNECTIONS	Communicating Conclusions	Reading 1 Writing 1–8 Speaking and Listening 1–6
	Taking Informed Action	
SHARED LANGUAGE		Argument; Explanation; Sources; Evidence; Claims; Counterclaims; Visually/Visualize; Credibility.

18). Standard 5 explains the process writing skills that students should develop. Standard 6 establishes that students should use technology to publish and distribute their writing. Standard 7 focuses on "short as well as more sustained research projects based on focused questions" (NGA and CCSSO, 2010a, p. 18). Standard 8 calls on students to "gather relevant information," "assess the credibility and accuracy of each source," and "integrate the information" into the text while "avoiding plagiarism" (NGA and CCSSO, 2010a, p. 18). The C3 Framework builds on these anchor standards by setting forth expectations that students will construct disciplinary arguments and explanations for a variety of audiences both inside and outside of school, and then plan how to take informed action given the products of their inquiry.

Anchor Speaking and Listening Standards 1-6 require that students engage one another strategically using different forms of media in a variety of contexts in order to present their knowledge and ideas. For example:

- **Standard 1** requires that students prepare and participate in a "range of conversations and collaborations with diverse partners" (NGA and CCSSO, 2010a, p. 22).
- **Standard 2** focuses on student use of diverse types of media to enhance communication.
- **Standard 3** expects that students will evaluate speakers' points of view, reasoning, and use of evidence.
- **Standard 4** expects that students will present "information, findings, and supporting evidence," with consideration of "task, purpose, and audience" (NGA and CCSSO, 2010a, p. 22).
- **Standard 5** asks students to make strategic use of "media and visual displays" when presenting (NGA and CCSSO, 2010a, p. 22).
- **Standard 6** requires that students take into consideration the context of their engagement.

The C3 Framework incorporates these skills through the expectations of Dimension 4, Communicating Conclusions, that students will present the products of their inquiries as well as adaptations of these products using a variety of technologies. When preparing to take informed action, students engage with one another in a productive manner using the skills set forth in the Speaking and Listening Standards.

Shared Language. The ELA/Literacy Common Core Standards closely align with Indicators in Dimension 4. In places, the connections between Common Core Standards and C3 Framework Indicators are so close that the same language is used. Dimension 4 and the ELA/Literacy Common Core Standards regularly use terms such as *argument, explanation, sources, evidence, claims, counterclaims, visually/visualize*, and *credibility.*

The ELA/Literacy Common Core Standards use the terms *visual* and *visually* to refer to presentation formats. The terms are often used in contrast to quantitative formats and as modifiers for a type of data display. The C3 Framework uses the terms *writing, visualizing*, and *speaking* in describing expectations for students for all of the Indicators in Table 28, Communicating Conclusions, on page 60. The uses of *visual, visually*, and *visualizing* are similar in referring to ways of presenting information that would otherwise be limited or even impossible using words.

Within the Common Core Standards, important literacy conventions are defined (e.g., citations, spelling, plagiarism) with regard to the presentation of conclusions, and these literacy conventions are integral to social studies inquiry.

APPENDICES

Appendix **A**

C3 Framework Disciplinary Inquiry Matrix

THE HEART OF THE C3 FRAMEWORK lies in the Inquiry Arc and the four Dimensions that define it. But no inquiry is generic; each takes root in a compelling question that draws from one or more of the disciplines of civics, economics, geography, and history.

The C3 Framework Disciplinary Inquiry Matrix articulates how each of the four Dimensions of the C3 Framework builds upon one another through the use of a content-specific example: how bad was the recent Great Recession?

The Disciplinary Inquiry Matrix describes what experts think and do. It is a four-part target example to which students should aspire. The matrix develops through the construction of disciplinary compelling and supporting questions (Dimension 1); the data sources, key concepts, and key strategies specific to each discipline (Dimension 2); the development of evidence-based claims (Dimension 3); and the means of expression (Dimension 4). The examples in the boxes are illustrative rather than exhaustive.

C3 Framework Disciplinary Inquiry Matrix

WAYS OF KNOWING	**CIVICS/ GOVERNMENT** POLITICAL SCIENTISTS SAY…	**ECONOMICS** ECONOMISTS SAY…	**GEOGRAPHY** GEOGRAPHERS SAY…	**HISTORY** HISTORIANS SAY…
	DIMENSION 1			
POSSIBLE DISCIPLINARY COMPELLING AND SUPPORTING QUESTIONS	What have major political parties proposed to respond to the Great Recession? What disagreements have political parties had and why? How can government institutions and the private sector respond?	What were some of the economic causes of the Great Recession? What are the indicators of its severity and what do they show? What are the possible economic policy solutions? How can those solutions be evaluated?	How did the Great Recession affect areas of the United States differently? Did it cause population migrations? If so, from where to where and why? Are land and resource uses affected. If so, how?	How bad (and for whom) compared to what earlier event? What related economic, political, and social events preceded the Great Recession? What precedents in the past help us understand the Great Recession?

WAYS OF KNOWING	CIVICS/ GOVERNMENT POLITICAL SCIENTISTS SAY…	ECONOMICS ECONOMISTS SAY…	GEOGRAPHY GEOGRAPHERS SAY…	HISTORY HISTORIANS SAY…
DIMENSION 2				
DATA SOURCES NEEDED TO ADDRESS QUESTIONS	Government policies, policy pronouncements, political poll results, statistics, leadership efforts, political behavior; observations of local conditions, interviews; news reports	Statistics and lots of them in as real time as possible (labor, capital, credit, monetary flow, supply, demand)	Spatial and environmental data; statistics, map representations, GIS data to measure observable changes to the planet; indicators of territorial impact	Accounts from the recent recession and from hard economic times in the past, both firsthand and synthetic, as many as can be found (oral history, diaries, journals, newspapers, photos, economic data, artifacts, etc.)
KEY CONCEPTS AND CONCEPTUAL UNDERSTANDINGS NECESSARY TO ADDRESS QUESTIONS (non-exclusive examples)	Theories of political behavior, rationality, self-interest, political parties, power flow, government, fiscal policy; relationships between the state and markets; constitutional limits on government, debates about those limits; evidence (to make claims)	Application of different types of economic theories to gauge inflation/deflation, labor shrinkage, capital contraction, asset/liability analyses from banking sector, changes in supply and demand; evidence (to make claims)	Theories of human land/resource use; spatial representation, scale, degree of distortion, map symbols, specialized GIS symbolic systems and representations; evidence (to make claims)	Theories of human behavior, thought, perspective, agency, context, historical significance; historical imagination; moral judgment; evidence (to make claims)
KEY STRATEGIES AND SKILLS NEEDED TO ADDRESS QUESTIONS (non-exclusive examples)	Reading statistics from polls, conducting polls and interview research; reading subtext into policies/pronouncements; reading power flow and blockage, converting such data into evidence to make arguments and claims that answer sub-questions	Capability to read statistics critically, for assessing agendas behind statistical representations; conducting survey research; capability to convert statistics into meaningful arguments and claims that answer the sub-questions	Cartography including using map symbol systems, critical reading and thinking, capability of using statistics to represent spatial change, capability to use statistical and spatial (often digitized) representations to make arguments and claims that address sub-questions	Critical reading and thinking, analysis and synthesis, reading subtext and agency in older sources; statistics; converting verbal, written, photographic, oral, artifactual accounts into evidence to make arguments and claims that answer the sub-questions

WAYS OF KNOWING	**CIVICS/ GOVERNMENT** POLITICAL SCIENTISTS SAY…	**ECONOMICS** ECONOMISTS SAY…	**GEOGRAPHY** GEOGRAPHERS SAY…	**HISTORY** HISTORIANS SAY…
		DIMENSION 3		
EVIDENCE-BACKED CLAIMS	Statistical analyses and theories of political and institutional behavior and outcomes point toward substantiating and justifying claims; adequacy judged within the community of peers	Statistical analyses coupled with economic theories show the way toward substantiating and justifying claims; adequacy judged within the community of peers, i.e., other economic investigators	Narratives, statistical and spatial analyses, and representations point toward substantiating and justifying claims; community of peers evaluates adequacy of claims	Accounts of human behavior and thought coupled with evidence corroboration and preponderance point towards substantiating and justifying claims; adequacy judged within the community of peers
		DIMENSION 4		
FORMS OF COMMUNICATION AND ACTION (illustrative examples)	Books, television appearances, articles, op-ed pieces, policy statements, blogs; supporting a public assistance non-profit organization	Op-ed articles, journal pieces, television appearances, policy statements, blogs, webinars, policy advisory roles, public action	Spatial representations for newspapers, web-based articulations, digital and analog geographical services; community mapping; other citizen-science experiences	Books, monographs, articles, websites, webinars, television appearances, blogs

Appendix B

Psychology Companion Document for the C3 Framework

Prepared by
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Introduction to the Disciplinary Concepts and Skills of Psychology

As the scientific study of behavior and mental processes, psychology examines all aspects of the human experience. Many of society's challenging issues involve human behavior, such as environmental change and the problems of violence, bullying, prejudice, and discrimination. Psychology contributes to the understanding of these issues, and promotes improvement in health and wellbeing. Psychological literacy is a foundation for civic engagement and is necessary for citizens to make informed decisions about their daily lives.

Psychology incorporates a variety of tools and knowledge to further the understanding of behavior and mental processes. Scientific inquiry and research methods are at the center of the discipline. Psychology promotes the measurement and explication of behavior in a variety of levels of study, ranging from genetic and brain-based influences on behavior to cultural and social influences. Psychological knowledge enhances our understanding of human development, emotion and motivation, cognition, learning processes, perceptual systems and sociocultural interactions. Psychology prepares students to enter the workforce or college by promoting skills such as critical thinking, problem solving, and teamwork. Students benefit from learning and applying psychological perspectives on personal and contemporary issues and learn the rules of evidence and theoretical frameworks of the discipline. The *National Standards for High School Psychology Curricula* offers learning benchmarks for the high school psychology course (APA, 2011).[2]

Psychological Perspectives and Methods of Inquiry[3]

Psychological knowledge is based on scientific methodology, the systematic, empirically-based investigation of phenomena through observations and measurements. Psychologists use scientific methods to establish knowledge and explain phenomena, and employ a variety of methods to observe and measure behavior. Broad psychological perspectives describe ways in which psychologists classify their ideas, and are employed to understand behavior and mental processes.

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[1] The writing team was composed of the following individuals (in alphabetical order): Jeanne A. Blakeslee, St. Paul's School for Girls (MD); Emily Leary Chesnes, American Psychological Association; Amy C. Fineburg, Oak Mountain High School (AL); Robin J. Hailstorks, American Psychological Association; Kenneth D. Keith, University of San Diego; Debra E. Park, Rutgers University, Camden; and Hilary Rosenthal, Glenbrook South High School (IL).

[2] The references for citations in this Appendix are listed on the final page of the Appendix.

[3] Several of the indicators across all four anchor concepts come from the *Guidelines for Preparing High School Psychology Teachers: Course-Based and Standards-Based Approaches* (APA, 2012) and the *National Standards for High School Psychology Curricula* (APA, 2011).

Psychology offers a unique way of thinking and organizing knowledge and provides students with tools and concepts that can prepare them for college, career, and civic life. The indicators that follow align with Dimension 2 of the C3 Framework (Applying Disciplinary Concepts and Tools), provide a conceptual set of skills related to psychological knowledge, and serve as a frame for organizing curricular content in psychology.

College, Career, and Civic ready students:

- **D2.Psy.1.9-12.** Demonstrate a basic understanding of the scientific methods that are at the core of psychology.
- **D2.Psy.2.9-12.** Investigate human behavior from biological, cognitive, behavioral, and sociocultural perspectives.
- **D2.Psy.3.9-12.** Discuss theories, methodologies, and empirical findings necessary to plan, conduct, and especially interpret research results.
- **D2.Psy.4.9-12.** Adhere to and consider the impact of American Psychological Association and federal guidelines for the ethical treatment of human and nonhuman research participants.
- **D2.Psy.5.9-12.** Explain how the validity and reliability of observations and measurements relate to data analysis.
- **D2.Psy.6.9-12.** Collect and analyze data designed to answer a psychological question using basic descriptive and inferential statistics.
- **D2.Psy.7.9-12.** Explore multicultural and global perspectives that recognize how diversity is important to explaining human behavior.

Influences on Thought and Behavior

There is no simple answer to the question, "What determines or constrains human behavior?" Psychologists have long considered the extent to which human behavior is malleable and the degree to which it varies between people and populations. Psychologists examine genetic predispositions to behavioral patterns, but human behavior is also influenced by the environment. Research has shown that biological, psychological, and sociocultural factors play important roles in shaping the way we see and react to the world around us.

College, Career, and Civic ready students:

- **D2.Psy.8.9-12.** Explain the complexities of human thought and behavior, as well as the factors related to the individual differences among people.
- **D2.Psy.9.9-12.** Describe biological, psychological, and sociocultural factors that influence individuals' cognition, perception, and behavior.
- **D2.Psy.10.9-12.** Explain the interaction of biology and experience (i.e., nature and nurture) and its influence on behavior.
- **D2.Psy.11.9-12.** Identify the role psychological science can play in helping us understand differences in individual cognitive and physical abilities.
- **D2.Psy.12.9-12.** Explain how social, cultural, gender, and economic factors influence behavior and human interactions in societies around the world.

Critical Thinking: Themes, Sources, and Evidence

Psychological inquiry is based on a variety of sources and materials that students can read and analyze. The study of psychology brings together common themes that include ethics, diversity, scientific attitudes, and skills (e.g., critical thinking, problem solving). Informed by these themes and supported by sources, students can make evidence-based conclusions which in turn can lead to further questions and answers.

College, Career, and Civic ready students:

- **D2.Psy.13.9-12.** Explain common themes across the field of psychological science, including ethical issues, diversity, developmental issues, and concerns about health and wellbeing.
- **D2.Psy.14.9-12.** Use information from different psychological sources to generate research questions.

- **D2.Psy.15.9-12.** Use existing evidence and formulate conclusions about psychological phenomena.
- **D2.Psy.16.9-12.** Use critical thinking skills to become better consumers of psychological knowledge.
- **D2.Psy.17.9-12.** Acknowledge the interconnectedness of knowledge in the discipline of psychology.

Applications of Psychological Knowledge

Psychological knowledge can be useful in addressing a wide array of issues, from individual to global levels. In order to understand behavior and mental processes, students should apply psychological knowledge to the world around them. Psychological knowledge directly relates to everyday and civic life, and its application can benefit society and improve people's lives.

College, Career, and Civic ready students:

- **D2.Psy.18.9-12.** Apply psychological knowledge to their daily lives.
- **D2.Psy.19.9-12.** Apply the major theoretical approaches in psychology to educational, emotional, political, ethical, motivational, organizational, personal, and social issues.
- **D2.Psy.20.9-12.** Suggest psychologically based ethical solutions to actual problems including, but not limited to, those encountered in education, business and industry, and the environment.
- **D2.Psy.21.9-12.** Discuss ways in which the applications of psychological science can address domestic and global issues.
- **D2.Psy.22.9-12.** Use psychological knowledge to promote healthy lifestyle choices.
- **D2.Psy.23.9-12.** Apply psychological knowledge to civic engagement.

Brief Overview of Connections between Psychology and the English Language Arts/Literacy Common Core Standards

Connections with the College and Career Readiness (CCR) Anchor Standards. Students in psychology develop and use a wide range of skills endorsed through the Common Core Anchor Standards. Students in psychology must develop questions and plan inquiries as they learn about and apply the various psychological theories and findings. Students should be able to propose, plan, and conduct simple research projects and/or read, discuss, and critique research findings in ways that apply their acquired content knowledge and hone the skills discussed in the Anchor Standards in Reading, Writing, Speaking and Listening, and Language. Students who complete such projects or assignments successfully demonstrate mastery of the skills in each dimension, thus fulfilling the goals for college and career readiness.

More detailed curricular recommendations are found in the *National Standards for High School Psychology Curricula* (APA, 2011). Although psychological science can be found in science and social studies lessons for students in grades K-8, the first formal introduction to psychological science often occurs during grades 9-12. Learning the theories, methodologies, and practices of psychological science provides students with knowledge and skills they need to think critically about research, address issues using the scientific method, and understand relationships among variables in given circumstances.

C3 Framework Disciplinary Inquiry Matrix: Psychology

In Appendix A, the Disciplinary Inquiry Matrix articulates how each of the four Dimensions of the C3 Framework build upon one another through the use of a content-specific example: *How bad was the Great Recession?* The Disciplinary Inquiry Matrix describes what *experts* think and do. It is a four-part target example to which *students* should aspire. The matrix develops through the construction of disciplinary compelling and supporting questions (Dimension 1); the data sources, key concepts, and key strategies specific to each discipline (Dimension 2); the development of evidence-based claims (Dimension 3); and the means of expression (Dimension 4). In the table on page 72, the Great Recession is examined through the disciplinary lens of psychology. The examples in the boxes are illustrative rather than exhaustive.

WAYS OF KNOWING	**PSYCHOLOGY** PSYCHOLOGISTS SAY…
DIMENSION 1	
POSSIBLE DISCIPLINARY COMPELLING AND SUPPORTING QUESTIONS	How did citizens behave during the recession? Did stress levels increase, decrease or stay the same? Was there adequate mental health support available? How does an individual's social status affect his or her perception of the effects a recession has on family, work and other societal institutions? Do individuals have prejudices that affect their perception of "who or what is to blame" for economic crises? How do attributions of responsibility develop and affect people's behaviors during a recession?
DIMENSION 2	
DATA SOURCES NEEDED TO ADDRESS QUESTIONS	Statistics on rates of anxiety, stress, and depression; the number of individuals seeking mental health counseling. Surveys, focus groups, reports, and interviews on how different populations and/or ethnic groups were affected by unemployment, and how the economic climate affected older adults. Experiments testing the effectiveness of treatments for mental illness or causes of other psychological phenomena.
KEY CONCEPTS AND CONCEPTUAL UNDERSTANDINGS NECESSARY TO ADDRESS QUESTIONS (non-exclusive questions)	Biological, cognitive, and psychological mechanisms of behavior and mental processes; theories of social learning and social cognition; theories of stress management and health promotion; theories of personality, motivation, emotion, and learning; theories of life span development; evidence (to make claims).
KEY STRATEGIES AND SKILLS NEEDED TO ADDRESS QUESTIONS (non-exclusive examples)	Ability to read and interpret statistics critically, including the ability to interpret qualitative and quantitative data; ability to use data to find causal and correlational connections between and among variables; critical thinking. Ability to apply psychological knowledge to issues faced by local communities and encourage civic engagement.
DIMENSION 3	
EVIDENCE-BASED CLAIMS	Statistical analyses and theories of human behavior point toward justifying claims; these should be judged within the community of peers.
DIMENSION 4	
FORMS OF COMMUNICATION AND ACTION (ILLUSTRATIVE EXAMPLES)	Books and journal articles, newspapers and television, websites, webinars, press releases, professional presentations.

REFERENCES

American Psychological Association. (2011). *National standards for high school psychology curricula*. Retrieved from http://www.apa.org/education/k12/national-standards.aspx

American Psychological Association. (2012). *Guidelines for preparing high school psychology teachers: Course-based and standards-based approaches*. Retrieved from http://www.apa.org/education/k12/teaching-guidelines.aspx

Appendix C

Sociology Companion Document for the C3 Framework

Prepared by
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Introduction to Disciplinary Concepts and Skills in Sociology

Sociology is the study of social life, social change, and the social causes and consequences of human behavior. Sociologists investigate the structure of groups, organizations, and societies and how people interact within these contexts. Since all human behavior is social, the subject matter of sociology ranges from the intimate family to the hostile mob; from organized crime to religious traditions; and from the divisions of race, gender, and social class to the shared beliefs of a common culture.[2]

Sociology is a science that uses research methods to investigate the social world. The scientific process ensures that the knowledge produced is more representative, objective, trustworthy, and useful for explaining social phenomena than personal opinions or individual experiences. Social phenomena are constructed through human interaction. Thus, sociological inquiry must examine what meanings people give to the behaviors, objects, and interactions that are present in each culture and society. It utilizes the scientific method, is based on critical thinking, and requires students to examine how they are influenced by their social positions. In this way, students learn how to effectively participate in a diverse and multicultural society, and develop a sense of personal and social responsibility.

This Appendix outlines four fundamental disciplinary learning goals for College, Career, and Civic ready students in sociology. These goals highlight key areas for student learning and instructional focus in K-12 sociology units and courses. Each of the four learning goals is accompanied by a set of assessable competencies. These learning goals align with Dimension 2 of the C3 Framework (Applying Disciplinary Concepts and Tools).

The Sociological Perspective and Methods of Inquiry

Sociology provides a unique perspective by focusing on the groups to which individuals belong rather than only on the individual. It deeply considers how social contexts influence both individuals and groups. In this way, it helps students to see the world through others' eyes, to increase their understanding of group dynamics, and to develop tolerance of differences. Sociology uses objective and data-driven scientific methods to study

[1] The writing team was composed of the following individuals (in alphabetical order): Jeanne H. Ballantine, Wright State University; Hayley L. Lotspeich, Wheaton North High School (IL); Chris Salituro, Stevenson High School (IL); Jean H. Shin, American Sociological Association; Margaret Weigers Vitullo, American Sociological Association; Lissa Yogan, Valparaiso University.

[2] See American Sociological Association (ASA), *21st Century Careers with an Undergraduate Degree in Sociology* (Washington DC: ASA, 2009).

social interactions at multiple levels, from families and peer-groups to nations and global organizations.

College, Career, and Civic ready students:

- **D2.Soc.1.9-12.** Explain the sociological perspective and how it differs from other social sciences.
- **D2.Soc.2.9-12.** Define social context in terms of the external forces that shape human behavior.
- **D2.Soc.3.9-12.** Identify how social context influences individuals.
- **D2.Soc.4.9-12.** Illustrate how sociological analysis can provide useful data-based information for decision making.
- **D2.Soc.5.9-12.** Give examples of the strengths and weaknesses of four main methods of sociological research: surveys, experiments, observations, and content analysis.

Social Structure: Culture, Institutions, and Society

Sociology studies the social structure and culture of societies in order to understand how social patterns are created and maintained over time; examples of these might include persistent violence or long-standing disparities in school achievement. Important components of social structures are institutions such as the economy, government and politics, the educational system, the family, religion, and the health care system. Culture includes the language, norms, values, and material goods of a society. Social structure and culture work in tandem to shape societies, but are not completely rigid. All individuals are impacted by social change, which refers to the transformation of culture, social institutions, and social structure over time.

College, Career, and Civic ready students:

- **D2.Soc.6.9-12.** Identify the major components of culture.
- **D2.Soc.7.9-12.** Cite examples of how culture influences the individuals in it.
- **D2.Soc.8.9-12.** Identify important social institutions in society.
- **D2.Soc.9.9-12.** Explain the role of social institutions in society.
- **D2.Soc.10.9-12.** Analyze how social structures and cultures change.

Social Relationships: Self, Groups, and Socialization

A fundamental insight of sociology is that individual and group identity is socially constructed through relationships with significant individuals, groups, and society as a whole. Socialization is a life-long process of learning how to function in society. Important socializing agents include family, peers, the media, schools, and religion. Major social and historical events can be a force in socializing entire generational groups. Groups form when individuals share common interests and/or goals, and often become a point of comparison for individuals as they evaluate themselves and others.

College, Career, and Civic ready students:

- **D2.Soc.11.9-12.** Analyze the influence of the primary agents of socialization and why they are influential.
- **D2.Soc.12.9-12.** Explain the social construction of self and groups.
- **D2.Soc.13.9-12.** Identify characteristics of groups, as well as the effects groups have on individuals and society, and the effects of individuals and societies on groups.
- **D2.Soc.14.9-12.** Explain how in-group and out-group membership influences the life chances of individuals and shapes societal norms and values.

Stratification and Inequality

Sociology helps students to understand their own and others' social problems. Group memberships and identities provide or deny certain opportunities and power. They also create and reinforce social stratification. This can result in conflict between groups for scarce or valued resources, and in diminished access for some in

society as others control these resources. Disadvantaged groups experience social problems such as poverty, unemployment, poor education, lack of access to health care, and inequality in obtaining rights and privileges.

College, Career, and Civic ready students:

- **D2.Soc.15.9-12.** Identify common patterns of social inequality.
- **D2.Soc.16.9-12.** Interpret the effects of inequality on groups and individuals.
- **D2.Soc.17.9-12.** Analyze why the distribution of power and inequalities can result in conflict.
- **D2.Soc.18.9-12.** Propose and evaluate alternative responses to inequality.

Brief Overview of Connections between Sociology and the English Language Arts/Literacy Common Core Standards

Connections with the College and Career Readiness (CCR) Anchor Standards. Students in sociology develop and use skills that are central to the Common Core College and Career Readiness Anchor Standards. Learning the theories, methodologies, and practices of sociology provides students with the knowledge and skills they need to think critically about the world they live in, themselves, and how they are influenced by their social positions. By studying sociology, students learn how to effectively participate in a diverse and multi-cultural society, and develop a sense of personal and social responsibility. Students in sociology integrate and evaluate multiple sources of information presented in diverse formats and media in order to address questions or solve complex problems. They are required to integrate data and information from diverse sources, both primary and secondary, in order to form a coherent and empirically- based understanding of an idea or social event, noting discrepancies among sources. Students learn how to propose, plan, and conduct simple research and action projects as well as read, discuss, and critique research findings in ways that apply their acquired content knowledge and hone the skills discussed in the Anchor Standards in Reading, Writing, Speaking and Listening, and Language.

More detailed curricular recommendations for sociology can be found on the website of the American Sociological Association (www.asanet.org/highschool). Although concepts from sociology are frequently seen in science and social studies lessons for students in grades K-8, more commonly the first formal introduction to sociology occurs in grades 9-12. Learning the theories, methodologies, and practices of sociology provides students with the knowledge and skills they need to think critically about sources of evidence, address issues using a systematic Arc of Inquiry based on the scientific method, and understand relationships among variables in complex social contexts. In this way, sociology supports students' successful entry into the world of work or post-secondary education.

C3 Framework Disciplinary Inquiry Matrix: Sociology

In Appendix A, the Disciplinary Inquiry Matrix articulates how each of the four Dimensions of the C3 Framework build upon one another through the use of a content-specific example: *How bad was the Great Recession?* The Disciplinary Inquiry Matrix describes what experts think and do. It is a four-part target example to which students should aspire. The matrix develops through the construction of disciplinary compelling and supporting questions (Dimension 1); the data sources, key concepts, and key strategies specific to each discipline (Dimension 2); the development of evidence-based claims (Dimension 3); and the means of expression (Dimension 4). In the table on page 76, the Great Recession is examined through the disciplinary lens of sociology. The examples in the boxes are illustrative rather than exhaustive.

WAYS OF KNOWING	**SOCIOLOGY** SOCIOLOGISTS SAY…
	DIMENSION 1
POSSIBLE DISCIPLINARY COMPELLING AND SUPPORTING QUESTIONS	What were the social consequences of the Great Recession, and in particular, how was the impact of the crisis differentially experienced by individuals, families and groups with different characteristics? What impact has it had on the social cohesion and collective behavior of communities? What were the possible policy responses to the crisis? Would they be effective across diverse communities?
	DIMENSION 2
DATA SOURCES NEEDED TO ADDRESS QUESTIONS	Statistics on employment, housing, government programs, health, demographics, markers of disruption of social cohesion such as crime and divorce, and other organizational impacts. Interviews with individuals about their experiences with unemployment, education, family dynamics, and personal well-being. Observations of individuals and groups in handling financially-related outcomes. Content analysis of published descriptions of the crisis and reactions to it.
KEY CONCEPTS AND CONCEPTUAL UNDERSTANDINGS NEEDED TO ADDRESS QUESTIONS (non-exclusive questions)	Theories (e.g., symbolic interactionism, functionalism, conflict theory) of social structure and contexts including the interplay between institutions and culture; of social relationships and the connection between individuals and the groups to which they belong; and of social stratification and inequality and the reinforcement of current and new inequalities in outcomes. Understanding patterns of reaction to the crisis based on different resources, opportunities, and power statuses.
KEY STRATEGIES AND SKILLS NEEDED TO ADDRESS QUESTIONS (non-exclusive examples)	Reading and interpreting statistics and graphical representations such as tables, charts, figures, and political cartoons. Conducting survey research as well as research via experimental, observational, and content analysis methods. Seeing the social world through the perspective of others and understanding why the crisis impacts people differently.
	DIMENSION 3
EVIDENCE-BASED CLAIMS	Statistical and narrative analyses, as well as interpretations based on theories of social structure, social relationships, and social stratification and inequality. These analyses and other methods of inquiry point toward substantiating and justifying claims; these should be judged within the community of peers including sociologists as well as other social scientists.
	DIMENSION 4
FORMS OF COMMUNICATION AND ACTION (illustrative examples)	Books and scholarly articles; television and radio appearances; op-ed pieces and blog entries; policy statements and research briefs; webinars; presentations at professional conferences and meetings; evaluations and reports; websites and anthologies.

Appendix D

Anthropology Companion Document for the C3 Framework

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Introduction to the Disciplinary Concepts and Skills of Anthropology

Anthropology is the study of human beings, past and present, in societies around the world. To understand the full sweep and complexity of cultures across all of human history, anthropology draws and builds upon knowledge from the social, natural, and physical sciences as well as the humanities. Anthropology is a comparative discipline; it assumes basic human continuities over time and place, but also recognizes that every society is the product of its own particular history, and that within every society one finds variation as well as commonalities. Anthropologists are centrally concerned with applying their research findings to the solution of human problems.

Anthropology includes four subfields. *Physical anthropologists* study human biological origins, evolution and variation, how humans adapt to diverse environments, primatology, and how biological and cultural processes work together to shape growth, development, and behavior. *Archaeologists* study past peoples and cultures, from the deepest prehistory to the recent past. *Sociocultural anthropologists* observe social patterns and practices across cultures, with a special interest in how people live in particular places and how they organize, govern, and create meaning. *Linguistic anthropology* is the comparative study of language systems and the ways in which language reflects and influences social life. Each of the subfields teaches distinctive skills. However, the subfields also have a number of similarities. For example, each subfield applies theories, employs systematic research methodologies, formulates and tests hypotheses, and develops extensive sets of data.

Concept 1. What It Means to be Human: Unity and Diversity

Anthropologists study what people have in common, and also how we differ with respect to physical and sociocultural characteristics. Importantly, they examine human physical variability and also the social reality of racial categorization and racism. Variable *physical* features like skin color and blood type *do not* cluster into clear-cut biologically defined *races*. At the same time, categorization into *socially* defined races is a real phenomenon with real consequences in societies like the United States. Race then is socially "real" even if biologically it has no grounding.

[1] This Appendix was prepared by the Ad Hoc K-12 Anthropology C3 Guidelines Committee of the American Anthropological Association (AAA), in consultation with the AAA Education Task Force. Kathryn Anderson-Levitt, Courtney Dowdall, Catherine Emihovich, Edmund T. Hamann, David Homa, Edward Liebow, Teresa McCarty, and Marjorie Faulstich Orellana participated in its preparation. The Appendix was commissioned by the American Anthropological Association (AAA) but has not been endorsed by the AAA or its members.

Anthropologists emphasize the importance of *culture*—patterns and processes of meaning expressed through language and other symbols. Anthropologists study all kinds of human groups, from small villages to transnational corporations, from large U.S. cities to remote Arctic and desert groups; even schools and classrooms can be subjects of anthropological inquiry. Anthropologists examine how societies change; how a society's beliefs, institutions, and ways of making a living are related to one another; and how individuals are shaped by their cultures and also agents of their own lives. A central anthropological insight is the notion of cultural *relativism*—that no cultural group is inherently "superior" or "inferior" to any other, and that all human behaviors are understandable in their cultural context even if humans may ultimately aspire to certain universal standards.

College, Career, and Civic ready students:

- Understand patterns of human physical variability and the evidence for arguing that humans cannot be sorted into distinct biological races.
- Develop through comparison awareness of human unity and cultural diversity, and of the connections among peoples from around the world.
- Understand the reasons for and development of human and societal endeavors, such as small-scale societies and civilizations, across time and place.
- Use anthropological concepts and practice to reflect on representations of "otherness" and consider critically students' own cultural assumptions.
- Apply anthropological concepts and theories to the study of contemporary social change, conflict, and other important local, national, and international problems.

Concept 2. Methods and Ethics of Inquiry

Anthropologists take a *scientific* approach to collecting empirical information, seeking to be systematic, transparent, and trustworthy in conducting and reporting research. For example, archaeologists study past peoples and cultures through the analysis of carefully excavated material remains, while physical anthropologists analyze evidence ranging from fossils to the DNA of living people. Sociocultural and linguistic anthropologists often rely on direct participation in and observation of a group's daily life, interpreting meanings constructed by people in the group and sometimes collaborating with them as active participants in the research. When analyzing their findings, anthropologists often seek to understand particular local situations in the context of larger social forces, and in great depth. At the same time, *comparison* across places and times is a hallmark of anthropological study.

Because the study of people, past and present, requires respect for the diversity of individuals, cultures, societies, and knowledge systems, anthropologists are expected to adhere to a strong code of professional ethics. In addition, an *engaged* anthropology is committed to supporting social change efforts that arise from the interaction between community goals and anthropological research.

College, Career, and Civic ready students:

- Identify and critically assess the opportunities to use anthropological knowledge in a variety of work settings and in everyday experience, as well as issues of description and representation in anthropology.
- Develop an understanding of the methods by which anthropologists collect data on cultural patterns and processes, and of ways of interpreting and presenting these data in writing and other media.
- Identify and critically assess ethical issues that arise in the practice of anthropological research, including issues of informed consent.
- Under the guidance of teachers, design, undertake, and report on personal research on an anthropological topic of interest, such as a limited ethnographic study of a local culture or a visit to an archaeological site.

Concept 3. Becoming a Person: Processes, Practices, and Consequences

Anthropologists examine what it means to be human by observing and recording the processes, practices, and consequences involved in becoming a person.

They explore what it means to be a person in different cultural contexts and the dynamic nature of *identities* on an individual level; on a larger scale, they explore the nature of boundaries between human groups. They ask, for example, what it means to be a full-fledged adult in different societies and through what rites of passage or other processes people become adults. They ask how people use symbols or other tools to draw boundaries based upon language, religion, gender, ethnicity, nationality, territory, or history, and they ask about the consequences of boundaries within and between societies, including *exclusion and differences of power or status*, racism and ethnic conflict, class conflict, and religious conflict. Throughout such discussions, they consider the relative importance of individual autonomy versus structural forces.

College, Career, and Civic ready students:

- Understand the variety of gendered, racialized, or other identities individuals take on over the life course, and identify the social and cultural processes through which those identities are constructed.

- Apply anthropological concepts of boundaries to the analysis of current ethnic, racial, or religious conflicts in the world—or in a local setting.

Concept 4. Global and Local: Societies, Environments, and Globalization

Because anthropology examines human experience around the world, it is attuned to global connections as well as local perspectives. Anthropologists examine the extent of globalization and its causes and consequences. For example, they study the movement of people, ideas and objects, and the causes and consequences of such movement, from the first human migration "out of Africa" to current diasporas. They consider the degree to which the global affects the local and vice versa, including debates about cultural homogenization and standardization. They bring together the global and local to consider perspectives on important world issues, including environmental conflict, global warming, wars, and nationalism. They consider human rights and the global justice movement and issues of cultural relativism, such as whether human rights should supersede local cultural rights.

College, Career, and Civic ready students:

- Understand and appreciate cultural and social difference, and how human diversity is produced and shaped by local, national, regional, and global patterns.

- Understand how one's local actions can have global consequences, and how global patterns and processes can affect seemingly unrelated local actions.

- Become critically aware of ethnocentrism, its manifestations, and consequences in a world that is progressively interconnected.

- Apply anthropological concepts to current global issues such as migrations across national borders or environmental degradation.

Connections to the College and Career Readiness (CCR) Anchor Standards. Students in anthropology develop and use skills that are included throughout the Common Core Anchor Standards in Reading, Writing, Speaking and Listening, and Language. As students learn to describe current and past cultures and societies, they use vocabulary that is new or employed in a new way. These descriptions often require students to compare the point of view of a local inhabitant with their own perspective, which may be quite different, or with the perspective of a Western visitor or colonizer. Anthropology students formulate and test hypotheses by conducting small-scale ethnographic studies and related observational research in biological anthropology, linguistic anthropology, and archaeology. Students learn to write ethnographic field notes modeled on those of professional anthropologists, which is excellent practice for writing routinely on a daily or weekly basis. These field notes require disciplining the memory while learning to distinguish between description and interpretation.

More detailed curricular recommendations are found on the AAA website (http://www.aaanet.org); see especially the section "For Teachers" and the Teaching Materials Exchange (additional resources are listed on page 80). Anthropological concepts and ideas are important for social studies students in all grades, but the first formal introduction to anthropology typically

occurs during grades 9-12. In these grades, students will regularly use Common Core ELA/Literacy skills as they understand and apply anthropological concepts, theories, and methods. Students who successfully develop their inquiry skills in anthropology classes will fulfill goals of the Common Core Standards for College and Career readiness.

C3 Framework Disciplinary Inquiry Matrix: Anthropology

In Appendix A, the C3 Framework Disciplinary Inquiry Matrix articulates how each of the four Dimensions of the C3 Framework build upon one another through the use of a content-specific example: How bad was the recent Great Recession? The Disciplinary Inquiry Matrix describes what experts think and do. It is a four-part target example to which students should aspire. The matrix develops through the construction of disciplinary supporting questions (Dimension 1); the data sources, key concepts, and key strategies specific to each discipline (Dimension 2); the development of evidence-based claims (Dimension 3); and the means of expression (Dimension 4). In the table on page 81, the Great Recession is examined through the disciplinary lens of anthropology.

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WAYS OF KNOWING	**ANTHROPOLOGY** ANTHROPOLOGISTS SAY…
	DIMENSION 1
POSSIBLE DISCIPLINARY COMPELLING AND SUPPORTING QUESTIONS	How have different groups of people in the United States experienced the recession? Remembering anthropology's commitment to holism, is the nation the most helpful scale at which to study the Great Recession? What happens if we study it at the level of a region (e.g., the Southwest, the Rust Belt)? A metropolitan area (e.g., Orlando)? A neighborhood (e.g., Hyde Park in Chicago)? Something smaller, like a mobile home court or school attendance area? How can studies at one scale be useful for understanding what is happening at another? Is the "Great Recession" an event unique to the United States? How do groups of people outside the U.S. name what is happening and explain it? In the U.S. and elsewhere, has it made individuals and families more mobile? Less mobile? More attached to "home"? More displaceable?
	DIMENSION 2
DATA SOURCES NEEDED TO ADDRESS QUESTIONS	Open-ended interviews with individuals about their experiences with unemployment, education, family dynamics, and personal well-being. Observations over time of individuals and groups handling financially-related and status-related outcomes. Content analysis of published descriptions of the crisis and interpretations of it. Statistics on employment, housing, government programs, health, demographics in the U.S. and elsewhere.
KEY CONCEPTS AND CONCEPTUAL UNDERSTANDINGS NECESSARY TO ADDRESS QUESTIONS (non-exclusive questions)	Informal as well as formal economy at the level of families, households, neighborhoods. Transnational flows of remittances. Social construction of status as it varies by ethnicity, class, gender, location in the global economy. Nutrition levels and their biological effects.
KEY STRATEGIES AND SKILLS NEEDED TO ADDRESS QUESTIONS (non-exclusive examples)	In-depth, open-ended interviews, and fieldwork on everyday behavior. Case studies of neighborhoods, social service institutions, workplaces. Content analysis of news reports, academic studies, and everyday conversations. Comparison of qualitative and quantitative information across neighborhoods, regions, and countries.
	DIMENSION 3
EVIDENCE-BASED CLAIMS	Ethnographic and narrative analyses, seeking "emic" (insider) understandings and cultural meanings of the event. These analyses and other methods of inquiry point toward substantiating and justifying claims that are judged within the community of peers, including anthropologists as well as other social scientists.
	DIMENSION 4
FORMS OF COMMUNICATION AND ACTION (illustrative examples)	Books and scholarly articles; television and radio appearances; op-ed pieces and blog entries; policy statements and research briefs; webinars; documentaries; presentations at professional conferences and meetings; evaluations and reports; websites and anthologies.

Appendix **E**

Scholarly Rationale for the C3 Framework

IN THE C3 FRAMEWORK, the call for students to become more prepared for the challenges of college and career (Bellanca and Brandt, 2010; Di Giacomo, Linn, Monthey, Pack, and Wyatt, 2013; Partnership for 21st Century Schools, 2011)[1] is united with a third element: preparation for civic life. Advocates of citizenship education cross the political spectrum, but they are bound by a common belief that our democratic republic will not sustain unless students are aware of their changing cultural and physical environments; know the past; read, write, and think deeply; and act in ways that promote the common good. There will always be differing perspectives on these objectives. The goal of knowledgeable, thinking, and active citizens, however, is universal.

The need for strong preparation in social studies is as apparent today as it has been in the past. In their *Framework for 21st Century Learning* (2011), the Partnership for 21st Century Skills identified government and civics, economics, geography, and history among the nine core subjects. Moreover, civic literacy, global awareness, and financial, economic, business, and entrepreneurial literacy are identified among the 21st century interdisciplinary themes. Finally, several of the key life and career skills listed fall firmly if not exclusively in the social studies: students must be able to work independently, be self-directed learners, interact effectively with others, and work effectively in diverse teams. The push for college and career readiness, so evident in the Common Core State Standards, is important, but as the Framework for 21st Century Learning makes clear, equally important is the need to help students ready themselves for their roles as citizens.

The rationale for social studies as one of the core school subjects is compelling. Unfortunately, that rationale has not always translated into the kinds of coherent and ambitious teaching and learning that enable students to achieve the promise of calls like the *Framework for 21st Century Learning.*

The C3 Framework and its Inquiry Arc mark a significant departure from past attempts to develop a robust social studies program. Some of the most compelling reasons for this departure are the remarkably flat scores on the National Assessment of Educational Progress (NAEP) in Civics/Government, Economics, Geography, and U.S. History (search "The Nation's Report Card" by these subjects to study the results). As the gold standard of national assessment, the NAEP results have

[1] The references in this Appendix are to works cited in the References section that follows.

been telling us for close to 20 years that our efforts to improve learning in key social studies subjects have not resulted in increased student achievement. Far too many 12th graders leave school with below-basic understandings.

A second reason why the C3 Framework represents a profound change is rooted in the research on teaching and learning in social studies that has drawn a remarkably consistent picture of what typically happens in schools. Too many social studies teachers—driven by content coverage demands, growing accountability requirements, and an all-too-crowded school day—spend much of their time talking at students (e.g., Brophy and Alleman, 2008; Cuban, 1991). Instead of building understandings in a robust learning environment, students too often spend their time simply trying to keep track of all the ideas flowing at them from their teachers and their textbooks.

This research, like the findings from the NAEP assessments, paints a remarkably consistent portrait of the consequences of such efforts: students learn too little. They develop precious few deep understandings of what they are called upon to learn in social studies.

We also know from other research that what students do retain from their studies is often wildly distorted and riddled with all manner of naïve conceptions about the past and the way the sociocultural world works (e.g., Frisch, 1989; Wineburg, Mosberg, Porat, and Duncan, 2007). They are also alienated by the social studies experience they receive in school, which is particularly the case among students of color (e.g., Epstein, 2009). Students are asked to be good consumers of other people's knowledge and ideas, but they rarely get a chance to build their own deeper understandings, to learn to give up their naïve ideas, and to construct more powerful forms of knowledge. The outcome shows us that little change in learning can be wrested from doing more of the same.

A growing body of research on how students learn school subjects such as social studies repeatedly teaches us that students need opportunities to ask questions, pursue answers to those questions under the tutelage of expert teachers who can show them how to discipline their thinking processes, and take part in opportunities to communicate and act on their understandings (Torney-Purta, Hahn, and Amadeo, 2001). Much of this work is cited in this Appendix, as it forms the basis for the scholarly rationale for the C3 Framework.

The C3 Framework signals a significant departure from past practices because it seeks to take advantage of this research and address the messages sent by NAEP tests. The Framework's four Dimensions build directly from the findings laid out in research on how students learn; they seek to redress the limits on learning repeatedly noted by NAEP tests. In what follows, we identify how this research supports and underpins the fundamental shift in direction and practice the C3 Framework embodies. If we are serious about wanting students who are civic-minded and adequately prepared for both college and careers, we can no longer ignore the prospect of making good on this new direction.

The Importance of Questions

Children and adolescents are naturally curious, and they are especially curious about the complex and multifaceted world they inhabit. Whether they articulate them to adults or not, they harbor an almost bottomless well of questions about how to understand that world. Sometimes children's and adolescents' silence around the questions in their heads leads adults to assume that they are empty vessels waiting passively for adults to fill them with their knowledge. This assumption could not be more mistaken.

Children's and adolescents' curiosity is deeply rooted in an unceasing desire to make sense of what goes on around them—through their language development; in their social interactions with parents, siblings, friends, and community members; and through what they see on television, in the movie theater, on YouTube, or on the Internet. Perhaps little signals the intensity of this socio-cultural curiosity so much as the wild popularity of social networking sites such as Facebook.

So what should a sound social studies education entail? The C3 Framework provides a plan that is deeply rooted in recent research on thinking, learning, and understanding.

For the reasons outlined above, a social studies education must begin with the kinds of compelling questions

and investigations described in Dimension 1. Young students will need help in framing useful questions and planning their inquiries, but even the youngest children want to make sense of the social and cultural environments around them (Brophy and Alleman, 2008). For example, students want to know what to make of the geographical spaces they inhabit whether their local community lies on the banks of a large river, on the high plain where the wind blows constantly, or in the shadows of snow-covered mountains. They are curious about the "olden days" Grandma always talks about. They wonder how money works as a means of purchasing things at stores. And they are fascinated by questions of who gets to make rules and whether those rules are fair. As they develop, and with the guidance of adults and peers, these questions give way to more sophisticated variants (Hess, 2008; Rogoff, 1994).

For too many years, however, a social studies education has meant a didactic, unidirectional process. Teachers have tried to instill ideas directly from adults' social worlds into children's minds on the assumption that, if there was enough telling, imploring, and demanding done, children would acquire those discipline-related ideas (Brophy and Alleman, 2008; Cuban, 1991). Researchers who have studied how children learn repeatedly confirm that young people learn by framing their own questions, with or without adult help (Bruner, 1960, 1996; Piaget, 1929/2007; Vosniadou, 2008; Vygotsky, 1986). Young people also construct their own problem-solving strategies, again with or without adult assistance. Those questions and problem-solving strategies, and the conclusions that young people reach, can remain naïve, ill-structured, undisciplined, and misleading without intervention by adults (Barton, 2008; Brophy and Alleman, 2006; Hahn and Alviar-Martin, 2008; Hicks, van Hover, Doolittle, and VanFossen, 2012; Miller and VanFossen, 2008; Segall and Helfenbein, 2008; VanSledright and Limon, 2006).

Challenging those nascent and often ill-formed questions, strategies, and conclusions can be very difficult, particularly if teachers are unaware of them. Young children, for example, often persist in the idea that banks exist only to give people money (Berti, 1995). It is not an unreasonable conclusion: they watch as parents get money from a bank's ATM simply by inserting a plastic card and punching a key or two. This process of "banks giving people money on command" answers the child's crucial economic question—where does money come from? Similarly, some young people insist on believing that developments in the past add together in such a way as to indicate a steady, if overgeneralized, march forward; this is reflected in the notion that things always and only get better (Barton, 1996; Brophy and VanSledright, 1997). This perspective helps children tell a story about why Grandpa is always talking about how lucky kids are today, or why Mom tells them about the childhood diseases she endured that they will not.

Children and adolescents are not empty vessels into which we pour our adult ideas and knowledge. Decades of research on how young people learn have repeatedly reinforced the view of students as active sense makers, who rely heavily on language to mediate their worlds and who are deeply enmeshed in investigating their social worlds in search of better ways to navigate it (Brophy, 1990; Bruner, 1996; Cole, 1995; Piaget, 1929/2007; Vygotsky, 1986).

Questions as Problem-Solving Spaces

The C3 Framework begins at the intersection of student and discipline-based questions, those that concern the socio-cultural worlds that human beings have long desired to understand (Dimension 1). Many of those questions are discipline-specific, but others transcend individual disciplinary categories and are multidimensional in nature. For example, consider the question, how bad was the economic recession that began in 2007?

At first glance, this question seems to fall squarely within the discipline of economics. It demarcates a clear economic problem space—the period of recent economic struggle that saw incomes freeze or decline, unemployment increase, and capital markets contract. At the same time, it implies a set of supporting questions around spatial proportion: was the impact of this recession felt equally across the country? Or were certain geographic regions less severely affected and, if so, which ones and why? It also suggests additional questions involving history, politics and government. To ask how bad this recession is, we need to have some sort of historical reference point, such as the Great Depression, from which to gauge its impact. And we need to know

what role government and political decision making played in its inception, duration, and resolution.

A compelling question, then, demands that students think and reason economically, geographically, historically, and politically (Dimension 2) in order to fully address the issue. Along with the behavioral and social sciences, these disciplinary lenses help students think broadly; separately, these lenses enable students to set up and pursue their investigations in different ways.

Investigative Practices and Problem-Solving Strategies

To ask questions implies the desire to answer them. Learning to investigate questions through the thinking and problem-solving strategies offered by the disciplines results in deeper understandings of the socio-cultural phenomena being investigated (Brophy, 1990; Donovan and Bransford, 2005). Doing so requires practicing those strategies until students become skilled and achieve automaticity.[2] Researchers have found that learning new ways of thinking can be slow because students often are reluctant to give up intuitive but naïve ideas that seem to work for them (e.g., Brophy, 1990; Piaget, 1929/2007). Persistence and repeated opportunities for students to practice different ways of thinking become the pedagogical order of the day.

So, what does thinking in the different disciplines look like? What do the experts do and how do school-aged students learn to accomplish it by comparison? What sorts of changes in thinking practices do learners need to undertake in order to become more knowledgeable about and proficient at understanding the world? What follows is a brief review of the last five decades of research on these questions.

[2] Automaticity is a term that means exercising a complex, problem-solving, cognitive operation without needing to devote conscious energy to thinking through its specific requirements and processes. An example from history might involve being able to read, analyze, and synthesize a cluster of difficult and conflicting accounts on the way to arriving at a defensible, evidence-based interpretation/understanding, all without much apparent effort. Automaticity in some disciplinary operations can take years to build. It is sometimes characterized as a hallmark of cognitive, problem-solving expertise. It is certainly a symbol of competence and proficiency.

Economic Thinking

Economic investigators are interested in the comparison of marginal costs and marginal benefits to allocate resources in a manner that maximizes well-being. Although not all economic investigators share the same assumptions about how markets and economies work, they typically believe that economic actors—individuals and/or organizations such as corporations—are rational beings or entities focused on satisfying their own self-interests. Because economic investigators are interested in marketplace activity, patterns become deeply important. Therefore, the language of numbers plays a decisive role in the ways in which they conduct their investigations.

To understand the depth of the recent recession, for example, economic investigators gather data about unemployment patterns; corporate assets, liabilities, and the changing patterns between them; government monetary and fiscal policy roles; and the like. Investigators use the patterns they glean from such data to assess the depths of up-and-down turns in the economy, to evaluate current states, to predict likely directions, and to offer recommendations. The ways that economic investigators employ economic models and gather data that offer evidence in support of those models provide justification for their explanations and claims of understanding (Miller and VanFossen, 1994).

Such practices, if engaged in well, require a form of economic literacy that depends on understanding and employing key concepts such as supply and demand, market liquidity, business cycles, labor practices, consumption, trade policies, and economic efficiencies (Dahl, 1998; Greenspan, 2005; Morton, 2005; Saunders and Gilliard, 1995; Council for Economic Education, 2010). That literacy also entails the application of theories that describe the interconnections among concepts and how they play out within economic structures. These theories or models of economic activity (and they can vary based on assumptions) allow investigators to attempt predictive solutions for economic problems (Miller and VanFossen, 1994).

Children, however, draw from simple everyday experiences to shape their views of how economies work, and those everyday ideas, while seeming to make intuitive sense, are decidedly naive (Berti, 1995; Berti and Bombi,

1988; Laney, 2001). Children frequently harbor a variety of ill-structured and incomplete economic ideas, such as the difference between buying and renting (Brophy and Alleman, 2006), the size of a price tag determining how much a good costs, and that pieces of property are owned by the people who live around them (Laney and Schug, 1998).

These sorts of ideas held by children (and even some adolescents) significantly limit their capability to think economically and solve economic problems (Miller and VanFossen, 2008). As Alice Rivlin (1999) once observed, "without a basic understanding of how the economy works, what the…terms and concepts are, the average citizen is likely to be left out of any conversation…about what is happening in the economy and what to do about it."

If students are to address a compelling question such as measuring the impact of the recent recession, they need opportunities to engage in investigations of such economic questions (Dimension 1), use economic reasoning and problem-solving strategies (Dimension 2), gather data that address those questions (Dimension 3), and do all of this collaboratively inside and outside the classroom context (Dimension 4). By engaging in this process, students can become more economically literate—able to use key economic concepts and data-gathering and analytic tools to solve problems. Doing so requires the educational assistance of knowledgeable social studies teachers, who know how to construct and conduct such investigations, and within them, shape naïve ideas into more sophisticated ones.

Geographic Thinking

Geographic inquiry focuses attention on place and space and seeks to understand why humans deal with them in ways that they do and with what consequences. Whereas to economists the recent recession is about causes, effects, and solutions to slowing economic activity, to geographic investigators it is about understanding and representing the spatial expressions of the events. Maps and other graphics showing changes in spatial patterns of human and physical environments provide a geographic language that aids in analyzing and understanding issues while stimulating new questions to investigate.

To investigate the causes and consequences of economic and political events, geographers ask questions about the changing landscape of human activity—who was affected, where, and how? For example, did the recent global recession cause observable population shifts, changes in landscape uses, or spatial re-patterning of human activity across the United States and other countries? To answer such questions requires problem-solving strategies that entail spatial thinking, data gathering, and spatial analysis using geospatial data, maps, and other graphics.

Research on geographic thinking suggests that children learn how to navigate spatial relationships early on. Even very young children develop mental maps of environments they experience and can manage to work with simple directional maps (Bednarz, Acheson, and Bednarz, 2010; Blades and Spencer, 1987) and they become somewhat adept at using map symbol systems (Boardman, 1989). However, children may persist in some naive understandings they initially develop such as consistently misreading adult mapmakers' representations of city populations by the use of different sizes of map dots.

Other map symbols are also misunderstood without opportunities to investigate how they can be used to convey spatial ideas (Bednarz et al., 2010; Hickey and Bein, 1996; Liben and Downs, 1989). These misunderstandings may arise repeatedly because the everyday understandings children develop early on make good intuitive sense to them. Geographic investigations that involve more advanced forms of spatial reasoning help learners reconstruct their misleading understandings (Gregg, 1997). Simply telling children to change their intuitive, but counter-productive spatial ideas does little good. They need opportunities in the presence of knowledgeable others to engage in spatial-reasoning investigations (e.g., drawing and describing their own mental maps and making map representations based on data collected or personal field observations) in which they confront cognitive impasses created by their naive everyday ideas. This kind of activity gives them a chance to restructure what they believe and know in more productive ways.

Changes in geospatial technologies have extended and amplified the reach and importance of the applications

of geographic knowledge, skills and perspectives. Learning to employ technologies such as GIS and Google Earth during their inquiries can serve ably in providing students with opportunities to restructure their knowledge, gain new skills, and change their perspectives. Students may engage in this process individually or collectively and collaboratively with the assistance and guidance of the more knowledgeable teacher.

Geographic thinking entails representing complex ideas about place. In many respects, places are created through human activity as people adapt to and modify the spaces they occupy. Ways of representing such activities are nearly always laden with the personal and cultural perspectives of the representers (Harley, 1994; Segall and Helfenbein, 2008). Without considerable prompting, students typically do not think much about who created the maps (i.e., cartographers), preferring instead to imagine that maps come ready-made and are thus always accurate. Yet, the sorts of political and socio-cultural distortions that may creep into such representations and into geographic narratives are crucial for students to understand if they are to achieve the type of geographic literacy and capable thinking required of citizens in democracies (Bednarz et al., 2010). How we come to understand and represent our global and interconnected world has important consequences for our lives (Segall and Helfenbein, 2008).

If investigating and understanding how people make economic choices, and with what consequences, helps us better make sense of who we are and why we do what we do, then investigating how we come to know and represent the world through geographic reasoning and tools helps us understand even more fully who we are and how we adapt to and modify a changing world. If taught in the research-based way the C3 Framework suggests, economic and geographic understandings will become less parochial and provincial as learners develop into more sophisticated and incisive thinkers.

For a comprehensive review of geography education research studies that examine how geographic knowledge, skills, and practices develop across diverse individuals, in a variety of settings, and over time, see Bednarz, Heffron, and Huynh (2013).

Historical Thinking

In effect, posing historical questions involves asking what the past means, what people in the past were thinking and talking about, and how that thinking and language caused them to behave in the ways they did (Collingwood, 1946/1993). Expert historical investigators rely on residue from the past—both original accounts and testimonials and synthetic sources constructed by previous investigators—to address those questions. These sources demand extensive reading, defined very broadly to include texts, cartoons, paintings, maps, charts, photographs, and the like.

In order to address their questions and develop deeper understandings of how people acted in the past, historians read in particular ways (Lee, 2005; Wineburg, 2001). This way of reading is a type of thinking that involves strategies and skills, ones that lead to historical understanding. If we wish our students to ask more profound questions of the past as well as construct deeper understandings of it, we need to teach them to think and reason in the ways demonstrated by those with greater expertise (VanSledright, 2011).

Historical questions, then, demand that students search out relevant accounts; identify what types of accounts they are; attribute them to authors; assess the authors' perspectives, language, motives, and agendas; and judge the reliability of those texts for addressing the questions posed (VanSledright and Afflerbach, 2005; Wineburg, 2001). They also do whatever they can to read these authors slowly, closely, and within the historical context of the period in which they lived (Reisman, 2012; Wineburg, 2001). Students then convert those accounts into forms of evidence for making claims about what occurred and why (Lee, 2005; Lee and Shemilt, 2003). These claims are justified through a process of evidence corroboration in which the way the evidence preponderates or comes together supports certain claims over others. Collectively, the evidence-justified claims serve as a form of historical understanding.

In history, there is often a dispute over what the past means. Investigators wrestle over what counts as justified understandings because evidence can sometimes be applied to make multiple and different claims. It will come as no surprise, then, that students investigating the recent recession may arrive at varied conclusions.

For better or worse, historical reading and thinking, and the specific strategies they require, seldom provide a single, definitive answer to the questions posed. Children and adolescents can come to make sense of this problem, since most of them have undergone experiences in which differing perspectives (e.g., she said/he said during a playground spat) prevented closure on a given issue.

Young people, the research studies suggest, do not necessarily come to these forms of historical reading and thinking on their own (Donovan and Bransford, 2005; Levstik and Barton, 1997; VanSledright and Brophy, 1992; Wineburg, 2001). Their naïve, everyday ideas formed through lived experience tend to interfere with richer understandings (Lee, 2005).

For example, children learn early on about the difference between telling the truth and telling a lie, since uttering the latter is often met with punishment. They quickly develop the idea that people can engage in only these two dichotomous possibilities, and they bring this social understanding to the social studies classroom.

When reading accounts about events during the American Revolution—for example, one by a British soldier and a contradictory one by a colonial minuteman concerning who was at fault during a bloody skirmish, children (and even some adolescents) insist that one or the other must be lying. In a complex world, this dichotomous thinking can arrest understanding because it becomes difficult to determine which is which without corroborating evidence. Moreover, the notion of differing (and often conflicting) perspectives offers a more useful idea in that it helps explain why historical actors may have interpreted what appears to be the same situation in vastly different ways (Lee, 2005; VanSledright, 2011; Wineburg, 2001). Helping students achieve such understandings can take a number of different forms. Classroom discussions of emerging understandings based on analyses of sources and the evidence they produce can be crucial (Hess, 2009). Writing is also critical: recent studies have demonstrated that students who write about their historical understandings and are coached on how to gradually build sound evidence-based arguments, demonstrate a deeper grasp of how to address the questions posed (Monte-Sano, 2008; Monte-Sano, 2011).

This is but one additional example that explains why the C3 Framework stresses the Inquiry Arc of developing questions; applying disciplinary concepts; gathering sources and using evidence; and working collaboratively to develop conclusions and take action. Learning to think historically (or economically, or geographically, or politically) helps children and adolescents let go of some of their less-productive ideas and develop richer ones that aid in their understandings of the social and cultural world (Donovan and Bransford, 2005).

Civic-Minded Thinking

If economic investigators primarily explore questions about how resources move to produce goods and services and how, in turn, those products flow to consumers, investigators who study politics and government primarily examine questions about how power flows. They are interested in understanding the political and civic actions of individuals and organizations and how they influence one another (Budano, 2012). Returning to the question about the recent recession, civic-minded investigators would trace how people's political behavior (e.g., voting practices, campaign donations) shapes the policies of elected officials in government and/or the converse. Those investigations would produce data that could be used to identify the role different policies (e.g., federal and local taxation, fiscal and monetary, discretionary and entitlement spending), or the lack thereof, play in creating a growth-recession cycle.

Analyzing how bad the recession was might be gauged by investigators of the civil polity through surveys of people's attitudes toward governmental organizations during this recession compared to other recessions, and how citizens deliberated about it and responded in the voting booth. These investigators might also survey the movement and efficacy of repair policies (e.g., stimulus packages, bail outs) through governmental organizations. Policy developments, their sources, and consequences as exercises in power shape the vocabulary of politics and government investigators. Their efforts are animated by asking questions about how power flows through cultures, resulting in policies and laws that regulate how citizens interact to solve dilemmas and conflicts between and among different interests. These investigators borrow a number of concepts and models from economists and historians. Because their questions focus on different kinds of problems (e.g., the

nature of civic behavior, or the effects of government policies), they use the concepts and models differently in order to address those problems.

Young social studies students typically have rather limited understandings of the internal workings of politics and civic behavior, both among individuals and within and across governmental bodies. They learn about voting as a decision-making strategy and can engage in simple forms of it, but they can have quite naïve understandings about it and they often overgeneralize the circumstances in which it can be applied (e.g., that all decisions should be subjected to a vote). Students of all ages are very curious about how decisions get made, and show interest in participating.

Early on, children rely heavily on their families for ideas about civic participation and how it works (Hess and Torney, 1967/2009). In order to learn how to participate effectively within deliberative and policymaking contexts, students need considerable guidance and continual practice in order to modify their naïve political and civic ideas. Students who are encouraged to ask questions, debate alternative actions, and gather evidence about the likely consequences of choosing one direction over others are typically less cynical than peers who do not have those experiences (Haas, 2004; Torney-Purta, Hahn, and Amadeo, 2001). Opportunities to engage in service-learning experiences also help prepare students for their adult responsibilities in participatory democratic cultures (Hahn and Alviar-Martin, 2008; Hess and Torney, 1967/2009; Kahne and Sporte, 2008; Metz and Youniss, 2005; Parker, 2008).

Evidence as Understanding

If one goal of education is to improve students' decision-making judgment and to prepare them for college, careers, and civic life, there is no substitute for deep knowledge and understanding of the socio-cultural world offered through the four forms of disciplinary thinking described above. Along with the behavioral and social sciences, each offers powerful strategies and tools for exploring and answering compelling and supporting questions. In their different ways, they provide time-honored means of turning source data into evidence for the conclusions one reaches (Dimension 3).

One of the central principles in the C3 Framework rests on the concept of evidence. Anyone can ask a question about the social world and come to some answer or another, no matter how wildly speculative or opinionated. Human minds have great capacity for imagination. A wildly speculative answer or an imaginative conjecture, however, is not the same thing as understanding. Understanding is achieved by the careful investigation of questions, data collection, reading, analysis, and synthesis; in effect, data are transformed into evidence-based claims that separate opinions and conjecture from justifiable understandings.

In a digital world filled with fact and speculation, that difference is a crucial contribution social studies teachers who follow the C3 Framework can offer to their students. This claim is no more evident than in the research done on teaching and learning in history education (see reviews by Barton, 2008; Grant, 2006; Lee, 2005; VanSledright and Limon, 2006; Voss, 1998; Wineburg, 2001).

In our rapidly-changing world where ideas, information, and opinions are but mouse-clicks away, students more than ever need to learn how to keep learning in order to cultivate sound understandings (Lee, 2010). As a result, they need a deep well of powerful and disciplined strategies for answering their questions and for gathering data that can be evaluated and transformed into evidence for justifiable decisions.

The days are long past when it was sufficient to compel students to memorize other people's ideas and to hope that they would act on what they had memorized. If 20 years of National Assessment of Educational Progress report cards on youth civic, economic, geographical, and historical understanding mean anything, they repeatedly tell us that the success of that telling-and-compelling effort no longer works in the 21st century, if it ever did (Smith and Niemi, 2001).

Working Collaboratively to Show Understanding

The research on how people learn makes clear how important collaborations are to deeper understanding (Brown and Campione, 2002; Brown, Collins, and Duguid, 1998; Palinscar, 1998). Businesses in Silicon Valley, for example, picked up on this idea long ago:

collaborative developmental teams designed the means of bringing the Internet to people in ways reminiscent of early 20th century efforts toward mass electrification. Researchers have long stressed the insights John Dewey (1902) offered about how important our shared language and vocabularies are to thinking and problem solving (Bruner, 1960; Rogoff, 1994 Vygotsky, 1986). In short, much of our best thinking occurs when we build and express ideas in collaborative settings (Dimension 4).

Teachers work to bridge student experience-based questions with disciplinary ones. Collaborative inquiries designed to address those questions are then launched in classrooms. Teachers act as guides, facilitators, and disciplinary ambassadors. Students are, however, engaged in the actual investigative work (for detailed examples of how this can play out in history classrooms, see Bain [2000] at the secondary level and VanSledright [2002] at the elementary level). Working together, students learn how to think more clearly and powerfully by employing disciplinary knowledge and methods. In doing so, they transform data they gather into evidence for the conclusions—explanations and arguments—they reach.

These explanations and arguments need to be communicated, for it is in this communication practice that teachers obtain evidence of growth in students' understandings (or the lack thereof). The process can take many collaborative forms. Students can read, analyze, and discuss data sources and accounts together; design websites or wikis; create digital documentary presentations; discuss and debate claims orally in the classroom; and engage in writing collective essays (Hess, 2002; Klingner, Vaughn, and Schumm, 1998; Soller, 2001; Monte-Sano, 2008; Swan and Hofer, 2008; Swan and Hofer, 2013). It is here, in particular, that the C3 Framework dovetails closely with the types of communication practices expected of students within the Common Core State Standards for English Language Arts and Literacy in History/Social Studies.

The aforementioned research speaks compellingly: While it is important for students to demonstrate their individual progress, they make more rapid progress in building their social studies understandings when working together.

Furthermore, collaborative opportunities to inquire into and then communicate understandings support students' informed civic engagement, a principal goal of a rich social studies education. Researchers have found that (a) investigating how governments operate, (b) engaging in opportunities to discuss and debate current social problems and issues, (c) being involved in service-learning and related activities, (d) participating in high-impact decision-making, and (e) participating in simulations of politically related activities all increase the likelihood of students attaining higher levels of political understanding, commitment, and action (Hess, 2002; Torney-Purta, 2005). As the Inquiry Arc of the C3 Framework culminates in Dimension 4, so too does the preparation for student success in college, career, and civic life.

Progressions in Socio-Cultural Understanding

The C3 Framework is organized by grade bands because researchers have long demonstrated that disciplinary ideas and understandings show progression in their development (Piaget, 1929/2007; Vygotsky, 1986). Some of the early work suggested that progression tended to form in lock step. That is, children and adolescents needed to attain a certain cluster of understandings before they could move to the next stage. This set of claims has given way to the idea that progression can be bumpy and uneven, and that children and adolescents may move back and forth across developmental levels. Therefore, students need repeated opportunities to work in investigative contexts with disciplinary concepts, strategies, and ideas (Lee and Ashby, 2000; Ashby, Lee, and Shemilt, 2005; VanSledright, 2002).

Students' capability to ask rich questions within disciplinary-based inquiries grows rather slowly. They need considerable guidance from more knowledgeable adults and peers in asking the meaty questions that prompt the development of deeper socio-cultural understandings useful to adults in democracies. This is not to say that the questions students ask are irrelevant. Rather, teachers will find the task of assisting their students in constructing questions and developing inquiries more challenging than, say, teaching students to consider an author's perspectives when reading a history text (Reisman, 2012).

Student progress can also be uneven in using evidence to draw conclusions (VanSledright, 2002; Wineburg, 2001). Researchers find that even some college students think that unsupported opinions are sufficient to claim understanding, and they can struggle to distinguish them from evidence-backed arguments (Maggioni, 2010; Maggioni, VanSledright, and Reddy, 2009; Seixas, 1993). Helping students make better distinctions and build criteria for judging the difference takes time and demands multiple opportunities to practice.

What then can social studies teachers reasonably expect as students progress through the social studies program? As the foregoing implies, researchers suggest that they will see relatively slow growth in children's and adolescents' disciplinary thinking and understanding. This finding makes sense. Because children's early learning experiences so often result in tightly-held intuitive, but often naïve understandings, children find those understandings difficult to give up and/or reconstruct.

It is just this kind of research finding that undergirds the importance of helping students develop questions and inquiries into the world. Merely telling students how the economy works or what the past means requires that they accept the teacher's word on faith. Researchers make it clear that this approach is insufficient. Students need repeated opportunities to practice asking questions, investigating phenomena, and gathering the necessary evidence if they are to progress in building explanations and arguments that illustrate their knowledge and understandings.

Furthermore, it is important to understand that students are quite capable of thinking in the ways that the Inquiry Arc indicates. The research base here is pointed: students are more than able to think deeply and richly about the world around them. They simply grow at different rates and need many and varied opportunities to engage with ideas (Donovan and Bransford, 2005). It is important to hold high, but reachable expectations for student learning progressions. Grade banding plus repetition is a way to suggest how the repeated opportunity to practice evolves across broad grade clusters.

Understanding as Civic Engagement

The C3 Framework and the embedded Inquiry Arc are underpinned by decades of research on how children and adolescents learn about and operate in the world. They begin with those young people's questions, intersect them with the social studies disciplines, and broach investigations into the world that are designed to address those questions. This approach is not willy-nilly. The research base demonstrates that the contributions disciplinary thinking can make to deepen young people's understandings of the world are indeed profound.

These disciplined ways of thinking are also ways of learning. As such, they are crucial in preparing young people for lives as engaged and active citizens. Now more than ever, students need the intellectual power to recognize societal problems; ask good questions and develop robust investigations into them; consider possible solutions and consequences; separate evidence-based claims from parochial opinions; and communicate and act upon what they learn. And most importantly, they must possess the capability and commitment to repeat that process as long as is necessary. Young people need strong tools for, and methods of, clear and disciplined thinking in order to traverse successfully the worlds of college, career, and civic life. The research that underpins the C3 Framework offers much to move our children precisely in that direction.

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GLOSSARY

KEY TERMS IN THE C3 FRAMEWORK

The College, Career and Civic Life (C3) Framework for Social Studies State Standards sets forth learning expectations and an inquiry arc that will be useful in guiding the development of state and local social studies standards and curriculum documents. This glossary defines and provides examples of key concepts and terms used in the C3 Framework. The examples are illustrative but are not exhaustive.

Adapt to an environment: People adapt to the opportunities and constraints of their environment, making relevant decisions based on their state of knowledge and technology.

Example: People settle in regions that provide resources needed for daily living. Settlement location choices are influenced by various factors, including climate and changes in technology. One example is the influence of air conditioning systems on where people choose to live.

Argument (coherent, reasoned): In the C3 Framework, an argument is a claim or collection of claims supported by relevant evidence, which can be considered an answer to the question investigated by the research. In historical research, a *coherent argument* is one in which the evidence cited supports the claim; a *reasoned argument* is one in which the evidence is used in a logical and critical way.

Example: In *Freedom From Fear: The American People in Depression and War, 1929-1945*, the historian David Kennedy develops the *reasoned argument* that U.S. isolation from the principal theaters of battle and the nation's superior economic ability allowed it to emerge successfully from World War II.

Authority (authoritative source): The legitimate power to influence or compel thoughts and actions. An *authoritative source* is a source acknowledged to be an accurate and reliable basis for identifying facts and constructing interpretations.

Example: The United States Constitution is an *authoritative source* on the structure of federal government in the United States.

Banks: Businesses that accept deposits and make loans.

Example: Family members or neighbors probably have checking or saving accounts at *banks* in the community. They deposit their money in these accounts to keep it safe. *Banks* offer ease of use through ATM cards, debit cards, and checks. *Banks* often pay interest on the money in these accounts. *Banks* use the deposits to make loans to other customers. Students may know friends or family who have obtained a loan from a *bank* to buy a house or a car.

Barriers to trade: Laws that limit imports or place taxes on imported goods and services in order to discourage imports and protect domestic profits and jobs.

Example: A tariff is a tax on imports that results in fewer imports being purchased. One consequence is that more domestic substitutes will likely be consumed.

Benefits: The gains from consuming and producing goods and services and making personal, business, and public choices. Benefits may be financial, or they may consist of other types of satisfaction.

Example: The purchase of a new bicycle results in increased satisfaction and enjoyment.

Borrowing: Taking money with a promise to repay the money in the future.

Example: Perhaps a brother, sister, or parent has *borrowed* money from a student and later repaid the money. Maybe a student has *borrowed* money from a brother, sister, friend, or parent. In commercial lending, the promise to repay includes the amount *borrowed* plus some interest—a payment for using the *borrowed* money.

Capital goods: Goods that have been produced and are used over and over again in the production process to produce other goods and services. Capital goods can also be called capital resources or physical capital.

Example: Tools, equipment, factories, office buildings, machines, desks in schools, interactive whiteboards, computers, and projectors are all examples of *capital goods.*

Causes and effects (probable, multiple, complex, unexpected): No historical event or development occurs in a vacuum; every one has prior conditions, and every one has consequences. Historians cannot test these in laboratories the way scientists can, but they can use historical evidence and reasoning to determine *probable* causes and effects. Events and processes often result from developments in many realms of life, including the social, political, economic, and cultural realms, and may have consequences that are broad, interconnected, and far-reaching, so that causes and effects are *multiple* and *complex*. The outcome of any historical event may not be what those who engaged in it intended or predicted, so that chains of cause and effect in the past have often been *unexpected*, not pre-determined.

Example of probable causes: *Probable causes* of the voyages of Columbus include Columbus's desire to reach the riches of Asia by sailing westward and the aims of the Spanish monarchs Ferdinand and Isabella to continue the expansion of Christianity, as well as other reasons listed as multiple causes below.

Example of multiple causes: *Multiple causes* of the voyages of Columbus include Columbus's personal ambition and desire to reach the riches of Asia by sailing westward; the aims of the Spanish

monarchs Ferdinand and Isabella to compete with Portugal in the race for direct access to spices and to continue the expansion of Christianity; the expansion of the Ottoman Empire that disrupted old trade routes and lessened the direct access of Western Europeans to silk, spices, and other Asian products; improvements in ship designs, including the adoption of new kinds of sails; and the development of the printing press, which allowed works by earlier geographers and travelers to be cheap and accessible to ship captains and merchants. Other factors also played a role, because no single cause led to Columbus's voyages.

Example of complex effects: *Complex effects* of the voyages of Columbus include all the developments that resulted from them, which have influenced nearly every aspect of today's globalized world.

Example of unexpected effects: The voyages of Columbus resulted in the widespread exchange of animals, plants, human populations, and diseases across the Atlantic in both directions, including corn, wheat, potatoes, tomatoes, coffee, cows, horses, turkeys, measles, and smallpox. Many results of the Columbian Exchange were *unexpected effects*, and some of the exchange was completely unintentional, such as the movement of invasive plant species that became pests.

Change and Continuity: The study of the past shows that some elements remained continuous or steady, while others changed. Thinking about change and continuity requires us to compare different points in time—either two points in time from the past with each other, or one from the past with the present. Sometimes the factors that change and those that stay the same are surprising or hidden. Change may bring progress, but it can also result in decline.

Example: The advent of electricity and household technology brought major *changes* to family life in the United States, but there were *continuities* as well. Doing laundry was much easier and less physically strenuous with washing machines, but laundry remained a household task that was almost always done by women, and the amount of clothing most people owned increased, so that the time taken to do laundry did not decrease significantly.

Choice: A decision made between two or more possibilities or alternatives.

Example: People make *choices* every day. They *choose* what to wear, what to eat, and what to do in their free time.

Chronological sequence: A list of historical events organized by the time and date of their occurrence. Ordering events in time is important to identifying relationships between events and historical context, and to understanding the development of processes across time in order not to view events in isolation.

Example: A *chronological sequence* of major events in African American history is: the 14th Amendment, Reconstruction, Jim Crow laws, rise of the Ku Klux Klan, World War II, and the Montgomery Bus Boycott.

Civic virtues: Principles and traits of character that enable citizens to contribute to the common good by engaging in political and civil society.

Example: Tolerance, adherence to law, opposition to tyranny, standing up for others' rights, and active participation in the community are *civic virtues*.

Civil society: The entire array of nongovernmental groups, associations, and institutions that citizens form and join, along with norms and values that underlie participation, such as cooperation, trust, and civility.

Example: The Parent Teachers Association in a school is part of *civil society*.

Claims and counterclaims: In the C3 Framework, claims are statements of belief or opinion rooted in factual knowledge and evidence that result from the analysis of sources in an inquiry. Counterclaims are statements that challenge or respond to claims, using evidence that contradicts a claim.

Example: Some economists *claim* that central government banks can effectively control economic growth by injecting capital into financial markets through buying and selling in bond markets. A *counterclaim* suggests that such interventions prevent capital markets from functioning properly and thus slow economic growth.

Climate change: Long-term significant variations in average weather conditions on Earth, particularly in temperatures and precipitation, that are caused by either natural or human induced processes.

Example: Alterations in the physical dynamics of Earth's atmosphere that affect the climate may result from natural phenomena, such as extensive volcanic eruptions, or human practices, such as burning fossil fuels.

Climate variability: Changes over time in patterns of weather and climate either globally or in a specific region of the world.

Example: Precipitation and temperature may change for varying times, resulting in dry and wet periods that influence the timing of planting and harvesting of food crops in specific regions affected.

Collective action: Activities undertaken by a group of people with a shared interest in promoting or encouraging change or progress on an issue about which members of the group agree.

Example: The Tea Party movement began as a *collective action* to limit government expenditures and taxes, and to oppose the expansion of the role of the federal government in areas such as health care.

Communication network: A pattern of links among points and pathways along which the movement and exchange of information takes place.

Example: Cell phone towers are located at sites chosen to facilitate the movement and reception of signals within areas served by the system.

Comparative advantage: The ability to produce at a lower opportunity cost than another producer.

Example: A producer with a *comparative advantage* in the production of wheat may have to give up less corn to produce wheat than other producers.

Compelling question: Compelling questions address problems and issues found in and across the academic disciplines that make up social studies. They require students to apply disciplinary concepts and to construct arguments and interpretations. Compelling questions often emerge from the interests of students and their curiosity about how things work, but they are also grounded in curriculum and content with which students might have little experience.

Example: Was the American Revolution revolutionary?

Competition: The ability of businesses and individuals to enter a market in an effort to compete to sell or buy a product. Competition results in attempts by two or more individuals or organizations to acquire the same goods, services, or productive and financial resources, or else to sell them. Consumers compete with other consumers for goods and services. Producers compete with other producers for sales to consumers.

Example: New cell phones are produced on a regular basis by a wide variety of firms.

Complex causal reasoning: A type of logical thinking that explains how multiple events, ideas, or activities contribute to one another.

Example: An understanding of human migration patterns in the world today requires *complex causal reasoning* that takes into account local politics, economic factors, geographical conditions, climate, and social and cultural influences.

Context: The ideas, events, or related content that situate a concept, event, person, or idea in a relevant time, place, or intellectual sphere.

Example: The theory of communism emerged in the *context* of rapid industrialization and changing economic conditions in 19th century Western Europe.

Core principles (in U.S. founding documents): Fundamental ideas and ideals expressed in the Declaration of Independence, the Constitution, and other early and influential documents.

Example: Government by the consent of the governed, equality under law, and freedom of the press are *core principles in the founding documents* of the United States.

Correct sequence (linear or non-linear): The notion that a text (written or multimodal) has a recognizable path for readers to follow. These paths may be linear, as are most written print texts, or non-linear, as are most web-based texts with hyperlinks

Example: A conventional essay would likely have a linear reading path. Websites that represent the same essay text on multiple webpages, and can be accessed in a variety of different sequences, would be non-linear.

Corroborative value: The extent to which information from one source that is used as evidence to support a claim supports information from another source.

Example: Economic data offers *corroborative value* in support of claims drawn from personal correspondence about the social impact of the Great Migration of African Americans from Southern cities and towns to Northern industrial areas in the early 20th century.

Costs: What an individual, business, organization, or government gives up when a choice is made. Costs may be financial or nonfinancial.

Example: When a person decides to go to a movie, the *cost* of that choice is what could have been done with the money spent and how the time could have otherwise been used.

Credibility: The degree to which a source can be trusted or believed to represent what it purports to represent. The concept of credibility does not necessarily correspond to that of truth; a source can be credible and contain factual inaccuracies.

Example: The *credibility* of personal accounts of the Civil War battles from politicians in Washington, D.C., and Richmond, Virginia, is limited, in view of the fact that their accounts were second-hand.

Credit: The granting of money or something else of value in exchange for a promise of future repayment.

Example: A bank or other financial institution may give people *credit*; that is, the bank or financial institution gives people money to buy cars or houses. The borrowers agree to repay the money borrowed plus interest over the time of the loan.

Cultural characteristics: The specific ideas, belief systems, or patterns of behavior that characterize a society or a culturally distinct social group.

Example: *Cultural characteristics* are expressed in housing types, food preferences, spatial patterns of settlements, and beliefs about appropriate relationships between people and nature.

Cultural pattern: Culture may be manifested in repeated behavior shown in social conventions, customs, and adherence to rules or habits that are based on values and beliefs about the attributes of society and nature.

Example: *Cultural patterns* may be seen in the tools and artifacts produced in different societies or in food-growing techniques shared among members of a group.

Cultural preference: A culturally-based preference for one thing rather than available alternatives. The choice to engage in some practices rather than others may be grounded in cultural habits or may reflect deeply-held cultural beliefs about appropriate behavior in certain settings or situations.

Example: Choices of favored spectator sports vary from place to place. Some regions have avid soccer fans, while others favor ice hockey or baseball. Food preferences also vary widely from place to place and may be based on religious beliefs, the history of available foods, or health concerns. *Cultural preferences* may range from seemingly trivial topics to issues of life-changing importance.

Culture: Culture is a human institution manifested in the learned behavior of people, including their specific belief systems, language(s), social relations, technologies, institutions, organizations, and systems for using and developing resources.

Example: Various *cultures* emerged on Earth in dispersed locations and within different environments. Long periods of isolation and limited interaction contributed to cultural diversity and distinctive habits and beliefs. Language-based communication is a clear example of a learned behavior that influences the development and interactions of human groups.

Deflation: A general sustained downward movement of prices for goods and services in an economy.

Example: The Japanese economy began to experience *deflation* during the 1990s. The United States experienced *deflation* during the Great Depression.

Deliberation: Discussing issues and making choices and judgments in a group, with information and evidence, civility and respect, and concern for fair procedures.

Example: The class *deliberated* and decided to conduct a service project at the senior center.

Deliberative and democratic strategies: A way to accomplish a goal that includes the input of those involved at all stages of the process.

Example: The United Nations seeks to utilize *deliberative and democratic strategies* to address global issues.

Demand: The quantity of a good or service that buyers are willing and able to buy at all possible prices during a certain time period. In general, people are willing and able to buy more units of a good or service at a lower price than they are at a higher price.

Example: Ellie opened a lemonade stand. She discovered that her customers were willing and able to buy more cups of lemonade at $.50 per cup than they would at $1.00 a cup.

Democratic principle: A principle that should guide the behavior and values of institutions and citizens in a democracy.

Example: It is a *democratic principle* that everyone is equal before the law.

Development: A historical event or set of events that is regarded as significant.

Example: The invention of the cotton gin was a *development* that significantly changed people's lives.

Disincentive or negative incentive: Perceived costs that discourage certain behaviors.

Example: Detention or suspension are costs imposed on students to deter behaviors such as skipping school or being disruptive. Fines for speeding are *disincentives* designed to discourage reckless driving.

Economic globalization: An international economic system for the production and exchange of goods and services that creates interdependence among the economies of the world's nations.

Example: *Global* trade in wheat and other grains fluctuates according to the predicted future supplies and actual reserves in grain growing countries. Prices and availability are influenced by climate events, transportation costs, population size, and changing food habits in various places.

Economic growth: A sustained rise over time in a nation's production of goods and services.

Example: The U.S. economy, as measured by real GDP, grew at an average of slightly more than 3% per year over the 60 years from 1953 to 2012.

Economic Interdependence: The dependence of people who specialize in producing one particular good or service upon other people or institutions to provide additional goods and services that they desire.

Example: A secondary social studies teacher specializes in producing learning among secondary students and is dependent upon others to provide clothing and food for her family.

Effects: See Causes and Effects.

Entrepreneurs: Individuals who are willing to take risks in order to develop new products and start new businesses. They recognize opportunities, enjoy working for themselves, and accept challenges.

Example: A person who opens a new restaurant, dry cleaning store, or other business in the community is an *entrepreneur*. People who have already started businesses, such as Bill Gates, are also *entrepreneurs*.

Entrepreneurship: A characteristic of people who assume the risk of organizing productive resources to produce goods and services.

Example: People who own and operate local businesses in the community (e.g., auto body repair shops, or restaurants) demonstrate *entrepreneurship*.

Environmental characteristics: Aspects of a place or area shaped by Earth's physical processes or derived from the physical environment.

Example: Across the Earth, there are variations in vegetative cover related to climate conditions and differences in landforms shaped by processes of volcanism, glaciations, and erosion and deposition.

Environmental problem: Any threat to nature or to human beings' dependence on nature.

Example: Acid rain is an *environmental problem*.

Event: An occasion, occurrence, or incident that takes place in the past. Events can be of various lengths.

Example: Nat Turner's rebellion was an *event* that took place in 1831, and is often seen as one of the many *events* leading up to the American Civil War, which is also a historical *event*.

Evidence: In the C3 Framework, evidence is information taken during an analysis of a source that is then used to support a claim made in response to an inquiry question.

Example: Temperature data might be used along with information about the invention and implementation of air conditioning as *evidence* to support a claim about urban development in the American South.

Exchange: The trading of goods, services, and resources with people for other goods, services, and resources, or for money.

Example: People *exchange* their human resource (labor) for payment in the form of income (wages or salaries). In turn they *exchange* part of their income with businesses to buy goods and services. They *exchange* part of their income in the form of taxes and government fees for goods and services that the government provides.

External benefits: The benefits of production or consumption that are received by persons other than the producer or consumer of the good or service.

Example: The benefits of the increased quality of secondary education are received by students. Others also benefit from the students' eventual higher production and taxes. The benefits received by the others are *external benefits*.

External costs: Costs of production or consumption that are borne by persons other than the producer or consumer of the good or service.

Example: A power plant produces electricity that it sells to its customers. The process of production results in polluted air that causes institutions and individuals other than customers to pay higher health care costs. Those higher health care costs are *external costs*.

Fiscal policy: Policies that affect the level of government spending on goods and services, taxes, and transfer payments.

Example: A government reduction in tax rates may encourage people to increase spending and the amount of time they are willing to work.

Freedom: The lack of coercion or limitation of a person's thoughts or actions; some definitions include the actual ability of an individual to do what he or she wishes.

Example: In the United States, *Freedom* of speech is one of the Five *Freedoms* in the First Amendment of the United States Constitution. In his Four Freedoms speech, President Franklin Roosevelt

proposed that *Freedom* from Fear and *Freedom* from Want were also important freedoms.

Geographic context: The location in which an event occurred.
Example: The Bureau of Reclamation oversaw the building of Hoover Dam between 1931 and 1936 within the immediate *geographic context* of the arid and physically taxing Black Canyon and the broader *geographic context* of the Colorado River watershed.

Geographic data: Facts and statistics about spatial and environmental phenomena gathered for analysis.
Example: *Geographic* or geospatial *data* may be gathered about physical and human processes on Earth's surface to analyze a range of problems, such as air and water pollution, urban sprawl, traffic congestion, or other problems arising from human-environment interactions.

Geographic model: An idealized and simplified representation of reality depicting a spatial concept or a tool for predicting specific outcomes in geography.
Example: Globes are scale models of Earth that correctly represent area, relative size and shape, physical features, distance between points, and true compass direction. A gravity model may be used to describe and predict flows from one place to another based on the distances between them and the size of their populations.

Geography: The study of physical and human systems and their changing spatial relationships across the surface of the Earth. Human systems and physical systems constantly interact with reciprocal influences flowing between and among them, creating a wide variety of spatial patterns.
Example: Humans plant crops in response to soil characteristics and climate variables that include temperature ranges and amounts of precipitation. When heat rises and rain fails, farmers may intervene with irrigation systems to sustain growing until harvest time. When soils are depleted from constant plantings, farmers may extend productivity by using no-till methods and adding fertilizers.

Geospatial technologies: Computer hardware and software used to produce and evaluate geographic data at infinitely varied levels; these technologies include technologies related to mapping and interpreting physical and human features on Earth's surface.
Example: *Geospatial technologies* include global positioning systems [GPS], geographic information systems [GIS], remote sensing [RS], and geospatial visualizations that allow the viewing of data associated with specific locations.

Globalization (see also **Economic Globalization**): The increasing interconnectedness of different parts of the world resulting from common worldwide cultural, economic, and political activities, and the impact of technological advances in communication and transportation.
Example: Communications technologies provide nearly instant transmission of news about widely dispersed events across Earth's surface. The increase in the speed of information flows from place to place influences the timing and nature of reactions to events and problems by governments, economic organizations, and the general public. As an example, international responses to natural and technological disasters are faster and more widespread than in the past.

Goods: Objects that satisfy people's wants.
Example: People buy and use a variety of *goods,* such as clothing, food, cars, houses, household appliances, bicycles, toys, books, computers, and tablets.

Governmental context: A setting in which citizens exercise rights and responsibilities through government or in response to government.
Example: Citizens act in a *governmental context* when they vote, serve on juries, enlist in the military, or seek to influence the government through protest and activism.

Historical context: The setting, background, or environment in which a specific historical event or process occurred, which can include cultural, political, social, intellectual, economic, and other factors.
Example: The Chicago Haymarket affair of 1886 occurred within the *context* of rapid industrialization, massive immigration of Eastern and Southern Europeans to the United States, and the formation of labor organizations.

Historical time period (historical era): A distinct segment of time whose beginning and end are marked in some way by significant developments or events. Different historians segment historical events and processes into periods or eras differently, depending on what they see as important. This segmentation can also be referred to as "periodization."
Example: The Civil War *time period* is typically studied in U.S. history classes, but the determination of its starting and ending dates depends on which events seem most significant. The typical starting date in historical accounts is the bombardment of Fort Sumter on April 12, 1861, and the typical ending date is April 9, 1865, when General Robert E. Lee surrendered. On the other hand, Southern states had already established the Confederacy in February 1861, and the surrender of other Confederate forces took place later than the surrender of Lee. In addition to examining these potential starting and ending points, an inquiry into longer-term causes can be launched by asking the compelling question, "When did the Civil War Begin?" (The Missouri Compromise? The 3/5 Compromise in the writing of the U.S. Constitution?) Another compelling question—"When Did the Civil War End?"—could examine interpretations of the point at which the Civil War can truly be said to have ended, the determination of which depends on a judgment about the resolution of its most significant issues.

Human capital: The knowledge and skills that people obtain through education, experience, and training.
Example: *Human capital* includes reading, computation, and other skills acquired through education, as well as physical and intellectual abilities required for work, and on-the-job training.

Human-induced environmental change: Environmental changes brought about by human activities on scales that can range from the local to the global.
Example: Human activities involve many actions and processes that result in *environmental changes*. These may include urban sprawl, deforestation, agricultural development, industrialization, water control structures, energy production, and the extraction of natural resources.

Human problem: Any serious problem facing human beings.
Example: War is a *human problem*.

Human rights: Rights or freedoms possessed by all people by virtue of their being human.

Example: If freedom of speech is a *human right*, then no human being should be denied freedom of speech.

Human settlement: A location where people have built structures to use as permanent or temporary living areas.

Example: A *human settlement* or populated place may range in size from a few dwellings located together at a rural crossroads to large cities with surrounding urbanized areas, such as Mexico City or Toronto.

Human system: A system for organizing human behavior through linked and interrelated processes and structures. Demographic, economic, political, social, and cultural structures are examples of major human systems. Through these systems, humans interact to acquire and allocate needed resources for sustaining life within and among various societies in different regions on Earth.

Example: Human population dynamics are influenced by cultural beliefs about the roles of men, women, and children in society. Similarly, economic structures allocating resources and the political rules governing decision making have effects on the population and the quality of life of a society. Individuals learn from, respond to, and influence the *human systems* they inhabit.

Incentive: Perceived benefit that encourages certain behaviors.

Example: Profits are *incentives* to start business. Wages are *incentives* to work.

Income distribution: The way in which the nation's income is divided among families, individuals, or other designated groups.

Example: In 2009, the share of aggregate income earned by households in the United States ranged from 3.2 percent for the lowest fifth of households to 50.3 percent for the highest fifth of households.

Inflation: A general, sustained upward movement of prices for goods and services in an economy.

Example: Prices paid by the typical consumer increased by an average of 2.5% annually from 2003 to 2012.

Institution: A formal structure or organization that is based on a strong set of norms and interests and governs people's behavior.

Example: Both the United States Congress and the family are *institutions*.

Intended audience (of a historical source): The desired recipient(s) of a historical source. This is sometimes clear, as in a letter written to a particular person or a speech given to a particular audience, but it is sometimes necessary to infer the desired recipient from the source and its context.

Example: Because of the ways in which the 1936 film *Modern Times* uses characters and techniques from his earlier, successful films, we can tell that Charlie Chaplin *intended* a large, movie-going *audience* to view it.

Interest: The price of using someone else's money. When people place their money in a bank, the bank uses the money to make loans to others. In return, the bank pays interest to the account holder. Those who borrow from banks or other organizations pay interest for the use of the money borrowed.

Example: Banks pay savers *interest* because banks use savers' money to make loans to other customers. Borrowers pay banks *interest* on loans because the borrowers are using others' money.

Investment in human capital: The efforts of people to acquire or increase human capital. These efforts include education, training, and practice.

Example: Attending trade school after high school, going to college, obtaining on-the-job training, and the provision of economics workshops by a school district for its teachers are all examples of *investment in human capital*. Learning to read, write, compute, and think are *investments in human capital*. Practicing a sport or improving the ability to play a musical instrument are *investments in human capital*.

Investment in physical capital: An addition or additions to the stock of equipment and structures that are used to produce goods and services.

Example: Examples of an investment in *physical capital* include a firm building a new manufacturing plant, a grocery store adding a new wing for its produce department, and an insurance company purchasing new computers for its offices.

Key constitutional provisions: Fundamental ideas included in a constitution.

Example: The separation of powers, federalism, and the right to a speedy trial are all key *constitutional provisions* of the U.S. Constitution.

Laws: Rules enacted by a legislature.

Example: By *law* in a number of states, a person cannot hold an adult driver's license until the age of 18.

Limitations in the historical record: Gaps or inadequacies in the evidence available for examining a historical event or development that result from the loss or destruction of evidence, or from evidence never having been created in the first place.

Example: Although we know the names of a few Roman gladiators from mosaics and written accounts, most of them have been lost. No one thought to record details about them as a group at the time, nor did anyone interview them to get their opinions. Because of these *limitations in the historical record* we will never be able to know how many of the gladiators were slaves, or what they thought about fighting.

Limits (of government): Actions a government may not take. The concept of limits is based on the idea that the government should have a limited role and is not supposed to interfere in all aspects of life. Students should be aware that reasonable people disagree about what the government may and may not do in the United States.

Example: The United States government may not establish a religion because of a *limitation* contained in the First Amendment.

Location: The position of a place, defined in terms of features such as site characteristics, accessibility, and connectivity.

Example: The position of a point on Earth's surface may be absolute, as expressed by means of a grid showing latitude and longitude, or relative, as shown by its *location* related to other points or places.

Long-term cause: Long-term causes are the factors, often intertwined, that result in the occurrence of a historical event or process.

Example: The *long-term causes* of World War I included the growth of nationalism in Europe, a series of alliances and treaties in which countries agreed to support one another, disputes over territory, a build-up of military forces on all sides, and rivalries for colonies and imperial trade.

Maker (of a historical source): The creator of a historical source. For written accounts, the maker is also often described as the author, although it can sometimes be complicated to determine the true maker of a document.

Example: In 1354, the Berber Muslim explorer Ibn Battuta began to dictate the story of the extensive travels he had made in Africa, Asia, and Europe over the previous twenty years to the scholar Ibn Juzaay, who wrote them down in a book generally called *Rihla* (the journey). Both Ibn Battuta and Ibn Juzaay can be seen as the *makers* of this historical source.

Map: A map is a representation of an area and is usually depicted on a flat surface. Maps describe spatial relationships of the specific features represented.

Example: *Maps* are made and used for different purposes. Reference *maps* such as topographic maps, may depict a wide variety of features on Earth's surface, including landforms, water bodies, and buildings. Thematic *maps* are topical and show the distribution of features and conditions based on data such as income levels, health, or incidence of diseases in various locations. Mental *maps* are the *maps* we have in our minds of places we have experienced.

Marginal Principle: Marginal means *extra*, *additional*, or *incremental*. People make decisions by comparing the marginal (extra) benefits of their options to the marginal (extra) costs of their options. One example would be comparing the marginal cost of hiring another worker with the marginal revenue that the worker provides. Alternatively, it might include decisions to work an hour of overtime versus spending that hour on a home project.

Example: I can spend one more hour studying for a final exam in English literature. I know that the hour might help me earn a 90% rather than an 80% grade. I also know that to earn an A, I must score 100% on the final. On the other hand, I could spend an extra hour studying for my mathematics final. This will result in a 90% on my mathematics final, and a 90% on my math final will improve my overall grade from a B to an A. For me, a *marginal* hour spent preparing for my math final affords a higher *marginal* benefit. In deciding whether to hire another worker who earns $35 per hour, I have to know whether or not hiring that worker will result in at least $35 of additional revenue.

Markets: Buyers and sellers of a particular good, service, or resource.

Example: *Markets* exist for goods and services, such as hamburgers, lettuce, auto mechanics, engineers, stocks, and commodities.

Megacity: As defined by the United Nations, a megacity is an extensive urban area with a large and dense population that exceeds ten million people and 2,000 persons per square kilometer. The number of megacities is increasing as the human population expands and millions of people migrate from rural to urban locations.

Example: Contemporary *megacities* include Tokyo, New York, São Paolo, Seoul, Mexico City, Mumbai, Lagos, and Shanghai.

Modify an environment: Human actions that change natural elements and/or physical systems.

Example: Historically, humans have *modified environments* by selecting certain plants and animals to domesticate, clearing land for agriculture, building dams to impound water for later uses, erecting small and large settlements, and extracting resources for energy and the production of goods.

Monetary policy: Federal Reserve System policies that affect the supply of money and credit in the U.S. economy.

Example: In 2012, the Federal Reserve Open Market Committee announced that the Federal Reserve would continue to purchase bonds in order to expand the money supply, keep interest rates low, and encourage spending in the economy.

Money: Anything widely accepted in exchange for goods, services, and resources.

Example: Historically, food, products, and resources such as silver and gold have been used as *money*. Today, countries use *fiat money*—money that is useful because it is backed by a country's government and because people are willing to accept it in exchange for goods, services, and resources.

Movement: Over time, physical and human phenomena change locations on Earth's surface.

Example: Physical phenomena, including ocean currents and air masses, continually *move* across Earth's surface. Humans *move themselves* by traveling from place to place, *move ideas* by communicating across long distances, and *move goods* by land, water, and air transportation. Enduring patterns of *movement* may be formed when people in different places interact frequently using the same methods of transportation or modes of communication.

Multi-tiered timeline: A timeline with multiple layers, each of which includes a different set of related events. A multi-tiered timeline allows students to see the complex context and causes of historical events and to recognize that the different topics they study happen contemporaneously, and may influence one another or be inextricably related.

Example: In portraying the causes of World War I, a timeline might include *multiple tiers* with each tier representing a different set of causes. One tier might include events related to nationalism. Another tier might include events related to industrialization. Yet another tier might include events related to imperialism.

Natural disaster: An event in the physical environment that is destructive to human life and property.

Examples: *Natural disasters* occur in Earth's environmental hazard zones as a result of floods, hurricanes, volcanic eruptions, earthquakes, droughts, tornados, landslides, and other destructive events that alter ecosystems and dislocate human populations and their activities. These events may devastate large regions, causing many deaths and lasting damage to ecosystems and human communities.

Natural hazard: A risk situation occurring in nature that may cause harm to humans and ecosystems. Most places are vulnerable to one or more natural hazards.

Example: *Natural hazards* occur in many forms. In some instances, these are geological, such as earthquakes, volcanic eruptions, and massive landslides. They may also be climate-related, such as tornados, hurricanes, droughts, and climate change.

Natural resources (land): Components of the natural environment that can be used to produce goods to meet the material needs of a population.

Example: *Natural resources* include water, trees, coal, minerals, soil, and natural gas.

Nongovernmental context: A setting in which citizens may act that is not created, managed, or owned by a government.

Example: *Nongovernmental contexts* in which citizens exercise rights and responsibilities include their families, neighborhoods and communities, religious congregations, associations, and communications media, such as newspapers or the Internet.

Origin: The point of origination of an original social studies source, which can include its cultural or historical context.

Example:The *origin* of the Waldseemuller map was early 16th century Europe. Martin Waldseemuller and his associates created the map in 1507 while Waldseemuller was working in the Gymnasium Vosagense, located in St. Dié in Lorraine (at that time part of the Holy Roman Empire).

Personal values: Ethical and moral commitments that guide individuals' actions and interpersonal relationships.

Example: *Personal values* include empathy, integrity, self-reliance, generosity, trustworthiness, and creativity.

Perspective: The ideas, attitudes, and beliefs of people at a given time in the past or present, also called point of view.

Example: A belief in racial hierarchy was one element of the *perspective* of European imperialists in the nineteenth century, which influenced their interactions with indigenous populations around the world.

Physical system: A collection of entities that are linked and interrelated in a stable structure. In geography, an ecosystem is a physical system of major interest. An ecosystem is made up of living organisms and other components, along with their environment, including air, water and soils.

Example: As *physical systems*, ecosystems vary in scale but usually occupy limited spaces. Networks of interactions among organisms and between organisms and their environment define ecosystems. A tidal pool is a single ecosystem. Sometimes the entire Earth may be considered one ecosystem.

Place: A location having distinctive features that give it meaning and character and distinguish it from other locations.

Example: People who build and inhabit a *place* give it many layers of personal and social meaning. Humans develop strong attachments to their homes and home *places*, and identify with the people and environment of those locations.

Political institution: An institution that exercises or seeks to exercise governmental power.

Example: Political parties and school boards are *political institutions.*

Political problem: Any problem facing a political institution, including an unresolved disagreement or a failure to govern effectively.

Example: The failure of the state legislature to pass a budget this year is a *political problem*.

Political system: The form of a government.

Example: A democratic republic, a monarchy, and a dictatorship are different *political systems.*

Population: A group of individuals that may change over time in its numerical size, age structure, gender structure, ethnic composition, and spatial distribution.

Example: Each country has a *population* distributed over its territory. Human *populations* vary in their settlement history and methods of interacting with the environment. Changes in the composition and structure of *population* may affect political and economic relationships within a country and beyond.

Powers (exercised by governments): Actions a government may legally take to compel citizens, organizations, or others to comply with government instructions and orders.

Example: The *powers of government* generally include taxing, regulating industry, prosecuting crimes, and declaring war, although there can be considerable disagreement over how far these powers should extend.

Price: The amount a seller receives and a buyer pays for a good or service.

Example: Stores place *price* tags on products or place signs near products indicating their *price*. Restaurants list *prices* in menus. Wages and salaries are also *prices;* businesses tell people what their hourly wage will be or what their annual salary will be.

Procedural: A procedural text or product describes a specific process with attention to the proper sequence and relationship among steps or parts in the process.

Example: A description of how a bill becomes a law is a *procedural* description.

Process: A series of related events or developments that unfold in time. Processes may also be of various lengths.

Example: Industrialization is a *process* that began in the eighteenth century, involving technological, economic, and other factors, and leading to changes in every aspect of life.

Productivity: The ratio of output per worker per unit of time.

Example: Bonnie owns a bakery. Her employees are able to produce 48 chocolate chip cookies each per hour. She purchases a new oven that bakes cookies in half the time. As a result, her workers' *productivity* increases to 96 chocolate chip cookies per worker per hour.

Profit: The amount of revenue that remains after a business pays the costs of producing a good or service.

Example: It costs Bonnie 42 cents (wages, ingredients, electricity, water, sewer, and other overhead) to produce 1 chocolate chip cookie. She is able to sell each cookie for 50 cents. Her *profit* per cookie is 8 cents.

Property rights: The ability of an individual to own and exercise control over a resource.

Example: People are able to own and exercise control over land, cattle, chickens, factories, and other resources and means of production

Purpose (of a historical source): The reason a historical source was produced. The maker of the source may state an explicit purpose, or analysts of the source may later infer its purpose. Sometimes the purposes stated by the maker and those inferred by later historians are very different from each other; historians may also disagree with each other about the purpose of a source.

Example: During the Renaissance, European city governments issued laws limiting what people could spend on weddings, stating that the *purpose* of these laws was to restrict wasteful spending. Later historians studying these laws have also determined that their *purpose* was to prohibit people from buying products made outside the city and so promote local industries, and also to make distinctions between social classes sharper. Some historians assert that a *purpose* of these laws was to control spending by women that the city leaders saw as frivolous, while other historians assert that men made most of the decisions regarding spending on weddings, so that limiting women's spending was not one of the purposes of these laws.

Real interest rate: The nominal or stated interest rate adjusted for inflation.

Example: If the nominal interest rate on a loan is 2% and inflation for the year is 2%, the *real interest rate* is zero. If the nominal interest rate is 5% and the inflation rate is 2%, the *real interest rate* is 3%.

Region: An area with one or more common physical or cultural features that give it a measure of homogeneity and distinguish it from surrounding areas.

Example: A *region* may be considered formal, functional, or vernacular. A formal *region* is homogeneous in certain characteristics, such as having the same vegetative cover or soil type. A functional *region* is characterized by a center of population or activity interacting with a surrounding area. A vernacular *region* may emerge out a people's sense of belonging and identity, and may be expressed by popular regional terms, such as Dixie or Appalachia.

Resources: Resources, sometimes called productive resources, are factors of production or inputs used to produce goods and services. Resources fall into four broad categories: natural (e.g., land), human (labor), capital, and entrepreneurial ability.

Example: Natural *resources* include water, trees, coal, minerals, soil, and natural gas. Examples of human *resources* include engineers, mechanics, nurses, doctors, lawyers, teachers, and plumbers. Capital *resources* include tools, buildings, equipment, and machines.

Responsibilities (of citizens in the U.S.): The obligations that a person must fulfill to be a good citizen. There can be disagreements about these obligations.

Example: It is commonly believed in the United States that citizens have the *responsibility* to vote, to serve on a jury when called, to obey a just law, to serve in the military when drafted or needed, and to protest unjust laws.

Rights (of citizens in the U.S.): These rights include those enumerated in the Bill of Rights as well as other rights not listed there.

Example: *Rights* protected under federal and state laws today include the *rights* to vote, to receive an adequate education, to bear arms, and not to be assigned to racially segregated schools.

Role (of citizens): The categories of actions taken by citizens to fulfill their responsibilities to their political community.

Example: Citizens play an important *role* by educating young people to promote the common good.

Rules: Regulations or norms governing actions or procedures.

Example: A *rule* in our classroom is: "You can't say, 'You can't play!'"

Rural: A geographic area that is less densely settled than cities or towns, and has less intensive land use. Agriculture is a common form of land use in rural areas.

Example: Landscape nurseries and local organic farms are often located where land is available in sparsely settled areas outside of cities.

Satellite images: Images produced by a variety of sensors including radar, microwave detectors, and scanners that measure and record electromagnetic radiation.

Example: Data from *satellite images* may be turned into digital or electronic forms that can be reconverted into imagery resembling a photograph. The digital data may then be used to create maps and other visualizations.

Scale: The relationship between distance on a map and the corresponding distance on Earth's surface.

Example: The *scale* 1:1,000,000 means that one unit on the map represents 1,000,000 similar units on Earth's surface.

Scarcity: The condition that exists because there are insufficient resources to produce goods and services to meet everybody's wants.

Example: Most of us would like to have more goods and services for ourselves and for our community; however, given our current resources, we cannot have all of the goods and services we want. As a result, we must make choices.

Secondary interpretation (or secondary work or secondary source): An analysis of a historical event or process, or of a historical figure, that uses historical sources and is usually produced after the event or process. The line between a primary source and a secondary work is not always sharp.

Example: The textbook for any course is a *secondary interpretation,* as are most published works of history, biographies, and encyclopedias. Former British prime minister Winston Churchill's history of World War II is both a *primary source*, because he was directly involved in some of the events he describes, and a *secondary work*, because he uses historical sources of many different types to tell the story of developments in which he was not directly involved.

Services: Actions that can satisfy people's wants.

Example: Transportation provided by bus drivers, car repair provided by mechanics, and haircuts provided by barbers and hair stylists are examples of *services*.

Source: The materials from human and natural activities that can be studied and analyzed. Sources can be written, visual, oral, or material. Historians often also use the terms *accounts* and *documents* to refer to sources.

Example: The *sources* that can be used to study the powered flight experiments of Orville and Wilbur Wright in North Carolina in December of 1903 include Orville Wright's diary, a telegram sent by the Wright brothers to their father immediately after the flight, Virginia and Ohio newspaper articles on the flight, and a letter written by Orville three weeks after the flight.

Spatial: Pertains to space and spatial relationships on Earth's surface.

Example: The scale, organization, and uses of spaces on Earth vary. A neighborhood occupies and uses a small space in a nation's entire collection of settlements.

Spatial connection: Contact over space resulting in flows of ideas, information, people, or products among places.

Example: People in many parts of the world are linked together by communications technology moving information over vast distances in a short time via cell phones, the Internet, and radio and television transmissions.

Spatial diffusion: The spread over space and through time of natural phenomena, people, ideas, technology, languages, innovations, and products.

Example: Infectious diseases may spread in human populations through direct contact with infected persons, food, or insects, or through airborne and waterborne methods. Use of the automobile spread throughout the United States and many other parts of the world during the 20th century as people adopted it for daily transportation. Numerous languages and religions spread to different world regions during past land and water explorations by members of different national groups.

Spatial distribution: The spread and arrangement of physical and human phenomena on Earth's surface.

Example: A large number of service stations, restaurants, and hotels are found along interstate highways in the United States**.** Extensive wheat and corn farming areas may be developed in locations with good soils and sparse population.

Spatial pattern: Objects and phenomena on Earth's surface are often arranged in lines, areas, or clusters of points that are related to the locations and placements of other phenomena. These arrangements may occur in an orderly and observable manner.

Example: Productive agriculture is likely to occur where soils are fertile and sufficient water is available. In such cases, the *spatial pattern* displayed in productive agriculture is connected to the *spatial patterns* of soil fertility and water supplies.

Specialization: The production of a single good or service or a limited number of goods and services in order to increase productivity.

Example: Elementary educators, pediatricians, nurse practitioners, electricians, plumbers, patent lawyers, and economics professors all *specialize* in the production of a particular good or service.

Spending: The expenditure by people of some or all of their income to purchase goods and services.

Example: All people *spend* some of their income on goods and services, such as food, clothing, housing, insurance, transportation, appliances, and entertainment.

Suburbs: Suburbs are less intensively developed areas than central cities. They contain residential developments that may be an outlying part of a city or a separate community located within commuting distance of a central city.

Example: *Suburbs* are located adjacent to cities in many regions of the world. Transportation technology, especially railways and the automobile, helped to extend suburbs ever farther out from central cities. Over time, many centers for goods and services have been located in rapidly growing suburbs.

Supply: The quantity of a good or service that producers are willing and able to sell at all possible prices during a certain time period. Generally, producers are willing to produce and sell more of a product at higher prices than they are at lower prices.

Example: An automobile repair shop is willing to produce more brake repairs and oil changes at a higher price than at a lower price. If the owner receives a higher price for each brake repair, she can stay open an hour later and pay mechanics to do the work. At the lower price for brake repair, she is unwilling to provide additional brake repair service by doing so.

Supporting question: Supporting questions are intended to contribute knowledge and insights to the inquiry behind a compelling question. Supporting questions focus on descriptions, definitions, and processes about which there is general agreement within the social studies disciplines, which will assist students to construct explanations that advance claims of understanding in response.

Example: What were the regulations imposed on the colonists under the Townsend Acts?

System of government: The combination of all the branches of government (legislative, executive, and judicial), other important political institutions, and the customs, laws, and rules that are the basis for the government of a society.

Example: Although not mentioned in the Constitution, political parties are now part of the U.S. *system of government*.

Technical: A technical explanation is one that describes the mechanics of an activity or process.

Example: A description of the geographic term *plate tectonics* would require a *technical* explanation.

Technological disaster: An event that results from the failure of a human built system and is destructive to human life, property, and community well-being.

Example: The April 1986 nuclear incident at Chernobyl in Ukraine resulted in nuclear contamination in varying intensities over large areas of Earth's surface. This event caused numerous human deaths and many long-term, life-threatening illnesses.

Technological hazard: A risk situation resulting from human activity that may cause harm to humans and ecosystems. The construction and use of some technologies may pose serious threats to the well-being of humans and ecosystems.

Example: Energy production involves technologies that include nuclear power and the extensive extraction of energy resources such as coal, petroleum, and natural gas. The physical plants and processes involved in energy production pose risks of industrial accidents and pollution that may cause harmful effects on ecosystems and human settlements.

Time periods of different lengths (see also **Historical time period**): Time can be segmented into periods of different lengths, depending upon the scale and meaning of events, and the relationships between them.

Example: The history of the women's suffrage movement in the United States might focus on the *time period* from the 1840s to the 1920s, beginning with the time at which advocates of women's suffrage first began to organize and ending with the ratification of the 19th Amendment granting women the right to vote; or it might focus on a longer *time period* starting with colonial times, when a few female property owners voted, and continuing beyond the 1920s to include the women's movements of the later twentieth century.

Trade: The exchange of goods, services, or resources for other goods, services, or resources, or for money.

Example: Workers normally *trade* their labor for wages and then use that income to purchase goods and services.

Transportation network: A pattern of links that connect roads, rails, pipelines, aqueducts, power lines, or other structures that permit vehicular movement or the flow of a commodity.

Example: A *transportation network* may combine different modes of transport, such as walking, cars, trains, ships, and aircraft, creating multi-modal trips for people or goods. Trucks on interstate highways in the United States may carry goods from ocean-going vessels to freight trains and to various market centers.

Triggering event: A triggering event is an event, sometimes unexpected, that has an immediate consequence, causing another event or process. Not every event or development has a single triggering event.

Example: The *triggering event* for World War I was the assassination of Archduke Franz Ferdinand of Austria, the heir to the throne of Austria-Hungary, by a Serbian nationalist in Sarajevo in June 1914. One month later, Austria-Hungary declared war on Serbia, and declarations of war by other countries quickly followed.

Unemployment: A condition where people at least 16 years old are without jobs and actively seeking work.

Example: The number of *unemployed* people in the U.S. reached 15,382,000 in October 2009.

Unintended consequences: Unforeseen costs or benefits.

Examples: In 1867 Secretary of State William Seward purchased Alaska from Russia for $7 million, which was roughly 2 cents per acre. The purchase was ridiculed in Congress as Seward's folly. An *unintended consequence* of the purchase was the later benefit of gold deposits and oil supplies.

We impose minimum wage laws in this country to afford low-skilled workers a better income. An *unintended consequence* of this policy may be higher unemployment rates for young minorities, as employers restrict their hiring to cover their higher labor costs.

Urban: An urban region is a built-up region characterized by a higher population density and more buildings, transportation systems, and other human-built features than in surrounding areas.

Example: *Urban* places offer a greater variety of goods, services, and activities than less densely populated surrounding regions. Megacities such as New York, Moscow, Cairo, Nairobi, Tokyo and many smaller cities are all defined as *urban* places.

Values: Ethical or moral standards for evaluating attitudes and behavior.

Example: The *values* associated with open discussion of a controversial issue should include the demonstration of equal respect to all participants and the possibility of reaching a consensus through listening and negotiation.

Wages: Income earned for providing human resources (labor) in the market. Wages are usually computed by multiplying an hourly pay rate by the number of hours worked.

Example: Plumbers, electricians, carpenters, store clerks, and car assembly workers earn an hourly *wage* for work that they perform.

C3 Framework Writing Team BIOGRAPHICAL SKETCHES

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Kathy Swan is an associate professor of curriculum and instruction at the University of Kentucky. Her research focuses on standards-based technology integration, authentic intellectual work, and documentary-making in the social studies classroom. Swan has been a four-time recipient of the National Technology Leadership Award in Social Studies Education, innovating with web-based interactive technology curricula including the *Historical Scene Investigation Project, the Digital Directors Guild*, and *Digital Docs in a Box*. She is co-author of the forthcoming book *And Action! Doing Documentaries in the Social Studies Classroom* and children's series *Thinking Like A Citizen*. She is also the advisor for the Social Studies Assessment, Curriculum, and Instruction Collaborative (SSACI) at the Council of Chief State School Officers (CCSSO) and is the co-editor of *Contemporary Issues in Technology and Teacher Education—Social Studies*.

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Stephen Buckles has served on the economics faculty of Vanderbilt University as a senior lecturer or professor since 1994. He is senior advisor for programs for the Council for Economic Education, and is a former president of the National Council on Economic Education and the National Association of Economic Educators. He played a central role in the creation of the original Voluntary National Content Standards in Economics and is a member of the Standing Committee of the National Assessment of Educational Progress (NAEP) Economics Assessment.

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Jim Charkins is the executive director of the California Council on Economic Education and professor emeritus of economics at California State University, San Bernardino. He served on the writing team for the Voluntary National Content Standards in Economics, has developed a number of teaching materials for economics education, and was the economics editor of *The Wall Street Journal Classroom Edition Teacher's Guide* for nine years. He is the 2011 recipient of the national Bessie Moore Award for outstanding service and dedication to excellence in economic education and the 2012 Hilda Taba Award, the California Council for the Social Studies' highest honor.

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Susan W. Hardwick is professor emerita of geography at the University of Oregon and a past president of the National Council for Geographic Education. She specializes in geographic education and the geography of immigration, national identity, and place in the North American context. She has authored or co-authored 11 scholarly books and university and secondary level textbooks as well as numerous refereed journal articles. Hardwick is also known for her role as co-host of the Annenberg/PBS series *The Power of Place* (2012) and her contributions as a writer and editor to *Geography for Life: National Geography Standards* (1994).

John Lee is an associate professor of social studies education at North Carolina State University. His scholarly work focuses on pedagogies and tools for using digital historical resources in K-12 and teacher education settings as well as theories and practices related to new literacies. He directs the Digital History and Pedagogy Project (http://dhpp.org) and co-directs the New Literacies Collaborative (http://newlit.org). In addition, he is interested in theory and practice related to global learning and democratic education. He is the author of *Visualizing Elementary Social Studies Methods*.

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Meira Levinson is associate professor of education at Harvard University, where she teaches courses on civic and multicultural education, urban education, social studies methods, and justice in schools. She taught middle school for eight years in low-income schools. Her most recent books include *No Citizen Left Behind* (2012) and *Making Civics Count* (2012, co-edited).

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Chauncey Monte-Sano is associate professor of educational studies at the University of Michigan. A National Board Certified teacher, her research examines how history students learn to reason with evidence in writing, and how their teachers learn to teach such historical thinking. She has won research awards from the National Council for the Social Studies and the American Educational Research Association. She has twice won the American Historical Association's James Harvey Robinson Prize for the teaching aide that has made the most outstanding contribution to teaching and learning history. Her most recent award was for her book with Sam Wineburg and Daisy Martin, *Reading Like a Historian: Teaching Literacy in Middle and High School History Classrooms*.

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