

Review and Analysis of the Colorado Academic Social Studies Standards

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I. INTRODUCTION AND OVERVIEW

Colorado has an education improvement agenda, which has been encoded into state law, Colorado's Achievement Plan for Kids (Senate Bill 08-212), calling for the development of rigorous standards for students. The Colorado Department of Education (CDE) engaged in a year-long process to update its academic standards in English language proficiency and ten content areas, including social studies. The social studies standards were developed during the 2008-2009 school year, with full implementation in 2013-14.

The Colorado Department of Education remains committed to providing rigorous academic standards of the highest quality. The *College, Career and Civic Life (C3) Framework for Social Studies State Standards* was released by the National Council for Social Studies in 2013. CDE has requested third-party experts conduct a formal study to identify the quality of the social studies standards being implemented during the 2013-14 school year, and to determine how and to what degree Colorado's current social studies standards compare with C3 as well as the social studies standards of higher-performing countries and states. This will be considered the first step in the standards review cycle. The CDE requested assistance from WestEd (a subcontractor to the Central Comprehensive Center) in designing and conducting a crosswalk/study that would inform CDE regarding the alignment to or gaps between the Colorado Social Studies Standards and the C3 Framework and in addressing any changes to the current standards that may be considered in the future.

C3 Framework and the CAS-SS

In the 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 another critical element: preparation for civic life. Now more than ever, students need the intellectual power to recognize societal problems, ask good questions, develop robust investigations into those questions, 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 tools and methods for clear and disciplined thinking in order to successfully traverse the world of college, career, and civic life. Preparation for civic life is critical to sustain a democratic republic. Engagement in civic life requires knowledge and experience. All students should be aware of their changing cultural and physical environment; know the past; read, write, and think deeply; and act in ways that promote the common good. The goal of knowledgeable, thinking, and active citizens is universal. An essential element of social studies education, therefore, is experiential—practicing the arts of and habits of civic life. The C3 Framework is centered on the Inquiry Arc—a set of interlocking and mutually supportive ideas that frame the ways student 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 is important to note that the C3 Framework

focuses on inquiry skills and key concepts, and it guides—not prescribes—the choice of content for rigorous social studies standards.

The C3 Framework can provide guidance on the review of CDE 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 concepts outlined in the C3 Framework illustrate disciplinary ideas such as political structures, economic decision making, spatial patterns, and chronological sequencing that can help organize the content of the CDE Social Studies Standards.

Based on the request from CDE, WestEd and the Colorado Department agreed on the following scope of work:

WestEd would:

- Review Colorado social studies standards based on the following criteria:
 - *Depth & Breadth*: Do the CAS-SS grade level expectations describe sufficient and appropriate depth and breadth of concepts and skills within each standard, with respect to comparable C3 indicators? If not, what concepts and skills are missing? Are the grade level expectations free from extraneous content? If not, what concept and skills are extraneous?
 - *Rigor*: Do the CAS-SS grade level expectations describe concept and skill expectations of a reasonable and appropriate level for this grade span, with respect to comparable C3 indicators and external referents? Do the standards, grade level expectations communicate an appropriate level of rigor?
 - *Coherence*: Are the CAS-SS grade level expectations for each standard situated appropriately within the grade spans, with respect to comparable C3 indicators and external referents? Do the grade level expectations begin and end at appropriate points in the content?
- Provide a gap analysis, identifying specific concepts and skills missing in the Colorado’s Social Studies Standards in relation to the referents;
- Provide information and considerations for the state to use and refer to when it engages in its next review of the state’s social studies standards to include the overall strengths and limitations of Colorado’s Social Studies Standards with particular attention paid to the organization/structure, concept, skills, and rigor of the standards;
- Articulate options that would address the gaps in Colorado’s Social Studies Standards including the affordances and limitations of each;
- Deliver report including findings and considerations by October 2016; identify additional information that CDE could use when conducting the next revision of its social studies standards and plans for assessment in this content area.

CDE would:

- Provide WestEd with information related to Colorado’s Social Studies Standards;
- Partner with WestEd in the design, development and implementation of the crosswalk analysis;
- Partner with WestEd in determining which states and countries will be used for comparative purposes (in addition to C3).

The findings and recommendations from this review are intended to inform decision-making by the CDE during its social studies standards revision process. Periodic standards review is critical to help ensure that the concepts and skills students are expected to learn reflects the changing priorities, needs, and values of the state and society more broadly, and continues to prepare students for the challenges they will face in successive grades or post-secondary endeavors.

Overview of Methodology

The standards review involves the following two components:

- Review of CAS-SS with C3 to determine the degree to which the standards demonstrate alignment with respects to depth & breadth, coherence, and rigor.
- Review and comparison of respected external referent standards to better understand overall strengths and limitations of the CAS-SS, with particular attention paid to the organization/structure and content of the standards

Key to the review, across all components listed, are the objective, third-party analysis and subsequent observations and recommendations related to reviewing the alignment of the CAS-SS to C3. Outcomes of the review are intended to inform and guide the work of those revising Colorado’s social studies standards.

The WestEd analyst who conducted the alignment review possesses extensive knowledge and skills in standards review and development, in social studies topic areas, K–12 curriculum, instruction, assessment, and alignment, as well as experience in the classroom. The analyst was trained in specific protocols designed to (1) articulate and operationalize the criteria and processes used to judge alignment quality and (2) ensure the accuracy and consistency of the application of the criteria across social studies topic areas and grades. The protocols and related criteria were applied systematically to each CAS-SS content area standard in comparison to C3.

For the review of internal quality, the specific criteria applied to the analysis of each standard included *Depth & Breadth, Rigor and Coherence*. The alignment to C3 was rated holistically in considering each criterion (Depth & Breadth, Rigor and Coherence) according to the following designations: Fully and Partially.

For the analysis of the external referent standards, the following criteria were used:

- *Organization/Structure*: Similarities and differences in grade articulation, hierarchy of standards, number of standards, and design/format.
- *Concepts and Skills*: Similarities and differences in standards scope and sequence, grade spans, and wording.

For each criterion (Organization/Structure, Content), the analyst recorded a holistic rating reflecting the similarity of the external referent standards to the CAS-SS (i.e., as Similar or Different).

The outcomes of this analysis have implications for CDE’s consideration during its CAS-SS revision process. It is intended to provide the CDE with an objective analysis, observations, and recommendations that can inform and guide the work of those revising Colorado’s social studies standards.

Organization of the Report

This report presents the methodology, findings, and recommendations from the crosswalk and alignment review. The complete report is organized as follows:

- Section I: Background. The background and purpose for the study.
- Section II: Methodology. The processes used and criteria applied during each step in the crosswalk and alignment review are described.
- Section III: Alignment Review Findings and Recommendations. Study findings analysis, and specific recommendations for alignment are presented.
- Section IV: References. References and documents reviewed in the analysis.
- Section V: Appendices. Alignment ratings and comments from the analyst are provided for each standard in all grades for each social studies topic area.

II. METHODOLOGY

This section describes the research-based processes and protocols used during WestEd’s crosswalk of the Colorado Academic Standards for Social Studies (CAS-SS) with the recently released C3 Framework. Findings from the crosswalk were used to develop observations of the current CAS-SS and objective recommendations for improvement of the content of the CAS-SS. These recommendations are intended to help guide decision-making during the standards revision process.

Alignment Review of the Colorado Academics Standards for Social Studies with the C3 Framework

For this step, the analyst was asked to apply a protocol focused on conducting a crosswalk of the CAS-SS with the recently released C3 Framework. The CAS-SS is organized into Grade Level Expectations (GLE) articulated across individual grades from preschool-grade 5 and in middle and high school. The unit of analysis and reporting for this step was

the CAS-SS Grade Level Expectation at each grade span, along with the 21st Century Skills and Readiness Competencies that accompany each Grade Level Expectation in a content area standard. These two statements were used to interpret the state's intent with regard to the development and application of the knowledge and skills described in the standards. The C3 Framework is organized into four dimensions; Dimension 1: Developing questions and planning inquiries, Dimension 2: applying disciplinary concepts and tools, Dimension 3: Evaluating sources and using evidence, Dimension 4: Communicating conclusions and taking action. Each dimension has a specific set of subsections or categories. Under each subsection are grade banded indicators. Each CAS-SS content area standard was reviewed and compared with appropriate grade banded indicator from the C3.

Alignment Review Criteria. The WestEd analyst applied general evaluation criteria to this review of standards. The general criteria, explained in greater detail below, were depth & breadth, rigor and coherence. These criteria, supported by research and best practices at the state and local levels, (see, for example, Webb, 1997, Rabinowitz, Roeber, Schroeder, & Sheinker, 2006, among others), were adapted through discussions with the CDE to ensure the information in the findings would be appropriate for Colorado's context, and thus maximally useful. Criteria for each dimension were designed as responses to holistic questions of sufficiency and appropriateness that were applied by the analyst as she reviewed each CAS-SS GLE statement.

- *Depth & Breadth:* Do the CAS-SS GLE statements describe sufficient and appropriate depth and breadth of concepts and skills within each standard, with respect to comparable C3 indicators? If not, what content is missing? Are the GLE statements free from extraneous content? If not, what content is extraneous?
- *Rigor:* Do the CAS-SS GLE statements describe concept and skill expectations of a reasonable and appropriate level for this grade span, with respect to comparable C3 indicators? Do the standards and grade level expectations communicate an appropriate level of rigor?
- *Coherence:* Are the CAS-SS GLE statements for each standard situated appropriately within the grade spans, with respect to comparable C3 performance expectations? Do the GLE statements for each standard begin and end at appropriate points in the content?

The alignment process began by evaluating each component of the C3 Framework and drawing out key criteria that inform the level of match. The key criteria that were considered to determine standard-to-standard match and to code these matches were as follows:

Depth and Breadth:

- Content expectations of the standard

Rigor:

- DOK required

- Key words signifying DOK

Coherence

- When key ideas were introduced and how they were built on from grade to grade

The alignment of the CAS-SS to the C3 Framework was conducted on a grade-by-grade basis. The C3 Framework is organized by grade band (K–2, 3–5, 6–8, and 9–12). The CAS-SS are organized by grade through grade 8 and includes a set of 9-12 high school concepts and skills by content area. To accommodate these differences in organization, the analyst performed the alignment by matching the expectations of the set of CAS-SS with the indicators presented in each C3 dimension. For each CAS-SS GLE statement, the analyst independently determined if there was a corresponding C3 indicator, and to what degree each statement was aligned to the indicator. The analyst used the evidence outcomes for each Grade Level Expectation to provide further clarification of the meaning of the grade level expectation. The evidence outcomes were individually reviewed for depth & breadth and rigor to make a final determination regarding the alignment of the grade level expectation. The charts in the appendices reflect this review. If a majority of the evidence outcomes under a grade level expectation were identified as fully aligned the grade level expectation was labeled as fully aligned. If a majority of the evidence outcomes were either partially or not aligned the grade level expectation was labeled as partially aligned. If none of the evidence outcomes were aligned then the grade level expectation was labeled as not aligned.

Rating sheets were used to guide the analysis and reporting of holistic findings. The GLE statements were rated as meeting each criterion using the following holistic designations and scale: “Fully” (F) and “Partially” (P). In any instances where a GLE statement aligned completely with a specific C3 indicator, it was noted with an F for that indicator. In any instances where a GLE statement aligned with only a part of a specific C3 indicator, it was noted with a P for that indicator. GLE statements that were rated as P were followed by a “D” or “R” if there was partial alignment with a corresponding, grade-appropriate indicator, to identify which criterion (D - Depth & Breadth or R - Rigor) was most significant in determining the P rating. In any instances where a GLE statement was not aligned with a specific C3 indicator, it was noted with a blank space for that indicator.

In addition to determining if each GLE statement was aligned to a C3 indicator, any indicator that was not addressed at all in the CAS-SS was also noted. Indicators that are not addressed in the CAS-SS are noted under the MISSING section for each grade span/social studies content area in Appendix A. General areas of C3 that are not addressed in any notable way are also discussed in the findings and recommendations section.

Comparison of the Colorado Academics Standards for Social Studies to External Referents

The analyst systematically reviewed sets of external referent standards vis-à-vis the CAS-SS using the criteria described below. The unit of analysis and reporting for this step of work was the CAS-SS content area standard, specifically the GLE statements. The GLE statements for each content area standard were used to interpret the state's intent with regard to the development and application of the knowledge and skills described in the standards. The unit of analysis for the external referents was the most comparable level in each set of referent standards. For the purposes of review and presentation, data were organized using the current structure and sequence of the CAS-SS.

The External Referents. CDE selected the external referents to which the CAS-SS would be compared. Included in the selection criteria was whether the standards were from states or countries respected for their strong overall academic performance and quality of their standards. To enable maximal usefulness in guiding standards revisions, sets of standards were sought that would be relevant in all content areas. Additionally, it was hoped that by reviewing each set of external referent standards for multiple social studies content areas, the comparison would benefit from any cross-content elements or guiding philosophies that might not be apparent in any one social studies content area. To this end, they selected standards from the following entities:

- From another state: Alabama, Vermont, Ohio
- From another country: Finland

Criteria Used for Comparative Analyses. The external referent comparison was intended to serve as a holistic review of the similarities and differences between each external referent and the CAS-SS in its current 2009 form, as compared to similar analyses completed prior to the last revisions. These data may be used to inform the CDE during the upcoming CAS-SS revision process. Specifically, comparisons were documented for two criteria, organization/structure and content. Analysts' considerations for judging each are defined as follows:

- ***Organization/Structure.*** Analyst's considerations related to standards organization and structure included similarities and differences in grade articulation (standards articulated by individual grade, grade-span, course, etc.; cross-grade strands versus no repetition of content), hierarchy of standards (number of levels in standards, e.g., strand, standard, benchmark, indicator), number of standards (number of strands, standards, indicators), design/format (organization and structure of standards), and ways in which intended knowledge and skills are communicated.
- ***Concepts and Skills.*** Analyst's considerations related to standards concepts and skills included similarities and differences in standards scope and sequence (the depth and breadth of concepts and skills described in the standards), grade spans

(the sequencing and distribution of concepts and skills within and across the grade spans), and wording (specificity of language; focus on action verbs, knowledge, etc.).

Holistic Rating Scale. For each criterion, the analyst recorded a holistic rating reflecting the similarity of the external referent standards to the CAS-SS. These ratings were as follows:

- *Similar* — Referent standards are mostly similar to CAS-SS in substantive ways
- *Different* — Referent standards are mostly different from CAS-SS in substantive ways

In order to arrive at these holistic ratings, the analyst recorded descriptive comments on the specific similarities and differences between the CAS-SS and referent standards. Comments included rationale and evidence to support judgments and conclusions about the impact or relative importance of the differences (or in some cases, similarities). It is important to note that the referents have similarities and differences among one another, as well as with CAS-SS. However, no one approach is intended to be presented as necessarily more or less effective than another. Differences in structure or content of a state or country's standards may be qualitative, but may also be attributable to differences in history, purpose, and/or context. Thus, the implication is that a variety of approaches and combinations of approaches may be considered, should they be determined to be appropriate for Colorado.

III. ALIGNMENT REVIEW FINDINGS AND RECOMMENDATIONS

This section contains findings and recommendations related to the C3 alignment review and the external referent reviews for the analysis of the CAS-SS. Detailed review criteria can be found in the Methodology section of this report. A brief description of the criteria and guiding questions also are provided here for convenience.

Overall Findings

This section provides an overview of key findings, including areas of full, partial, and no alignment and a review of whether current CAS-SS provide students the opportunity to learn the knowledge, skills, and practices outlined in the C3 Framework.

Overall findings are as follows:

- **Strengths**
 - Early-grades CAS-SS include strong alignment to the civics and history indicators of the C3.
 - Across grade levels, the CAS-SS have an emphasis on geographical thinking, which connects clearly to Dimension 1 of the C3 Framework

- Across grade levels, most of the CAS-SS have at multiple matches to Dimension 2 of the C3 Framework. Matches increase with grade level.
 - CAS-SS include the concepts and skills needed to help students engage with the indicators outlined in the C3.
 - The CAS-SS has some strong concepts and skills that can be used that is not in the C3 Framework, like a focus on state and local government and public policy at the earlier grades and world history at the later grades.
 - The CAS-SS incorporates Personal Financial Literacy which has some connections to the C3 economics indicators.
 - CAS-SS and the C3 Framework tend to be concept and skills based, placing content decisions at the curricular level.
- **Gaps**
 - Overall, the C3 Framework requires a more rigorous DOK than the CAS-SS. Neither set of standards requires extended thinking/reasoning (DOK 4) until Grade 8.
 - Particularly in the elementary grades, CAS-SS tend to be more civics and geography based. Although CAS-SS content specificity remains strong throughout, content in the higher grades becomes slightly more conceptual.
 - For multiple CAS-SS, the content could be used to address the C3 expectations, but students would need to be asked to engage in a higher level of cognitive demand.
 - The C3 Framework emphasizes the importance of student inquiry and the development of questions that drive each student to be engaged. C3 provides the flexibility to address students’ driving curiosities, which then leads to understanding how and why civic, historical, economic, and geographic thinking are useful for examining questions.
 - The C3 Framework is more likely than CAS-SS to require that students’ understanding includes consideration of multiple perspectives and contexts.
 - Depth of concepts across disciplines can be an issue throughout the CAS-SS: for example, in first grade students are asked in history to “discuss common and unique characteristics of different cultures using multiple sources of information” while at the same time in geography they are asked to “recite address including city, state and country and explain how those labels find places on a map”. This is an example of the differing grain sizes within a grade across disciplines. Dimension 2 of the C3 attempts to create a balanced approach to the disciplines.
 - There are very few connections to Dimensions 1, 3 and 4 throughout the CAS-SS.
 - Communicating conclusions and taking informed action (Dimension 4 of the C3 Framework) is a weak area throughout CAS-SS. Dimension 4 prepares students to take action in their communities, and the CAS-SS do not currently include this in grades K-8.

- Content-specific details found in CAS-SS are not found in the C3 Framework. The content is used in the CAS-SS to support a clearer understanding of the concepts and skills in the GLEs. The C3 incorporates some specific content within the indicators but focuses on broader concepts and skills.

Although the guiding question was how the set of CAS-SS connected directly to the indicators of the C3 Framework, some CAS-SS standards did not align with any part of the C3. As CDE transitions to reviewing the social studies standards, these CAS-SS may not be needed. Some indicators of the C3 are not addressed by the current CAS-SS. As CDE begins to review standards, reviewing the C3 components not currently addressed could be helpful in ensuring full coverage of the inquiry framework of the C3. A list of C3 standards not addressed is included in Appendix A.

Alignment Review

As described in the Methodology section of this report, the CAS-SS GLE statements were reviewed for their quality according to three specific criteria: depth & breadth, rigor and coherence, in comparison to indicators provided in the C3 Framework. The scale used for evaluating each criterion was as follows: Fully (F) or Partially (P). General findings from these analyses are presented in Table 1 and specific alignment data can be found in the Appendices.

Table 1. Overall Alignment of CAS -SS Grade Level Expectations with C3 Indicators

K-2														
	D1		D2								D3		D4	
			Civics		Economics		Geography		History					
K-2	F	P	F	P	F	P	F	P	F	P	F	P	F	P
	1	1	4	4	3	2	6	2	3	0	0	0	0	0
Total	2/5		8/12*		5/13*		8/12		3/9*		0/4		0/8	
3-5														
	D1		D2								D3		D4	
			Civics		Economics		Geography		History					
3-5	F	P	F	P	F	P	F	P	F	P	F	P	F	P
	0	1	8	0	1	5	6	3	7	1	0	2	0	0
Total	1/5		8/14		6/15		9/12		8/14*		2/4		0/8	
6-8														
	D1		D2								D3		D4	
			Civics		Economics		Geography		History					
6-8	F	P	F	P	F	P	F	P	F	P	F	P	F	P
	3	0	6	6	2	3	5	1	12	2	3	0	1	0

Total	3/5		12/14		5/15		6/12		14/15*		3/4		1/8	
HS														
	D1		D2						D3		D4			
			Civics		Economics		Geography		History					
HS	F	P	F	P	F	P	F	P	F	P	F	P	F	P
	0	0	7	6	7	6	11	0	8	2	3	0	7	0
Total	0/5		13/14		13/15		11/12		10/17		3/4		7/8	

If ranked as partial and full across grades counted as a full in this chart

*Numbers account for those indicators that are only relevant to K-2 some begin in 3-5, 6-8 or 9-12

As evidenced in Table 1, there are a significant number of CAS-SS GLE statements that are aligned partially or fully to a specific C3 indicator at that grade level. Most noticeably, in civics and geography in K-2 and more evenly across content areas in 3-5. Middle school alignment is, however, much higher than in the elementary grades, although economics and geography alignment is noticeably lower than civics and history. There is more even alignment across content areas at the high school level.

The alignment review also indicates that there are significant gaps between Dimension 3 and 4 versus what is addressed in the CAS-SS GLE statements at early grade level. For example, in K-2 there are no connections, in 3-5 there are only 2, in 6-8 there are 4 and in high school there are 10.

Coverage of C3 indicators is significantly improved in middle school, although economics lagged noticeably in middle school. Similarly in high school, the number of D1 indicators that are unaddressed is noticeably less than in earlier grades. At almost every grade span, there are some components of the inquiry framework of C3 that are not addressed in the CAS-SS.

CDE asked to review standards for coherence in comparison to the C3 Framework. Table 2 highlights the level of match for each indicator at each grade band. This table can be used to identify gaps in coherence of the CAS-SS as it relates to the C3 Framework. For example, there is full alignment to D1.1 at grades K-2, no coverage at grades 3-5, full coverage grades 6-8 and no coverage in high school. This can be demonstrative of a lack of coherence as it relates to the C3. Whereas, D2.Geo.6 is partially aligned in K-2 and then fully aligned throughout grades 3-high school. This demonstrates a more coherent coverage of the C3 in the CAS-SS.

Table 2. Overall Alignment of CAS -SS Grade Level Expectations with C3 Indicators

Dimension 1: Developing questions & planning inquiries	K-2	3-5	6-8	HS
Constructing Compelling Questions.				
D1.1.	F		F	
D1.2.		P	F	
Constructing Supporting Questions.				
D1.3.	P			
D1.4.				
Determining Helpful Sources.				
D1.5.			F	
Dimension 2: Applying Disciplinary Concepts and Tools				
Civic and political institutions.				
D2.Civ.1.	F	F	F	F
D2.Civ.2.		F	F	F
D2.Civ.3.	F	F	F	F
D2.Civ.4. Starts in 3-5		F	F	P
D2.Civ.5.		F	F	P
D2.Civ.6.			F	P
Participation and Deliberation: Applying Civic Virtues and Democratic Principles.				
D2.Civ.7.	P			P
D2.Civ.8.	P		P	
D2.Civ.9	P	F		P
D2.Civ.10.	P		P	F
Process, Rules, and Laws.				
D2.Civ.11.	F		P	F
D2.Civ.12	F		P	P
D2.Civ.13. Starts in 3-5		F		F
D2.Civ.14.		F	P	F
Economic Decision Making.				
D2.Eco.1.	F	P		F
D2.Eco.2.	P	P	P	P
Exchange and Markets				
D2.Eco.3.	F	P		P
D2.Eco.4.	F	P	F	
D2.Eco.5.		F		F
D2.Eco.6.				F
D2.Eco.7. Starts in 3-5			F	F
D2.Eco.8.				F
D2.Eco.9.				F

The National Economy				
D2.Eco.10.	P			P
D2.Eco.11. Starts in 3-5				P
D2.Eco.12.				F
D2.Eco.13.				
Global Economy				
D2.Eco.14.			P	P
D2.Eco.15			P	P
Geographic Representations: Spatial Views of the World				
D2.Geo.1.		P	F	F
D2.Geo.2.	F	F	F	F
D2.Geo.3.	F	P		F
Human-Environment Interaction: Place, Regions, and Culture				
D2.Geo.4.		F	F	F
D2.Geo.5.	F	P	F	F
D2.Geo.6.	P	F	F	F
Human Population: Spatial Patterns and Movements				
D2.Geo.7.	F	F		
D2.Geo.8.	P	F		F
D2.Geo.9.	F			F
Global Interconnections: Changing Spatial Patterns				
D2.Geo.10.				F
D2.Geo.11.		F		F
D2.Geo.12.			P	F
Change, Continuity, and Context				
D2.His.1.	F	F	F	F
D2.His.2.	F	F	F	F
D2.His.3.	F	F	F	F
Perspectives				
D2.His.4.		F	F	
D2.His.5. Starts in 3-5			F	
D2.His.6.			F	
D2.His.7 – Start in 9-12				
D2.His.8. Start in 9-12				

Historical Sources and Evidence				
D2.His.9		F	F	F
D2.His.10.		F	F	F
D2.His.11.			P	F
D2.His.12.			F	P
D2.His.13. Starts in 3-5		P	P	P
Causation and Argumentation				
D2.His.14.		F	F	F
D2.His.15. Starts in 6-8			F	F
D2.His.16			F	F
D2.His.17. Starts in 3-5				
Dimension 3: Evaluating Sources & Using Evidence				
Gathering and Evaluating Sources				
D3.1.		P	F	F
D3.2.		P	F	F
Developing Claims and Using Evidence				
D3.3. Starts in 3-5			F	F
D3.4. Starts in 3-5				
Dimension 4: Communicating Conclusions & Taking Informed Action				
Communicating and Critiquing Conclusions. Together and with others, students use writing, visualizing, and speaking to...				
D4.1.			F	F
D4.2.				F
D4.3.				F
D4.4.				F
D4.5.				F
Taking Informed Action				
D4.6.				
D4.7.				F
D4.8.				F

Specific wording for each C3 indicator can be identified in Appendix B

As shown in Table 2, the flow between indicators as connected to the CAS-SS is sporadic, which can be a sign of low coherence. At some points, like indicator D2, Econ 4, there was full alignment at the earlier grades, partial alignment at the middle and then full alignment at the higher grades. This can be demonstrative of a lack of focus and coherence in the CAS-SS as it compares to the C3 indicators. Table 2 also demonstrates lower connections to the C3 at the elementary grades and higher connections at the high school level.

Alignment Review – 21st Century Skills and Readiness Competencies

As described in the Methodology section of this report, the CAS-SS 21st Century Skill Competencies were reviewed for alignment with the indicators of the C3. General findings from these analyses are presented in Table 3.

Table 3. Alignment of CAS-SS 21st Century Competencies with C3 Indicators

21 st Century Skills	C3 Indicator Connections
Critical Thinking and Reasoning	D1 – Developing Questions and Planning Inquiries
Information Literacy	D3 – Evaluating Sources and Using Evidence
Collaboration	D2- Applying Disciplinary Concepts and Tools (especially Civics)
Self-Direction	D4 – Communicating Conclusions and Taking Informed Action
Invention	D4 – Communicating Conclusions and Taking Informed Action

Understanding the connections between the C3 indicators and 21st Century Skills and Readiness Competencies can help identify the strengths and gaps in the current CAS-SS. The small emphasis on Dimension 1 in the early grades demonstrates a connection to building critical thinking and reasoning skills. The continued emphasis on geographic thinking throughout the grades also demonstrates a small emphasis on critical thinking in the CAS-SS. An increased emphasis on Dimensions 3 and 4 at the higher grades demonstrates an alignment to the information literacy, self-direction and invention components of the 21st Century Skills and Readiness Competencies. These findings make sense given the relatively low level of attention that social studies is often given in elementary classrooms. Teachers are often times uncomfortable or unfamiliar with presenting lessons that address social studies practices and more often focus on content instead. Middle and high school social studies teachers are more likely to be credentialed in social studies and are better prepared to present lessons that address the social studies practices. This does however highlight an opportunity for CDE during the review process. It would be beneficial to reflect more specifically on the 21st Century Skills and Readiness Competencies, to ensure all students are getting access to the skills needed to be competitive in college and careers.

Alignment Review – Comparison to External Referents

As described in the Methodology section of this report, the analyst reviewed four sets of content standards to serve as an external referent comparison with the CAS-SS. The following documents were used as external referent standards for the social studies review:

- Grade Expectations for Vermont’s Framework of Standards and Learning Opportunities (Summer 2004)
- Alabama Course of Study – Social Studies (2010)
- Ohio Social Studies Standards (2010)
- National Core Curriculum for Basic Education 2014 (Finland)
- National Core Curriculum for Upper Secondary Schools 2014 (Finland)

The external referent standards were reviewed for two broad criteria, organization/structure and concepts and skills. Each criterion contained several subcategories about which the analyst recorded observations before determining a final overall holistic rating of mostly similar (Similar) or mostly different (Different). Findings from these analyses are presented below.

Table 4. Comparison Rating for External Referents.

Referent	Vermont	Alabama	Ohio	Finland
Organization Structure	Different	Similar	Similar	Different
Concepts and Skills	Similar	Different	Similar	Different

As indicated by the ratings in Table 4, Vermont and Alabama each differ from Colorado in either Organization/Structure or Concepts and Skills, while Finland remains more different in both areas and Ohio is similar in both areas. The analyses below highlight various similarities and differences between the CAS-SS and each external referent. It is important to note that the referents continue to have similarities and differences among one another, as well as with CAS-SS. Differences in structure or content of a state or country’s standards may be qualitative, but may also be attributable to differences in history, purpose, and/or context. Therefore, a variety of structural and content factors should be considered when making comparisons between the external referents and CAS-SS.

Organization and Structure. Alabama, Vermont and Finland specify their social studies standards by grade level range (e.g., K–2, 3–5, 6–8). In contrast, Colorado and Ohio specify social studies standards by individual grade for kindergarten through grade eight and then by grade level range for high school by discipline (CO) or by course (OH). Colorado’s CAS-SS are organized around four overarching content areas. Each content area is organized into high level standards that spiral through grades K–12. At each grade K–8, and high school—age appropriate grade level expectations and evidence outcomes communicate how these overarching standards are to be applied as students mature. This hierarchy of overarching standards, broad grade level expectations, and more specific grade level evidence outcomes is different from the referents. None of the external referents specifically organize their curricula in this way. All emphasize the four content areas but all in different

ways. Ohio calls the content areas “strands” and has topics under each strand that guide the grade level content statements. This is the most similar in structure to Colorado. Vermont labels the content areas as components which include; Inquiry, History, Physical and cultural geography, Civics, government and society, and economics. They then have common sentence stems that are spiraled through grade bands. Alabama calls the content areas the “four organizational strands of the social studies program”. Every content standard is connected to at least one strand via a chart where a box is checked showing which strand or strands connect to that specific standard. Finland has broad standards called “Descriptions of Good Performance” for grades 1–5 and “Final Assessment Criteria” for grades 6–8.

In contrast to Colorado, three of the four external referents organize the social studies content, at some level, by topical or thematic strands. For example, some of the Ohio themes at elementary include: A Childs Place in Time and Space, Regions and People of the Eastern Hemisphere, and People Working together. After that, the secondary standards are listed for each course rather than by grade level, although Ohio does have a set of concepts and skills standards that apply across grades 8–12. Alabama lays out all its expectations for high school students course by course. Vermont is more similar to Colorado in that it does not delineate themes/topics per grade.

Concepts and Skills. The concepts and skills of the CAS-SS for civics has a number of similarities and differences with the content in the referents’ standards. In general, the treatment of the concepts and skills is more similar than different with Vermont and Ohio. It is more different than similar with Finland and Alabama. All of the external referents share the broad goal of creating well-informed and effective citizens. They differ, however, in significant ways on how to accomplish this end. Colorado and the three US referents focus more on high level concepts at the elementary grades. Alabama does offer a little more content specific references to help teachers better unpack the standards. The Colorado and Vermont emphasize concepts more than specific content. Unlike Colorado, Alabama, Ohio, Vermont and Finland focus on specific themes at each of the elementary and middle school grade levels. Ohio, Vermont and Finland have a clearer integration of specific skills in their standards than Colorado and Alabama. Both Colorado and Alabama outline skills in the introduction to the document but do not specifically integrate and/or incorporate into the actual grade level standards statements (with the expectation of some reference to geographic thinking in the evidence outcomes in parts of the CAS-SS standards).

The referents cover much of the same content outlined in the CAS-SS. Each referent requires students to understand key concepts and skills of each of the four content areas. The major difference between Colorado and the referents is the level of detail of the standards. Generally speaking, the referents have greater depth than the referent standards, particularly

at the high school level. The Vermont standards have similar depth as the CAS-SS, but the Vermont standards place emphasis on detail in different areas than the Colorado CAS.

Alabama. The organization and content of the Alabama Social Studies Course of Study clearly reflect the intent to articulate the guidelines for learning, teaching, and assessment in social studies. The Alabama Course of Study is an expansive document that includes content standards, bullets explaining the content standards more in depth, a grid showing which of the four disciplines are addressed and a map icon, identifying when AL history and geography can be addressed. In addition, the Framework provides several appendices addressing related topics such as connections to the 6-12 literacy standards, high school graduation requirements, and guidelines for time requirements.

Both Colorado and Alabama organize the standards by grade K-8. They differ at the high school level where Alabama outlines courses of study by grade and Colorado uses the disciplines to organize a 9-12 approach. At the highest level of organization for content, the Colorado and Alabama documents are very similar. Both cover the four large disciplines: geography, history, economics and civics. At the high school grade span, Alabama divides the content into five distinct courses: World History, US History I, US History II, US Government and Economics. Also at the high school grade level, Alabama defines a set of Course Overviews, in the appendix, for Psychology, Sociology, Contemporary World Issues and Civic Engagement and Human Geography.

Alabama delineates a theme for each grade K-8. Each theme is unique at each grade, but reflects related content that is grade span appropriate. In general, the individual Alabama standards tend to have greater specificity and detail than the individual Colorado grade level expectations. Each Standard is coded to indicate what content domain(s) it reflects—history (H), geography (G), civics (C), and economics (E). Many standards are marked with multiple codes. Moreover, many standards also include multiple examples or lists of specific bulleted content to be mastered.

Ohio. Ohio includes all of its social studies standards in one document, with standards broken out into grade levels K-8 and by courses at the high school level. Each grade level and course includes themes, strands, topics and content statements.

Ohio divides its K-8 social into themes which offer a particular focus for the grade. Each theme is split up into strands including history, geography, government and economics. Each strand is then organized into skill/topic descriptions (i.e. geography; spatial thinking, places and regions, and human systems). The strands and topics/skills are consistent at every grade level. The Ohio standards then outline content statements for each topic. This differs from Colorado in that these are statements and do not start with a verb.

The Ohio High School Standards are laid out in a course specific manner. At each course, they reflect the social studies content that students are to master in that high school course. In terms of overall content, the two states are relatively similar in their expectations of what students should know by the time they graduate from high school. Colorado's standards, especially in the upper grades, are broader in describing what students are to know. The Ohio standards are more heavily tilted toward historical developments, reflecting the great emphasis placed on history in the state's framework.

Vermont. The stated goal of the Grade Level Expectations for Vermont is to “identify the academic content for essential components of the social studies curriculum at different grade levels.” Vermont differs from Colorado in that its standards are grade banded by two years; PK-K, 1-2, 3-4, 5-6, 7-8, 9-10 and 11-12. They are grouped into a range of components or content strands (Inquiry, History, Physical and Cultural Geography, Civics, Government and Society, and Economics). These strands largely reflect the same content as the CAS-SS strands with the exception of inquiry. Vermont uses consistent sentence stems for each of the components and spiral the depth of content as the grade levels increase. Vermont has a large emphasis on questioning and research across grades.

This organization of the Vermont standards allows teachers to see the connections between grade levels around each of the content strands. Vermont's standards documents make clear what is expected of students at each grade band. It is also easy to visualize the coherence across a strand throughout the grade bands. However, the physical organization of standards by content strand and grade band make it difficult to delineate what should be addressed at each grade.

Overall, the content of Vermont's and Colorado's standards are at quite similar grain sizes. However, Vermont's emphasis on inquiry throughout the curriculum demonstrates a clearer connection to the C3 inquiry arc than Colorado's current standards.

Finland. Unlike Colorado, Finland organizes its descriptions of what students are expected to learn by grade span. Its first span covers grades 1–5, the second grades 6–9, and the final grade span is upper secondary. However, after completing their basic education (grade levels 1–9), Finnish students are placed in one of two tracks to continue their education at the upper secondary level. The first track prepares students for university instruction. The second track prepares students for vocational training and polytechnic institutes. As a result of the two-track system, not all Finnish students receive instruction in the same set of standards once they reach the upper secondary level. Thus, many students in Finland are not exposed to the broadest and deepest content, which should be noted when making comparisons with Colorado's standards.

Whereas Colorado’s four overarching standards are designed to spiral through the K–12 grade years, Finland does not have standards that cross grade spans. Instead, Finland labels its expectations of what students will know and be able to do at the end of grade 5 as “Descriptions of Good Performance” and at the end of grade 8 as “Assessment Criteria.” Some of these descriptions and criteria include content, but many do not. For example, by the end of fifth grade students are to “know principles of human rights, tolerance, and justice,” and to “understand the importance of shared rules,” both of which are counted as civics standards. They are also expected to “be able to assess the moral demands of various situations” and to “know various explanations for the world and the individual’s place in it,” which would not traditionally be considered content in CAS-SS standards.

Finland does not include any performance descriptions or assessment criteria in its upper secondary ethics and social studies curricula. However, it introduces both curricula with a few very broad “Objectives of Instruction.” For example, students at this level are expected to “command key social and economic concepts” (social studies) and to “develop their judgment, discernment, and functional abilities” (ethics).

Finland’s core curriculum documents differ from CAS-SS documents in many ways. The most obvious is in their brevity. Relatedly, Finnish performance indicators are general and refer to how well students can use what they have learned to perform authentic tasks, (e.g. the pupils will be able to justify their ideas about social issues). The CAS-SS standards document is more specific as to what students are expected to know and be able to do via the evidence outcomes.

Finland focuses on the development of skills. This shift in emphasis is clear when one looks at how they title their programs. These curricula focus on human relations and moral growth. Finland titles its core social studies program “Ethics”. Finland supplements its core Ethics program with social studies standards. Finland is also far more general and brief in its description of what its students should know than any of the American states studied. These differences in emphasis most likely reflect the possibility that educators in Finland see moral or character education as an essential part of preparing students for citizenship.

Observations for Consideration

There are numerous areas where noticeable differences between CAS –SS, the C3 Framework and the external referents can be observed. It is in these areas that we anticipate the most discussion in considering revisions to the CAS-SS and provide observations for consideration.

1. ***Inquiry.*** The most noticeable difference between CAS-SS and other international, national and state standards is exclusion of inquiry, particularly at the early grades. CDE reviewers could look at the way Vermont included inquiry as a main

component of their standards to begin to ensure these skills are embedded in the standards. Minnesota also has inquiry embedded in their social studies standards and may be one to look at. One area where this is already present in the current CAS-SS is in 4th grade Geography GLE 1. All four evidence outcomes ask students to engage in geographic inquiry. This is sporadically built throughout the geography standards across grades and could be built into the other content standards.

2. ***Integration.*** A hallmark feature of high quality social studies standards is the integration of the disciplines across grades. The CAS-SS emphasizes four content standards of social studies but there are times it may be difficult to determine coherent connections between the four at a grade level. For instance, the 7th grade civics GLEs do not clearly connect to the three other content standards. CDE reviewers could look at Alabama as a way to demonstrate how to integrate disciplines across a grade level into a coherent curriculum.
3. ***Elementary Gaps.*** An common element across the documents reviewed is a consistent approach to the elementary grades. The grain size in some of the current CAS-SS elementary evidence outcomes varies from specifics like “reciting your address” to broad like “understanding the social, political and economic ramifications of...” It may prove beneficial to review the gaps to begin to identify how to incorporate some of the ideas of the elementary strands of the Dimension 2 of the C3 framework. Reviewing and connecting to some of the indicators of C3 may help build coherence and level the grain size in the CAS-SS in grades K-5. Also adding themes and topics similar to Ohio may also help bring coherence and level grain size of the elementary CAS-SS.
4. ***Middle and Depth & Breadth and Rigor.*** There are a number of areas where alignment of the CAS-SS at the middle and high school levels could be improved, but that would require significant retooling of the CAS-SS along the lines of depth & breadth and rigor. For instance, a grade six CAS-SS GLE states, “the historical eras, individuals, groups, ideas and themes in regions of the Western Hemisphere and their relationships with one another”. This is a very broad statement that is not clarified by the evidence outcomes. The evidence outcomes use verbs like explain, determine, and identify, all low level verbs. Reviewers could look at dimension 2 of the C3 framework to increase the rigor, depth and specificity of the standard. D2.His.4.6-8 states “analyze multiple factors that influenced the perspectives of people during different historical eras”. Asking to students to analyze perspectives in these eras offers more rigor and depth. There are a number of instances where the two sets of standards cover similar content areas, but the level of depth & breadth or rigor would need to be adjusted to bring them into alignment. Using the alignment chart in Appendix A could help identify areas where this can happen. One other way to address coherence in the middle and high school grades is to more clearly

delineate timeframes and concept coverage. Identifying broad timelines in US and World History at specific grades could help the standards go deeper and build from grade to grade.

5. ***Taking Informed Action.*** In reviewing the literature on impactful social studies, considerable attention is paid to building students' capacity to take informed action. CAS-SS covers this in a more limited extent at the high school level. This concept, though difficult, is one of the most important components that can ensure Colorado students are prepared "competent and responsible citizens".
6. ***Integration of Disciplinary Literacy.*** Many of the national and state standards reviewed emphasize the concept of disciplinary literacy. The Wisconsin Department of Public Instruction defines disciplinary literacy as "In Wisconsin, disciplinary literacy is defined as the confluence of content knowledge, experiences, and skills merged with the ability to read, write, listen, speak, think critically and perform in a way that is meaningful within the context of a given field. These abilities are important in ALL courses and subjects" (dpi.wi.gov/sites/default/files/imce/cal/pdf/section2.pdf). Reviewers may want to make clearer connections to the CAS-RWC standards within the actual standards document to ensure an emphasis on disciplinary literacy.
7. ***Connections to 21st Century Skills.*** Many state social studies standards inherently connect directly to the 21st century skills and readiness competencies in Social Studies outlined in the CAS-SS. These are also the basis of the first prepared graduate competency in social studies that states: Prepared graduates in social studies: 1. Use the tools, thinking and practices of history, geography, economics and civics to: a) solve problems, make decisions and analyze issues from multiple perspectives as a responsible member of society, b) read, write and communicate ideas." Based on the gaps identified in the alignment study it may be beneficial for reviewers to more clearly integrate the 21st century skills and readiness competencies in Social Studies at each grade level, identifying specific GLEs and evidence outcomes like the inquiry component in the Vermont document.
8. ***Coherence.*** Most of the documents reviewed use increasing depth of knowledge expectations connected to common categories at each grade band to increase the level of rigor and to ensure coherence throughout the document. Colorado reviewers could review each content standard by grade to ensure increasing complexity of similar concepts throughout the grades. For instance, a 6th grade history evidence outcome for GLE 2 states, "Determine and explain the historical context of key people, events and ideas over time..." and the 7th grade history evidence outcome for GLE 2 states "Determine and explain the historical context of key people and events from the origins of the American revolution..." are connected conceptually but do

not build on each other. Understanding the content in each grade would be different, it may still be beneficial to ask students to engage with the concepts in higher ways at each grade level. Another aspect to review in terms of coherence is to ensure the prepared graduate statements, the GLEs and the evidence outcomes build off of each other. One example of a gap in the current CAS-SS is high school civics GLE 1. The prepared graduate statement says “analyze and practice rights, roles, and responsibilities of citizens”, the GLE states “research, formulate positions, and engage in appropriate civic participation to address local, states and national issues or policies” but not one of the evidence outcomes includes the research necessary to address the GLE or prepared graduate statement. A review of these gaps would greatly strengthen the document.

IV. REFERENCES AND EXTERNAL REFERENTS

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Rabinowitz, S., Roeber, E., Schroeder, C., & Sheinker, J. (2006). Creating Aligned Standards and Assessment Systems. (Issue Paper 3 of 3). Washington, DC: Council of Chief State School Officers.

Webb, N. L. (1997). Criteria for alignment of expectations and assessment in mathematics and science education. (NISE Research Monograph No. 8). Madison: University of Wisconsin—Madison, National Institute for Science Education. Washington, DC: Council of Chief State School Officers.

Social studies External Referents

Grade Expectations for Vermont’s Framework of Standards and Learning Opportunities (Summer 2004) - <http://education.vermont.gov/sites/aoe/files/documents/edu-grade-expectations-framework-of-standards.pdf>

Alabama Course of Study – Social Studies (2010) - <http://www.alsde.edu/sec/sct/COS/2010%20Alabama%20Social%20Studies%20Course%20of%20Study.pdf>

Ohio Social Studies Standards (2010) - <https://education.ohio.gov/getattachment/Topics/Ohio-s-New-Learning-Standards/Social-Studies/SS-Standards.pdf.aspx>

National Core Curriculum for Pre-primary Education 2010 (Finland) - http://www.oph.fi/download/153504_national_core_curriculum_for_pre-primary_education_2010.pdf

National Core Curriculum for Basic Education 2014 (Finland) http://www.oph.fi/english/curricula_and_qualifications/basic_education/curricula_2014

National Core Curriculum for Upper Secondary Schools 2014 (Finland) http://www.oph.fi/english/curricula_and_qualifications/general_upper_secondary_education

Appendix A – List of C3 Indicators Partially or Not Covered By CAS-SS

K – 2 - Partially Covered Indicators

BY THE END OF 2 nd GRADE
Dimension 1: Developing questions & planning inquiries
D1.3.K-2. Identify facts and concepts associated with a supporting question.
Participation and Deliberation: Applying Civic Virtues and Democratic Principles.
D2.Civ.7.K-2. Apply civic virtues when participating in school settings.
D2.Civ.8.K-2. Describe democratic principles such as equality, fairness, and respect for legitimate authority and rules.
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.10.K-2. Compare their own point of view with others’ perspectives.
Economic Decision Making.
D2.Eco.2.K-2. Identify the benefits and costs of making various personal decisions.
The National Economy
D2.Eco.10.K-2. Explain why people save.
Human-Environment Interaction: Place, Regions, and Culture
D2.Geo.6.K-2. Identify some cultural and environmental characteristics of specific places.
Human Population: Spatial Patterns and Movements
D2.Geo.8.K-2. Compare how people in different types of communities use local and distant environments to meet their daily needs.
Global Interconnections: Changing Spatial Patterns
D2.Geo.10.K-2. Describe changes in the physical and cultural characteristics of various world regions
D2.Geo.11.K-2. Explain how the consumption of products connects people to distant places.
D2.Geo.12.K-2. Identify ways that a catastrophic disaster may affect people living in a place.

K-2 – Indicators Not Addressed

BY THE END OF 2 nd GRADE
Dimension 1: Developing questions & planning inquiries
Constructing Compelling Questions.
D1.2.K-2. Identify disciplinary ideas associated with a compelling question.
Constructing Supporting Questions.
D1.4.K-2. Make connections between supporting questions and compelling questions.
Determining Helpful Sources.
D1.5.K-2. Determine the kinds of sources that will be helpful on answering compelling and supporting questions.

Dimension 2: Applying Disciplinary Concepts and Tools
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.5.K-2. Explain what governments are and some of their functions.
D2.Civ.6.K-2. Describe how communities work to accomplish common tasks, establish responsibilities, and fulfill roles of authority.
Process, Rules, and Laws.
D2.Civ.14.K-2. Describe how people have tried to improve their communities over time.
Economic Decision Making.
Exchange and Markets
D2.Eco.5.K-2. Identify prices of products in a local market.
D2.Eco.6.K-2. Explain how people earn income.
D2.Eco.7.K-2. Describe examples of costs of production.
D2.Eco.9.K-2. Describe the role of banks in an economy.
The National Economy
D2.Eco.12.K-2. Describe examples of the goods and services that governments provide.
D2.Eco.13.K-2. Describe examples of capital goods and human capital.
Global Economy
D2.Eco.14.K-2. Describe why people in one country trade goods and services with people in other countries.
D2.Eco.15.K-2. Describe products that are produced abroad and sold domestically and products that are produced domestically and sold abroad.
Human-Environment Interaction: Place, Regions, and Culture
D2.Geo.4.K-2. Explain how weather, climate, and other environmental characteristics affect people's lives in a place or region.
Global Interconnections: Changing Spatial Patterns
D2.Geo.10.K-2. Describe changes in the physical and cultural characteristics of various world regions
D2.Geo.11.K-2. Explain how the consumption of products connects people to distant places.
D2.Geo.12.K-2. Identify ways that a catastrophic disaster may affect people living in a place.
Perspectives
D2.His.4.K-2. Compare perspectives of people in the past to those of people in the present.
D2.His.6.K-2. Compare different accounts of the same historical event.
Historical Sources and Evidence
D2.His.9.K-2. Identify different kinds of historical sources
D2.His.10.K-2. Explain how historical sources can be used to study the past.
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.12.K-2. Generate questions about a particular historical source as it relates to a particular

historical event or development.
Causation and Argumentation
D2.His.14.K-2. Generate possible reasons for an event or development in the past.
D2.His.16.K-2. Select which reasons might be more likely than others to explain a historical event or development.
Dimension 3: Evaluating Sources & Using Evidence
Gathering and Evaluating Sources
D3.1.K-2. Gather relevant information from one or two sources while using the origin and structure to guide the selection.
D3.2.K-2. Evaluate a source by distinguishing between fact and opinion.
Dimension 4: Communicating Conclusions & Taking Informed Action
Communicating and Critiquing Conclusions. Together and with others, students use writing, visualizing, and speaking to...
D4.1.K-2. Construct an argument with reasons.
D4.2.K-2. Construct explanations using correct sequence and relevant information.
D4.3.K-2. Present a summary of an argument using print, oral, and digital technologies.
D4.4.K-2. Ask and answer questions about arguments.
D4.5.K-2. Ask and answer questions about explanations.
Taking Informed Action
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.
D4.7.K-2. Identify ways to take action to help address local, regional, and global problems.
D4.8.K-2. Use listening, consensus-building, and voting procedures to decide on and take action in their classrooms.

Grade 3 – 5 - Partially Covered Indicators

BY THE END OF 5th GRADE
Dimension 1: Developing questions & planning inquiries
Constructing Compelling Questions.
D1.2.3-5. Identify disciplinary concepts and ideas associated with a compelling question that is open to different interpretations.
Dimension 2: Applying Disciplinary Concepts and Tools
Economic Decision Making.
D2.Eco.1.3-5. Compare the benefits and costs of individual choices.
D2.Eco.2.3-5. Identify positive and negative incentives that influence the decisions people make.
Exchange and Markets
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.4.3-5. Explain why individuals and businesses specialize and trade.
Geographic Representations: Spatial Views of the World

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.3.3-5. Use maps of different scales to describe the locations of cultural and environmental characteristics.
Human-Environment Interaction: Place, Regions, and Culture
D2.Geo.5.3-5. Explain how the cultural and environmental characteristics of places change over time.
Historical Sources and Evidence
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.
Dimension 3: Evaluating Sources & Using Evidence
Gathering and Evaluating Sources
D3.1.3-5. Gather relevant information from multiple sources while using the origin, structure, and context to guide the selection.
D3.2.3-5. Use distinctions among fact and opinion to determine the credibility of multiple sources.

Grades 3-5 – Indicators Not Covered

BY THE END OF 5th GRADE
Dimension 1: Developing questions & planning inquiries
Constructing Compelling Questions.
D1.1.3-5. Explain why compelling questions are important to others (e.g., peers, adults).
Constructing Supporting Questions.
D1.3.3-5. Identify the disciplinary concepts and ideas associated with a supporting question that are open to interpretation.
D1.4.3-5. Explain how supporting questions help answer compelling questions in an inquiry
Determining Helpful Sources.
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.
Dimension 2: Applying Disciplinary Concepts and Tools
Civic and political institutions.
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.
Participation and Deliberation: Applying Civic Virtues and Democratic Principles.
D2.Civ.7.3-5. Apply civic virtues and democratic principles in school settings.
D2.Civ.8.3-5. Identify core civic virtues and democratic principles that guide government, society, and communities.

D2.Civ.10.3-5. Identify the beliefs, experiences, perspectives, and values that underlie their own and others' points of view about civic issues.
Process, Rules, and Laws.
D2.Civ.11.3-5. Compare procedures for making decisions in a variety of settings, including classroom, school, government, and/or society.
D2.Civ.12.3-5. Explain how rules and laws change society and how people change rules and laws.
Exchange and Markets
D2.Eco.6.3-5. Explain the relationship between investment in human capital, productivity, and future incomes.
D2.Eco.7.3-5. Explain how profits influence sellers in markets.
D2.Eco.8.3-5. Identify examples of external benefits and costs.
D2.Eco.9.3-5. Describe the role of other financial institutions in an economy
The National Economy
D2.Eco.10.3-5. Explain what interest rates are.
D2.Eco.11.3-5. Explain the meaning of inflation, deflation, and unemployment.
D2.Eco.12.3-5. Explain the ways in which the government pays for the goods and services it provides.
D2.Eco.13.3-5. Describe ways people can increase productivity by using improved capital goods and improving their human capital.
Global Economy
D2.Eco.14.3-5. Explain how trade leads to increasing economic interdependence among nations.
D2.Eco.15.3-5. Explain the effects of increasing economic interdependence on different groups within participating nations.
Human Population: Spatial Patterns and Movements
D2.Geo.9.3-5. Analyze the effects of catastrophic environmental and technological events on human settlements and migration.
Global Interconnections: Changing Spatial Patterns
D2.Geo.10.3-5. Explain why environmental characteristics vary among different world regions.
D2.Geo.12.3-5. Explain how natural and human-made catastrophic events in one place affect people living in other places.
Perspectives
D2.His.5.3-5. Explain connections among historical contexts and people's perspectives at the time.
D2.His.6.3-5. Describe how people's perspectives shaped the historical sources they created.
Historical Sources and Evidence
D2.His.11.3-5. Infer the intended audience and purpose of a historical source from information within the source itself.
D2.His.12.3-5. Generate questions about multiple historical sources and their relationships to particular historical events and developments.

Causation and Argumentation
D2.His.16.3-5. Use evidence to develop a claim about the past.
D2.His.17.3-5. Summarize the central claim in a secondary work of history.
Dimension 3: Evaluating Sources & Using Evidence
Developing Claims and Using Evidence
D3.3.3-5. Identify evidence that draws information from multiple sources in response to compelling questions.
D3.4.3-5. Use evidence to develop claims in response to compelling questions.
Dimension 4: Communicating Conclusions & Taking Informed Action
Communicating and Critiquing Conclusions. Together and with others, students use writing, visualizing, and speaking to...
D4.1.3-5. Construct arguments using claims and evidence from multiple sources.
D4.2.3-5. Construct explanations using reasoning, correct sequence, examples, and details with relevant information and data.
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).
D4.4.3-5. Critique arguments.
D4.5.3-5. Critique explanations.
Taking Informed Action
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.
D4.7.3-5. 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.
D4.8.3-5. Use a range of deliberative and democratic procedures to make decisions about and act on civic problems in their classrooms and schools.

Grade 6 – 8 - Partially Covered Indicators

BY THE END OF 8th GRADE
Dimension 1: Developing questions & planning inquiries
Dimension 2: Applying Disciplinary Concepts and Tools
Participation and Deliberation: Applying Civic Virtues and Democratic Principles.
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.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

Process, Rules, and Laws.
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.12.6-8. Assess specific rules and laws (both actual and proposed) as means of addressing public problems.
D2.Civ.14.6-8. Compare historical and contemporary means of changing societies, and promoting the common good.
Economic Decision Making.
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.
Global Economy
D2.Eco.14.6-8. Explain barriers to trade and how those barriers influence trade among nations.
D2.Eco.15.6-8. Explain the benefits and the costs of trade policies to individuals, businesses, and society.
Global Interconnections: Changing Spatial Patterns
D2.Geo.12.6-8. Explain how global changes in population distribution patterns affect changes in land use in particular places.
Historical Sources and Evidence
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.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.

6-8 – Indicators Not Covered

D1.3.6-8. Explain points of agreement experts have about interpretations and applications of disciplinary concepts and ideas associated with a supporting question
D1.4.6-8. Explain how the relationship between supporting questions and compelling questions is mutually reinforcing.
Dimension 2: Applying Disciplinary Concepts and Tools
Participation and Deliberation: Applying Civic Virtues and Democratic Principles.
D2.Civ.7.6-8. Apply civic virtues and democratic principles in school and community settings.
D2.Civ.9.6-8. Compare deliberative processes used by a wide variety of groups in various settings.
Process, Rules, and Laws.
D2.Civ.13.6-8. Analyze the purposes, implementation, and consequences of public policies in multiple settings.
Economic Decision Making.
D2.Eco.1.6-8. Explain how economic decisions affect the well-being of individuals, businesses, and society.

Exchange and Markets
D2.Eco.3.6-8. Explain the roles of buyers and sellers in product, labor, and financial markets.
D2.Eco.5.6-8. Explain ways in which money facilitates exchange by reducing transactional costs.
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.8.6-8. Explain how external benefits and costs influence market outcomes.
D2.Eco.9.6-8. Describe the roles of institutions such as corporations, non-profits, and labor unions in a market economy
The National Economy
D2.Eco.10.6-8. Explain the influence of changes in interest rates on borrowing and investing.
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.12.6-8. Explain how inflation, deflation, and unemployment affect different groups.
D2.Eco.13.6-8. Explain why standards of living increase as productivity improves.
Geographic Representations: Spatial Views of the World
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.
Human Population: Spatial Patterns and Movements
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.8.6-8. Analyze how relationships between humans and environments extend or contract spatial patterns of settlement and movement.
D2.Geo.9.6-8. Evaluate the influences of long-term human-induced environmental change on spatial patterns of conflict and cooperation.
Global Interconnections: Changing Spatial Patterns
D2.Geo.10.6-8. Analyze the ways in which cultural and environmental characteristics vary among various regions of the world.
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
Causation and Argumentation
D2.His.17.6-8. Compare the central arguments in secondary works of history on related topics in multiple media.
Dimension 3: Evaluating Sources & Using Evidence
Developing Claims and Using Evidence
D3.4.6-8. Develop claims and counterclaims while pointing out the strengths and limitations of both.

Dimension 4: Communicating Conclusions & Taking Informed Action
Communicating and Critiquing Conclusions. Together and with others, students use writing, visualizing, and speaking to...
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.
D4.3.6-8. 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).
D4.4.6-8. Critique arguments for credibility.
D4.5.6-8. Critique the structure of explanations.
Taking Informed Action
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.
D4.7.6-8. 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.
D4.8.6-8. 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.

High School – History - Partially Covered Indicators

Historical Sources and Evidence
D2.His.12.9-12. Use questions generated about multiple historical sources to pursue further inquiry and investigate additional sources.
D2.His.13.9-12. Critique the appropriateness of the historical sources used in a secondary interpretation.

High School – History – Indicators Not Covered

Perspectives
D2.His.4.9-12. Analyze complex and interacting factors that influenced the perspectives of people during different historical eras.
D2.His.5.9-12. Analyze how historical contexts shaped and continue to shape people’s perspectives.
D2.His.6.9-12. Analyze the ways in which the perspectives of those writing history shaped the history that they produced.
D2.His.7.9-12. Explain how the perspectives of people in the present shape interpretations of the past.

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
D2.His.10.9-12. Detect possible limitations in various kinds of historical evidence and differing secondary interpretations.
Causation and Argumentation
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.

High School – Geography – Indicators Not Covered

Human Population: Spatial Patterns and Movements
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.

High School – Economics - Partially Covered Indicators

Economic Decision Making.
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
D2.Eco.3.9-12. Analyze the ways in which incentives influence what is produced and distributed in a market system.
The National Economy
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.
D2.Eco.11.9-12. Use economic indicators to analyze the current and future state of the economy.
Global Economy
D2.Eco.14.9-12. Analyze the role of comparative advantage in international trade of goods and services.
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.

High School – Economics – Indicators Not Covered

Exchange and Markets
D2.Eco.4.9-12. Evaluate the extent to which competition among sellers and among buyers exists in specific markets.
The National Economy
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.

High School – Civics - Partially Covered Indicators

Civic and political institutions.
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.5.9-12. Evaluate citizens' and institutions' effectiveness in addressing social and political problems at the local, state, tribal, national, and/or international level.
D2.Civ.6.9-12. Critique relationships among governments, civil societies, and economic markets.
Participation and Deliberation: Applying Civic Virtues and Democratic Principles.
D2.Civ.7.9-12. Apply civic virtues and democratic principles when working with others.
D2.Civ.9.9-12. Use appropriate deliberative processes in multiple settings.
Process, Rules, and Laws.
D2.Civ.12.9-12. Analyze how people use and challenge local, state, national, and international laws to address a variety of public issues.

High School – Civics – Indicators Not Covered

Participation and Deliberation: Applying Civic Virtues and Democratic Principles.
D2.Civ.8.9-12. Evaluate social and political systems in different contexts, times, and places, that promote civic virtues and enact democratic principles.

Appendix B – Full List of C3 Indicators

BY THE END OF 2nd GRADE
Dimension 1: Developing questions & planning inquiries
Constructing Compelling Questions.
D1.1.K-2. Explain why the compelling question is important to the student.
D1.2.K-2. Identify disciplinary ideas associated with a compelling question.
Constructing Supporting Questions.
D1.3.K-2. Identify facts and concepts associated with a supporting question.
D1.4.K-2. Make connections between supporting questions and compelling questions.
Determining Helpful Sources.
D1.5.K-2. Determine the kinds of sources that will be helpful on answering compelling and supporting questions.
Dimension 2: Applying Disciplinary Concepts and Tools
Civic and political institutions.
D2.Civ.1.K-2. Describe roles and responsibilities of people in authority.
D2.Civ.2.K-2. Explain how all people, not just official leaders, play important roles in a community.
D2.Civ.3.K-2. Explain the need for and purposes of rules in various settings inside and outside of school.
D2.Civ.4.K-2. Begins in grades 3–5
D2.Civ.5.K-2. Explain what governments are and some of their functions.
D2.Civ.6.K-2. Describe how communities work to accomplish common tasks, establish responsibilities, and fulfill roles of authority.
Participation and Deliberation: Applying Civic Virtues and Democratic Principles.
D2.Civ.7.K-2. Apply civic virtues when participating in school settings.
D2.Civ.8.K-2. Describe democratic principles such as equality, fairness, and respect for legitimate authority and rules.
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.10.K-2. Compare their own point of view with others’ perspectives.
Process, Rules, and Laws.
D2.Civ.11.K-2. Explain how people can work together to make decisions in the classroom.
D2.Civ.12.K-2. Identify and explain how rules function in public (classroom and school) settings.
D2.Civ.13.K-2. Begins in grades 3–5
D2.Civ.14.K-2. Describe how people have tried to improve their communities over time.
Economic Decision Making.
D2.Eco.1.K-2. Explain how scarcity necessitates decision making.
D2.Eco.2.K-2. Identify the benefits and costs of making various personal decisions.

Exchange and Markets
D2.Eco.3.K-2. Describe the skills and knowledge required to produce certain goods and services.
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.5.K-2. Identify prices of products in a local market.
D2.Eco.6.K-2. Explain how people earn income.
D2.Eco.7.K-2. Describe examples of costs of production.
D2.Eco.7.K-2. Begins in grades 3-5
D2.Eco.9.K-2. Describe the role of banks in an economy.
The National Economy
D2.Eco.10.K-2. Explain why people save.
D2.Eco.11.K-2. Begins in grades 3–5
D2.Eco.12.K-2. Describe examples of the goods and services that governments provide.
D2.Eco.13.K-2. Describe examples of capital goods and human capital.
Global Economy
D2.Eco.14.K-2. Describe why people in one country trade goods and services with people in other countries.
D2.Eco.15.K-2. Describe products that are produced abroad and sold domestically and products that are produced domestically and sold abroad.
Geographic Representations: Spatial Views of the World
D2.Geo.1.K-2. Construct maps, graphs, and other representations of familiar places.
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.3.K-2. Use maps, globes, and other simple geographic models to identify cultural and environmental characteristics of places.
Human-Environment Interaction: Place, Regions, and Culture
D2.Geo.4.K-2. Explain how weather, climate, and other environmental characteristics affect people’s lives in a place or region.
D2.Geo.5.K-2. Describe how human activities affect the cultural and environmental characteristics of places or regions.
D2.Geo.6.K-2. Identify some cultural and environmental characteristics of specific places.
Human Population: Spatial Patterns and Movements
D2.Geo.7.K-2. Explain why and how people, goods, and ideas move from place to place.
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.9.K-2. Describe the connections between the physical environment of a place and the economic activities found there

Global Interconnections: Changing Spatial Patterns
D2.Geo.10.K-2. Describe changes in the physical and cultural characteristics of various world regions
D2.Geo.11.K-2. Explain how the consumption of products connects people to distant places.
D2.Geo.12.K-2. Identify ways that a catastrophic disaster may affect people living in a place.
Change, Continuity, and Context
D2.His.1.K-2. Create a chronological sequence of multiple events.
D2.His.2.K-2. Compare life in the past to life today.
D2.His.3.K-2. Generate questions about individuals and groups who have shaped a significant historical change.
Perspectives
D2.His.4.K-2. Compare perspectives of people in the past to those of people in the present.
D2.His.5.K-2. Begins in grades 3–5
D2.His.6.K-2. Compare different accounts of the same historical event.
D2.His.7.K-2. Begins in grades 9–12
D2.His.8.K-2. Begins in grades 9–12
Historical Sources and Evidence
D2.His.9.K-2. Identify different kinds of historical sources
D2.His.10.K-2. Explain how historical sources can be used to study the past.
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.12.K-2. Generate questions about a particular historical source as it relates to a particular historical event or development.
D2.His.13.K-2. Begins at grade 3–5
Causation and Argumentation
D2.His.14.K-2. Generate possible reasons for an event or development in the past.
D2.His.15.K-2. Begins in grades 6–8
D2.His.16.K-2. Select which reasons might be more likely than others to explain a historical event or development.
D2.His.17.K-2. Begins in grades 3–5
Dimension 3: Evaluating Sources & Using Evidence
Gathering and Evaluating Sources
D3.1.K-2. Gather relevant information from one or two sources while using the origin and structure to guide the selection.
D3.2.K-2. Evaluate a source by distinguishing between fact and opinion.
Developing Claims and Using Evidence
D3.3.K-2. Begins in grades 3–5
D3.4.K-2. Begins in grades 3–5

Dimension 4: Communicating Conclusions & Taking Informed Action
Communicating and Critiquing Conclusions. Together and with others, students use writing, visualizing, and speaking to...
D4.1.K-2. Construct an argument with reasons.
D4.2.K-2. Construct explanations using correct sequence and relevant information.
D4.3.K-2. Present a summary of an argument using print, oral, and digital technologies.
D4.4.K-2. Ask and answer questions about arguments.
D4.5.K-2. Ask and answer questions about explanations.
Taking Informed Action
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.
D4.7.K-2. Identify ways to take action to help address local, regional, and global problems.
D4.8.K-2. Use listening, consensus-building, and voting procedures to decide on and take action in their classrooms.

BY THE END OF 5th GRADE
Dimension 1: Developing questions & planning inquiries
Constructing Compelling Questions.
D1.1.3-5. Explain why compelling questions are important to others (e.g., peers, adults).
D1.2.3-5. Identify disciplinary concepts and ideas associated with a compelling question that is open to different interpretations.
Constructing Supporting Questions.
D1.3.3-5. Identify the disciplinary concepts and ideas associated with a supporting question that are open to interpretation.
D1.4.3-5. Explain how supporting questions help answer compelling questions in an inquiry
Determining Helpful Sources.
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.
Dimension 2: Applying Disciplinary Concepts and Tools
Civic and political institutions.
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.2.3-5. Explain how a democracy relies on people's responsible participation, and draw implications for how individuals should participate.
D2.Civ.3.3-5. Examine the origins and purposes of rules, laws, and key U.S. constitutional provisions.
D2.Civ.4.3-5. Explain how groups of people make rules to create responsibilities and protect freedoms.
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.6.3-5. Describe ways in which people benefit from and are challenged by working together, including through government, workplaces, voluntary organizations, and families.
Participation and Deliberation: Applying Civic Virtues and Democratic Principles.
D2.Civ.7.3-5. Apply civic virtues and democratic principles in school settings.
D2.Civ.8.3-5. Identify core civic virtues and democratic principles that guide government, society, and communities.
D2.Civ.9.3-5. Use deliberative processes when making decisions or reaching judgments as a group.
D2.Civ.10.3-5. Identify the beliefs, experiences, perspectives, and values that underlie their own and others' points of view about civic issues.
Process, Rules, and Laws.
D2.Civ.11.3-5. Compare procedures for making decisions in a variety of settings, including classroom, school, government, and/or society.
D2.Civ.12.3-5. Explain how rules and laws change society and how people change rules and laws.
D2.Civ.13.3-5. Explain how policies are developed to address public problems.
D2.Civ.14.3-5. Illustrate historical and contemporary means of changing society.
Economic Decision Making.
D2.Eco.1.3-5. Compare the benefits and costs of individual choices.
D2.Eco.2.3-5. Identify positive and negative incentives that influence the decisions people make.
Exchange and Markets
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.4.3-5. Explain why individuals and businesses specialize and trade.
D2.Eco.5.3-5. Explain the role of money in making exchange easier.
D2.Eco.6.3-5. Explain the relationship between investment in human capital, productivity, and future incomes.
D2.Eco.7.3-5. Explain how profits influence sellers in markets.
D2.Eco.8.3-5. Identify examples of external benefits and costs.
D2.Eco.9.3-5. Describe the role of other financial institutions in an economy
The National Economy
D2.Eco.10.3-5. Explain what interest rates are.
D2.Eco.11.3-5. Explain the meaning of inflation, deflation, and unemployment.
D2.Eco.12.3-5. Explain the ways in which the government pays for the goods and services it provides.
D2.Eco.13.3-5. Describe ways people can increase productivity by using improved capital goods and improving their human capital.
Global Economy
D2.Eco.14.3-5. Explain how trade leads to increasing economic interdependence among nations.

D2.Eco.15.3-5. Explain the effects of increasing economic interdependence on different groups within participating nations.
Geographic Representations: Spatial Views of the World
D2.Geo.1.3-5. Construct maps and other graphic representations of both familiar and unfamiliar places.
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.3.3-5. Use maps of different scales to describe the locations of cultural and environmental characteristics.
Human-Environment Interaction: Place, Regions, and Culture
D2.Geo.4.3-5. Explain how culture influences the way people modify and adapt to their environments.
D2.Geo.5.3-5. Explain how the cultural and environmental characteristics of places change over time.
D2.Geo.6.3-5. Describe how environmental and cultural characteristics influence population distribution in specific places or regions.
Human Population: Spatial Patterns and Movements
D2.Geo.7.3-5. Explain how cultural and environmental characteristics affect the distribution and movement of people, goods, and ideas.
D2.Geo.8.3-5. Explain how human settlements and movements relate to the locations and use of various natural resources.
D2.Geo.9.3-5. Analyze the effects of catastrophic environmental and technological events on human settlements and migration.
Global Interconnections: Changing Spatial Patterns
D2.Geo.10.3-5. Explain why environmental characteristics vary among different world regions.
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.12.3-5. Explain how natural and human-made catastrophic events in one place affect people living in other places.
Change, Continuity, and Context
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.2.3-5. Compare life in specific historical time periods to life today
D2.His.3.3-5. Generate questions about individuals and groups who have shaped significant historical changes and continuities
Perspectives
D2.His.4.3-5. Explain why individuals and groups during the same historical period differed in their perspectives
D2.His.5.3-5. Explain connections among historical contexts and people’s perspectives at the time.

D2.His.6.3-5. Describe how people’s perspectives shaped the historical sources they created.
D2.His.7.9.3-5. Begins in grades 9–12
D2.His.7.10.3-5. Begins in grades 9–12
Historical Sources and Evidence
D2.His.9.3-5. Summarize how different kinds of historical sources are used to explain events in the past.
D2.His.10.3-5. Compare information provided by different historical sources about the past.
D2.His.11.3-5. Infer the intended audience and purpose of a historical source from information within the source itself.
D2.His.12.3-5. Generate questions about multiple historical sources and their relationships to particular historical events and developments.
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.
Causation and Argumentation
D2.His.14.3-5. Explain probable causes and effects of events and developments.
D2.His.15.3-5. Begins in grades 6–8
D2.His.16.3-5. Use evidence to develop a claim about the past.
D2.His.17.3-5. Summarize the central claim in a secondary work of history.
Dimension 3: Evaluating Sources & Using Evidence
Gathering and Evaluating Sources
D3.1.3-5. Gather relevant information from multiple sources while using the origin, structure, and context to guide the selection.
D3.2.3-5. Use distinctions among fact and opinion to determine the credibility of multiple sources.
Developing Claims and Using Evidence
D3.3.3-5. Identify evidence that draws information from multiple sources in response to compelling questions.
D3.4.3-5. Use evidence to develop claims in response to compelling questions.
Dimension 4: Communicating Conclusions & Taking Informed Action
Communicating and Critiquing Conclusions. Together and with others, students use writing, visualizing, and speaking to...
D4.1.3-5. Construct arguments using claims and evidence from multiple sources.
D4.2.3-5. Construct explanations using reasoning, correct sequence, examples, and details with relevant information and data.
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).
D4.4.3-5. Critique arguments.
D4.5.3-5. Critique explanations.

Taking Informed Action
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.
D4.7.3-5. 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.
D4.8.3-5. Use a range of deliberative and democratic procedures to make decisions about and act on civic problems in their classrooms and schools.

BY THE END OF 8th GRADE
Dimension 1: Developing questions & planning inquiries
Constructing Compelling Questions.
D1.1.6-8. Explain how a question represents key ideas in the field.
D1.2.6-8. Explain points of agreement experts have about interpretations and applications of disciplinary concepts and ideas associated with a compelling question.
Constructing Supporting Questions.
D1.3.6-8. Explain points of agreement experts have about interpretations and applications of disciplinary concepts and ideas associated with a supporting question
D1.4.6-8. Explain how the relationship between supporting questions and compelling questions is mutually reinforcing.
Determining Helpful Sources.
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.
Dimension 2: Applying Disciplinary Concepts and Tools
Civic and political institutions.
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.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.3.6-8. Examine the origins, purposes, and impact of constitutions, laws, treaties, and international agreements.
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.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.6.6-8. Describe the roles of political, civil, and economic organizations in shaping people’s lives.

Participation and Deliberation: Applying Civic Virtues and Democratic Principles.
D2.Civ.7.6-8. Apply civic virtues and democratic principles in school and community settings.
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.9.6-8. Compare deliberative processes used by a wide variety of groups in various settings.
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
Process, Rules, and Laws.
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.12.6-8. Assess specific rules and laws (both actual and proposed) as means of addressing public problems.
D2.Civ.13.6-8. Analyze the purposes, implementation, and consequences of public policies in multiple settings.
D2.Civ.14.6-8. Compare historical and contemporary means of changing societies, and promoting the common good.
Economic Decision Making.
D2.Eco.1.6-8. Explain how economic decisions affect the well-being of individuals, businesses, and society.
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.
Exchange and Markets
D2.Eco.3.6-8. Explain the roles of buyers and sellers in product, labor, and financial markets.
D2.Eco.4.6-8. Describe the role of competition in the determination of prices and wages in a market economy.
D2.Eco.5.6-8. Explain ways in which money facilitates exchange by reducing transactional costs.
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.7.6-8. Analyze the role of innovation and entrepreneurship in a market economy.
D2.Eco.8.6-8. Explain how external benefits and costs influence market outcomes.
D2.Eco.9.6-8. Describe the roles of institutions such as corporations, non-profits, and labor unions in a market economy
The National Economy
D2.Eco.10.6-8. Explain the influence of changes in interest rates on borrowing and investing.
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.12.6-8. Explain how inflation, deflation, and unemployment affect different groups.

D2.Eco.13.6-8. Explain why standards of living increase as productivity improves.
Global Economy
D2.Eco.14.6-8. Explain barriers to trade and how those barriers influence trade among nations.
D2.Eco.15.6-8. Explain the benefits and the costs of trade policies to individuals, businesses, and society.
Geographic Representations: Spatial Views of the World
D2.Geo.1.6-8. Construct maps to represent and explain the spatial patterns of cultural and 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.3.6-8. Use paper based and electronic mapping and graphing techniques to represent and analyze spatial patterns of different environmental and cultural characteristics.
Human-Environment Interaction: Place, Regions, and Culture
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.5.6-8. Analyze the combinations of cultural and environmental characteristics that make places both similar to and different from other places.
D2.Geo.6.6-8. Explain how the physical and human characteristics of places and regions are connected to human identities and cultures.
Human Population: Spatial Patterns and Movements
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.8.6-8. Analyze how relationships between humans and environments extend or contract spatial patterns of settlement and movement.
D2.Geo.9.6-8. Evaluate the influences of long-term human-induced environmental change on spatial patterns of conflict and cooperation.
Global Interconnections: Changing Spatial Patterns
D2.Geo.10.6-8. Analyze the ways in which cultural and environmental characteristics vary among various regions of the world.
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.12.6-8. Explain how global changes in population distribution patterns affect changes in land use in particular places.
Change, Continuity, and Context
D2.His.1.6-8. Analyze connections among events and developments in broader historical contexts.
D2.His.2.6-8. Classify series of historical events and developments as examples of change and/or continuity.

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.
Perspectives
D2.His.4.6-8. Analyze multiple factors that influenced the perspectives of people during different historical eras.
D2.His.5.6-8. Explain how and why perspectives of people have changed over time.
D2.His.6.6-8. Analyze how people’s perspectives influenced what information is available in the historical sources they created.
D2.His.7.6-8 Begins in grades 9–12
D2.His.7.6-8 Begins in grades 9–12
Historical Sources and Evidence
D2.His.9.6-8. Classify the kinds of historical sources used in a secondary interpretation.
D2.His.10.6-8. Detect possible limitations in the historical record based on evidence collected from different kinds of historical sources.
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.12.6-8. Use questions generated about multiple historical sources to identify further areas of inquiry and additional sources.
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.
Causation and Argumentation
D2.His.14.6-8. Explain multiple causes and effects of events and developments in the past.
D2.His.15.6-8. Evaluate the relative influence of various causes of events and developments in the past.
D2.His.16.6-8. Organize applicable evidence into a coherent argument about the past.
D2.His.17.6-8. Compare the central arguments in secondary works of history on related topics in multiple media.
Dimension 3: Evaluating Sources & Using Evidence
Gathering and Evaluating Sources
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.
D3.2.6-8. Evaluate the credibility of a source by determining its relevance and intended use.
Developing Claims and Using Evidence
D3.3.6-8. Identify evidence that draws information from multiple sources to support claims, noting evidentiary limitations.
D3.4.6-8. Develop claims and counterclaims while pointing out the strengths and limitations of both.
Dimension 4: Communicating Conclusions & Taking Informed Action
Communicating and Critiquing Conclusions. Together and with others, students use writing, visualizing, and speaking to...

D4.1.6-8. Construct arguments using claims and evidence from multiple sources, while acknowledging the strengths and limitations of the arguments.
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.
D4.3.6-8. 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).
D4.4.6-8. Critique arguments for credibility.
D4.5.6-8. Critique the structure of explanations.
Taking Informed Action
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.
D4.7.6-8. 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.
D4.8.6-8. 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.

BY THE END OF 12th GRADE
Dimension 1: Developing questions & planning inquiries
Constructing Compelling Questions.
D1.1.9-12. Explain how a question reflects an enduring issue in the field.
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.
Constructing Supporting Questions.
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.
D1.4.9-12. Explain how supporting questions contribute to an inquiry and how, through engaging source work, new compelling and supporting questions emerge.
Determining Helpful 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.
Dimension 2: Applying Disciplinary Concepts and Tools
Civic and political institutions.
D2.Civ.1.9-12. Distinguish the powers and responsibilities of local, state, tribal, national, and international civic and political institutions.

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.3.9-12. Analyze the impact of constitutions, laws, treaties, and international agreements on the maintenance of national and international order.
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.5.9-12. Evaluate citizens' and institutions' effectiveness in addressing social and political problems at the local, state, tribal, national, and/or international level.
D2.Civ.6.9-12. Critique relationships among governments, civil societies, and economic markets.
Participation and Deliberation: Applying Civic Virtues and Democratic Principles.
D2.Civ.7.9-12. Apply civic virtues and democratic principles when working with others.
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.9.9-12. Use appropriate deliberative processes in multiple settings.
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.
Process, Rules, and Laws.
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.12.9-12. Analyze how people use and challenge local, state, national, and international laws to address a variety of public issues.
D2.Civ.13.9-12. Evaluate public policies in terms of intended and unintended outcomes, and related consequences.
D2.Civ.14.9-12. Analyze historical, contemporary, and emerging means of changing societies, promoting the common good, and protecting rights.
Economic Decision Making.
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.2.9-12. Use marginal benefits and marginal costs to construct an argument for or against an approach or solution to an economic issue
Exchange and Markets
D2.Eco.3.9-12. Analyze the ways in which incentives influence what is produced and distributed in a market system.
D2.Eco.4.9-12. Evaluate the extent to which competition among sellers and among buyers exists in specific markets.
D2.Eco.5.9-12. Describe the consequences of competition in specific markets.

D2.Eco.6.9-12. Generate possible explanations for a government role in markets when market inefficiencies exist.
D2.Eco.7.9-12. Use benefits and costs to evaluate the effectiveness of government policies to improve market outcomes.
D2.Eco.8.9-12. Describe the possible consequences, both intended and unintended, of government policies to improve market outcomes
D2.Eco.9.9-12. Describe the roles of institutions such as clearly defined property rights and the rule of law in a market economy.
The National Economy
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.
D2.Eco.11.9-12. Use economic indicators to analyze the current and future state of the economy.
D2.Eco.12.9-12. Evaluate the selection of monetary and fiscal policies in a variety of economic conditions.
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.
Global Economy
D2.Eco.14.9-12. Analyze the role of comparative advantage in international trade of goods and services.
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.
Geographic Representations: Spatial Views of the World
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.2.9-12. 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.3.9-12. 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
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.5.9-12. Evaluate how political and economic decisions throughout time have influenced cultural and environmental characteristics of various places and regions.
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
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.8.9-12. Evaluate the impact of economic activities and political decisions on spatial patterns within and among urban, suburban, and rural regions.
D2.Geo.9.9-12. 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
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.11.9-12. Evaluate how economic globalization and the expanding use of scarce resources contribute to conflict and cooperation within and among countries
D2.Geo.12.9-12. Evaluate the consequences of human-made and natural catastrophes on global trade, politics, and human migration.
Change, Continuity, and Context
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.2.9-12. Analyze change and continuity in historical eras.
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
D2.His.4.9-12. Analyze complex and interacting factors that influenced the perspectives of people during different historical eras.
D2.His.5.9-12. Analyze how historical contexts shaped and continue to shape people’s perspectives.
D2.His.6.9-12. Analyze the ways in which the perspectives of those writing history shaped the history that they produced.
D2.His.7.9-12. Explain how the perspectives of people in the present shape interpretations of the past.
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
D2.His.9.9-12. Analyze the relationship between historical sources and the secondary interpretations made from them.
D2.His.10.9-12. Detect possible limitations in various kinds of historical evidence and differing secondary interpretations.
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.12.9-12. Use questions generated about multiple historical sources to pursue further

inquiry and investigate additional sources.
D2.His.13.9-12. Critique the appropriateness of the historical sources used in a secondary interpretation.
Causation and Argumentation
D2.His.14.9-12. Analyze multiple and complex causes and effects of events in the past.
D2.His.15.9-12. Distinguish between long-term causes and triggering events in developing a historical argument.
D2.His.16.9-12. Integrate evidence from multiple relevant historical sources and interpretations into a reasoned argument about the past.
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.
Dimension 3: Evaluating Sources & Using Evidence
Gathering and Evaluating Sources
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
D3.2.9-12. Evaluate the credibility of a source by examining how experts value the source.
Developing Claims and Using Evidence
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.
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.
Dimension 4: Communicating Conclusions & Taking Informed Action
Communicating and Critiquing Conclusions. Together and with others, students use writing, visualizing, and speaking to...
D4.1.9-12. Construct arguments using precise and knowledgeable claims, with evidence from multiple sources, while acknowledging counterclaims and evidentiary weaknesses.
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).
D4.3.9-12. 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).
D4.4.9-12. Critique the use of claims and evidence in arguments for credibility.
D4.5.9-12. Critique the use of the reasoning, sequencing, and supporting details of explanations.

Taking Informed Action
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.
D4.7.9-12. 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.
D4.8.9-12. 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.

Appendix C – Grade Level Alignment Review

Tables 1-8 in this section provide a visual overview of the degree of alignment between the C3 Framework and the CAS-SS at each grade band and level. Although the graphs and accompanying narratives provide a summary at each grade level, it is essential that the CDE team review the Standards Alignment chart in order to closely examine each specific grade-level standard.

Alignment Review – K-2

Table 1 provides a grade-level overview of the standards alignment across the domains within the grade. In the chart, the number of C3 indicators that were identified as aligned and partially aligned to the CAS-SS are identified under each domain. The number in each box represents the number of C3 Indicators that were addressed by CAS-SS. Some of the indicators may have been covered at multiple grades but were only counted once each if addressed by the CAS-SS. For example, six C3 civic indicators were addressed at least once by the CAS-SS.

Table 1. C3 Indicators Addressed Either Fully and/or Partially by Grade- K-2

	D1	D2				D3	D4
		Civics	Economics	Geography	History		
K	2	6	2	1	3	0	0
1	0	1	3	3	2	0	0
2	0	2	4	6	4	0	0

Table 2 provides a grade-band overview of the standards alignment across the domains within the grade. In the chart, the number of CAS-SS standards that are aligned or partially aligned are identified under each domain. The number in each box represents the number of CAS-SS GLEs that aligned or partially aligned to an indicator of the C3. The total represents the number of CAS-SS GLE that aligned and partially aligned to a set of C3 indicators.

Table 2. C3 Indicators Addressed by Grade Band- K-2

	D1		D2				D3		D4				
	F	P	Civics		Economics		Geography		History				
K-2	1	1	4	4	3	2	6	2	3	0	0	0	0
Total	2/5		8/12*		5/13*		8/12		3/9*		0/4		0/8

If ranked as partial and full across grades counted as a full in this chart

*Numbers account for those indicators that are only relevant to K-2 some begin in 3-5, 6-8 or 9-12

Strengths

- Content indicators were balanced across content areas and grades. This can demonstrate a balanced approach to the disciplines within a grade band.
- Civics and geography are more strongly aligned between the CAS-SS and C3.
- There is an emphasis on D1 in K in the CAS-SS.
- The CAS-SS GLEs have more full alignment to C3 indicators than partial alignment.
- The content in the CAS-SS goes beyond the expectations of the C3 indicators and can be used to enhance the C3 indicator (Illustrative Example #1)

Gaps

- Connections to D1 are lacking in grades 1 and 2.
- Across grades there is a lack of alignment to D3 and D4.
- There are a large number of D2 indicators not being addressed by the CAS-SS GLEs.
- There is a need for clearer connections to both the GLEs and C3 indicators and the evidence outcomes. (Illustrative Example #2)

Illustrative Example #1

The K-2 C3 indicator for civics focuses on understanding deliberative process. A grade two CAS-SS civics GLE that goes beyond those expectations states the following:

People use multiple ways to resolve conflicts or differences

- a. Give examples of ways that individuals, groups, and communities manage conflict and promote equality, justice, and responsibility (DOK 1-2)
- b. Identify examples of power and authority and strategies that could be used to address an imbalance, including bullying as power without authority (DOK 1-3)
- c. Identify and give examples of appropriate and inappropriate uses of power and the consequences (DOK 1-3)
- d. Demonstrate skills to resolve conflicts or differences (DOK 1-3)

This type of content and expectation is stronger and more contextual to Colorado than what the C3 expects. This is a good example of why it is important for reviewers to look at this data and ask why there isn't alignment and if the CAS-SS go deeper in content for a reason.

Illustrative Example #2

First grade CAS-SS GLE 1 in history states the following: "Describe patterns and chronological order of events of the recent past" With the following evidence outcomes:

- a. Identify the components of a calendar. Topics to include but not limited to days of the week, months, and notable events (DOK 1)
- b. Identify past events using a calendar (DOK 1)
- c. Use words related to time, sequence, and change (DOK 1)

The evidence outcomes lack in depth to reach the expectation of the GLE and/or the C3 indicator that states: "create a chronological sequence of multiple events". The evidence outcomes may

outline initial steps in the process but do they get students to the level of rigor and depth expected in both the GLE and the C3 indicator

Alignment Review – 3-5

Table 3 provides a grade-level overview of the standards alignment across the domains within the grade. In the chart, the number of C3 indicators that were identified as aligned and partially aligned to the CAS-SS are identified under each domain. The number in each box represents the number of C3 indicators that were addressed by CAS-SS. Some of the indicators may have been covered at multiple grades but were only counted once each if addressed by the CAS-SS. For example, six C3 civic indicators were addressed at least once by the grade 3 CAS-SS.

Table 3. C3 indicators addressed by grade- 3-5

	D1	D2				D3	D4
		Civics	Economics	Geography	History		
3	1	6	3	4	4	0	0
4	1	4	3	6	4	2	0
5	0	5	1	7	6	0	0

Table 4 provides a grade-band overview of the standards alignment across the domains within the grade. In the chart, the number of CAS-SS standards that are aligned or partially aligned are identified under each domain. The number in each box represents the number of CAS-SS GLEs that aligned or partially aligned to an indicator of the C3. The total represents the number of CAS-SS GLE that aligned and partially aligned to a set of C3 indicators.

Table 4. C3 Indicators Addressed by Grade Band 3-5

	D1		D2								D3		D4	
			Civics		Economics		Geography		History					
3-5	F	P	F	P	F	P	F	P	F	P	F	P	F	P
	0	1	8	0	1	5	6	3	7	1	0	2	0	0
Total	1/5		8/14		6/15		9/12		8/14*		2/4		0/8	

If ranked as partial and full across grades counted as a full in this chart

*Numbers account for those indicators that are only relevant to K-2 some begin in 6-8 or 9-12

Strengths

- Two D3 indicators were partially addressed by grade 4, demonstrating an introduction to evaluating and using sources.
- Civics, geography and history are more strongly aligned between the CAS-SS and C3.
- The CAS-SS GLEs have more full alignment to C3 indicators than partial alignment.
- Civics has a high level of alignment in the 3-5 CAS-SS

- D1 of the C3 is addressed by a focus on geographic thinking in grades 3 and 4.

Gaps

- Connections to D1 are lacking in grades 3 and 5, and are only partially aligned to one out of five indicators in grade 4.
- Across grades there is a low alignment to D3 and D4, no alignment in grades 3 and 5 and partial alignment to 2 out 4 indicators in grade 4.
- There are a large number of D2 indicators not being addressed by the CAS-SS GLEs.
- Economics has the lowest alignment at this grade band.
- The History standards in the CAS-SS cover a very broad area and are not specific enough to help unpack the C3 indicators (Illustrative Example #3)

Illustrative Example #3

The CAS-SS history standard 2 in grade 5 is a very broad and expansive standard:

The historical eras, individuals, groups, ideas, and themes in North America from 1491 through the founding of the United States government. Most of the GLEs are fairly broad but the evidence outcomes outline the specifics. In this case the evidence outcome is just as broad and can be difficult to implement:

- a. Identify and explain cultural interactions between 1491 and the American Revolution. Topics to include but not limited to the Columbian Exchange, the interactions between Europeans and native Americans in the 17th and 18th centuries, and the developing relationship between Europeans and enslaved Africans (DOK 1-2)

CDE reviewers could use the C3 to help make the evidence outcomes a little more specific by connecting the “topics” to specific C3 indicators. For instance, an evidence outcome could be “Explain why Europeans and Native Americans differed in their perspectives and how it impacted their interactions” – combining the evidence outcome above with D2.HIS.4.3-5.

Alignment Review – 6-8

Table 5 provides a grade-level overview of the standards alignment across the domains within the grade. In the chart, the number of C3 indicators that were identified as aligned and partially aligned to the CAS-SS are identified under each domain. The number in each box represents the number of C3 indicators that were addressed by CAS-SS. Some of the indicators may have been covered at multiple grades but were only counted once each if addressed by the CAS-SS. For example, ten C3 civic indicators were addressed at least once by the grade 8 CAS-SS.

Table 5. C3 Indicators Addressed by Grade Band 6-8

	D1	D2				D3	D4
		Civics	Economics	Geography	History		
6	2	4	0	4	9	3	0
7	2	2	4	4	5	1	0
8	2	10	1	6	11	3	1

Some indicators were covered in multiple grades.

Table 6 provides a grade-band overview of the standards alignment across the domains within the grade. In the chart, the number of CAS-SS standards that are aligned or partially aligned are identified under each domain. The number in each box represents the number of CAS-SS GLEs that aligned or partially aligned to an indicator of the C3. The total represents the number of CAS-SS GLE that aligned and partially aligned to a set of C3 indicators.

Table 6. C3 Indicators Addressed by Grade Band- 6-8

	D1		D2								D3		D4	
	F	P	Civics		Economics		Geography		History		F	P	F	P
6-8	F	P	F	P	F	P	F	P	F	P	F	P	F	P
	3	0	6	6	2	3	5	1	12	2	3	0	1	0
Total	3/5		12/14		5/15		6/12		14/15*		3/4		1/8	

If ranked as partial and full across grades counted as a full in this chart

*Two indicators start in 9-12

Strengths

- There is a stronger alignment to D1 in all three grades as compared to earlier grades.
- There is a stronger alignment to D3 in all three grades as compared to earlier grades.
- Civics, geography and history are more strongly aligned between the CAS-SS and C3.
- The CAS-SS GLEs have more full alignment to C3 indicators than partial alignment.
- History has a high level of alignment in the 6-8 CAS-SS

Gaps

- Connections to D4 are lacking in grades 6 and 7, and are only partially aligned to one out of eight indicators in grade 8.
- There are a large number of D2 indicators in economics and geography not being addressed by the CAS-SS GLEs. (Illustrative Example #4)

Illustrative Example #4

In the 8th grade CAS-SS GLEs there is a focus on “Economic freedom, including free trade, is important for economic growth”. There is no connection to a C3 indicator but the evidence outcomes highlight some very important economic ideas:

- Give examples of international differences in resources, productivity, and prices that provide a basis for international trade (DOK 1-2)
- Describe the factors that lead to a nation having a comparative and absolute advantage in trade (DOK 1)
- Explain effects of domestic policies on international trade (DOK 1-2)
- Explain why nations often restrict trade by using quotas, tariffs, and non-tariff barriers (DOK 1-2)

This demonstrates some of the reasons there is a gap in alignment between economics. The CAS-SS addresses some ideas and concepts that are not in the C3 but are still important for all students to learn.

Alignment Review – High School

Table 7 provides a grade-level overview of the standards alignment across the domains within the grade. In the chart, the number of C3 indicators that were identified as aligned and partially aligned to the CAS-SS are identified under each domain. The number in each box represents the number of C3 indicators that were addressed by CAS-SS. Some of the indicators may have been covered at multiple grades but were only counted once each if addressed by the CAS-SS. For example, 13 C3 civic indicators were addressed at least once by the Civics strand of CAS-SS.

Table 7. C3 Indicators Addressed by Grade Band 9-12

	D1	D2				D3	D4
		Civics	Economics	Geography	History		
Civics	0	13	0	0	0	1	1
Economics	0	0	13	0	0	0	0
Geography	0	0	1	11	0	3	6
History	0	0	0	0	10	2	2

Some indicators were covered in multiple grades

Table 8 provides a grade-band overview of the standards alignment across the domains within the grade. In the chart, the number of CAS-SS standards that are aligned or partially aligned are identified under each domain. The number in each box represents the number of CAS-SS GLEs that aligned or partially aligned to an indicator of the C3. The total represents the number of CAS-SS GLE that aligned and partially aligned to a set of C3 indicators.

Table 8. C3 Indicators Addressed by Grade Band- 9-12

	D1		D2				D3		D4					
	F	P	Civics		Economics		Geography		History					
HS	F	P	F	P	F	P	F	P	F	P	F	P		
	0	0	7	6	7	6	11	0	8	2	3	0	7	0
Total	0/5		13/14		13/15		11/12		10/17		3/4		7/8	

If ranked as partial and full across grades counted as a full in this chart

Strengths

- Balanced approach to the Content Areas of D2.
- There is a stronger alignment to D3 and D4 in all three grades as compared to earlier grades.
- The CAS-SS GLEs have more full alignment to C3 indicators than partial alignment.

- Economics and Civics have high levels of alignment in the HS CAS-SS
- The CAS-SS align to most of the D2 indicators.
- There is more of a connection to getting students engaged and thinking through issues in the HS CAS-SS

Gaps

- Connections to D1(Developing Questions and Planning Inquiries) are lacking in the HS CAS-SS.
- The HS History standards are very broad (Illustrative Example #5)
- There are no CAS-SS GLEs that align with the perspective indicators of the C3 Framework.

Illustrative Example #5

The CAS-SS History GLEs and evidence outcomes are very broad and may be difficult to implement. For example, History GLE # 2 states: The key concepts of continuity and change, cause and effect, complexity, unity and diversity over time. Then the evidence outcomes are as follows:

World history (both East and West including modern world history):

- Evaluate continuity and change over the course of world history (DOK 1-3)
- Investigate causes and effects of significant events in world history (DOK 1-2)
- Analyze the complexity of events in world history (DOK 2-3)
- Examine and evaluate issues of unity and diversity in world history (DOK 1-3)

United States history (Reconstruction to the present):

- Analyze continuity and change in eras over the course of United States history (DOK 2-3)
- Investigate causes and effects of significant events in United States history. Topics to include but not limited to WWI, Great Depression, Cold War (DOK 1-2)
- Analyze the complexity of events in United States history. Topics to include but not limited to the suffrage movement and the Civil Rights Movement (DOK 2-3)
- Examine and evaluate issues of unity and diversity from Reconstruction to present. Topics to include but not limited to the rise and fall of Jim Crow, role of patriotism, and the role of religion (DOK 1-3)

There is a lot in each of these evidence outcomes. It may be helpful to break these down using the C3 into three different (change, continuity and context, causation and argumentation, and perspectives) GLEs with specific evidence outcomes.

Appendix D – Personal Financial Literacy Alignment Report

I. METHODOLOGY

This section describes the research-based processes and protocols used during WestEd’s crosswalk of the Colorado Personal Financial Literacy Expectations (CO-PFL) with the Programme for International Student Assessment (PISA) 2015 Financial Literacy Assessment Framework. Findings from the crosswalk were used to develop observations of the current CO-PFL and objective recommendations for improvement of the content of the CO-PFL. These recommendations are intended to help guide decision-making during the standards revision process.

Alignment Review of the Colorado Personal Financial Literacy Expectations with the PISA Financial Literacy Assessment Framework

For this step, the analyst was asked to apply a protocol focused on conducting a crosswalk of the CO-PFL with the PISA 2105 Financial Literacy Assessment Framework. The CO-PFL is organized into Grade Level Expectations (GLE) articulated across individual grades from preschool-grade 5 and in middle and high school and are integrated into the Mathematics and Social Studies Standards documents. The unit of analysis and reporting for this step was the CO-PFL Grade Level Expectation at each grade. These statements were used to interpret the state’s intent with regard to the development and application of the knowledge and skills described in the standards.

In 2012, PISA conducted the first large-scale international study to assess the financial literacy of young people. PISA assesses the readiness of students for their life beyond schooling – and, in particular, their capacity to use knowledge and skills – by collecting and analyzing information from 15 year olds across countries.

The PISA 2015 Personal Financial Literacy Assessment Framework outlines the core PISA domains of the financial literacy assessment. And like the other PISA domains, financial literacy is assessed using this instrument designed to provide data that are valid, reliable and comparable.

The PISA Financial Literacy Assessment Framework outlines the elements that are part of the concept of financial literacy. It is important to highlight that the main elements outlined are the ones that will best ensure construction of an assessment comprising tasks with an appropriate range of difficulty and a broad coverage of the domain.

The PISA Framework outlines specific content, processes and contexts can be thought of as three different perspectives on the area to be assessed.

- Content comprises the knowledge and understanding(s) that are essential.
- Processes describe the mental strategies or approaches that are called upon to negotiate the material.
- Contexts refer to the situations in which the domain knowledge, skills and understandings are applied, ranging from the personal to the global.

Content

The content of financial literacy is conceived of as the areas of knowledge and understanding that must be drawn upon in order to perform a particular task. The content components of the Framework come from a review of the content of existing financial literacy learning frameworks from Australia, Brazil, England, Japan, Malaysia, the Netherlands, New Zealand, Northern Ireland, Scotland, South Africa and the United States and focuses on areas where there is some consensus on financial literacy content (OECD, 2014b). These topics form the four content areas of the PISA financial literacy assessment:

- money and transactions
- planning and managing finances
- risk and reward
- financial landscape

Processes

The process categories relate to cognitive processes. They are used to describe students' ability to recognize and apply concepts relevant to the domain, and to understand, analyze, reason about, and evaluate and suggest solutions. PISA defines four process categories for financial literacy:

- identify financial information
- analyze information in a financial context
- evaluate financial issues
- apply financial knowledge and understanding

While the verbs used here bear some resemblance to those in Bloom's taxonomy of educational objectives (Bloom, 1956), an important distinction is that the processes in the financial literacy construct are not a hierarchy of skills. They are, instead, processes representing a typical sequence of actions.

Contexts

The PISA Framework also includes a set of contexts that frame situations around the individual, family or peer group, and on the wider community. The PISA team reviewed the main contexts that impact financial decision making. The contexts that are part of the PISA Framework are:

- education and work
- home and family
- individual
- societal

These types of contexts are usually left up to the curriculum and instruction components in the U.S. and are not normally part of the academic standards. Colorado reviewers may want to review the contexts as they build support tools and resources once the standards are revised.

Alignment Review Criteria. The WestEd analyst applied a single general evaluation criterion to this review of CO-PFL. The general criteria, explained in greater detail below, were concepts and skills. Due to the structure of the PISA Framework, the comparison was intended to serve as a holistic review of the similarities and differences between the expectations outlined in the PISA Framework and the CO-PFL in its current form. These data may be used to inform CDE during the upcoming CO-PFL revision process. Specifically, comparisons were documented for one criteria, concepts and skills. The analyst’s considerations for judging each are defined as follows:

- *Concepts and Skills.* Analyst’s considerations related to standards concepts and skills included similarities and differences in the concepts and skills outlined by the PISA Framework and wording (specificity of language; concepts, knowledge, etc.).

The alignment process began by evaluating each component of the PISA Framework and drawing out key criteria that inform the level of match.

The alignment of the CO-PFL to the PISA Framework was conducted on a grade-by-grade basis to begin to identify where the content and processes were being addressed. It has to be mentioned that the PISA Framework is built to outline the knowledge and skills that a 15 year old should have access to. That being said, this review can be used to identify how to spiral the concepts throughout the grades to ensure students have multiple opportunities to engage with the knowledge and skills throughout the K-12 standards. The CO-PFL are integrated within the Mathematics and Social Studies standards and are organized by grade through grade 8 and includes a set of 9-12 high school concepts and skills. To accommodate these differences in organization, the analyst performed the alignment by matching the expectations of the set of CO-PFL with the content and processes outlined in the PISA Framework. For each PFL GLE statement, the analyst independently determined if there was a corresponding PISA indicator, and to what degree each statement was aligned to the indicator. The analyst used the evidence outcomes for each grade level expectation to provide further clarification of the meaning of the grade level expectation. The evidence outcomes were individually reviewed for concepts and skills to make a final determination regarding the alignment of the grade level expectation. If a majority of the evidence outcome under a grade level expectation was identified as fully aligned the grade level expectation was labeled as fully aligned. If a majority of the evidence outcome were either partially or not aligned the grade level expectation was labeled as partially aligned. If none of the evidence outcomes were aligned then the grade level expectation was labeled as not aligned.

Rating sheets were used to guide the analysis and reporting of holistic findings. The GLE statements were rated as meeting each criterion using the following holistic designations and scale: “Fully” (F) and “Partially” (P). In any instances where a GLE statement aligned completely with a specific PISA indicator, it was noted with an F for that indicator. In any instances where a GLE statement aligned with only a part of a specific PISA indicator, it was noted with a P for that indicator. GLE statements that were rated as P were followed by a “D” or “R” if there was partial alignment with a corresponding, grade-appropriate indicator, to identify which criterion (D - Depth

& Breadth or R - Rigor) was most significant in determining the P rating. In any instances where a GLE statement was not aligned with a specific PISA indicator, it was noted with a blank space for that indicator.

Comparison of the Colorado Personal Financial Literacy Expectations to External Referents

The analyst systematically reviewed sets of external referent standards vis-à-vis the CO-PFL using the criteria described below. The unit of analysis and reporting for this step of work was the CO-PFL content area standard, specifically the GLE statements. The GLE statements for each content area standard were used to interpret the state's intent with regard to the development and application of the knowledge and skills described in the standards. The unit of analysis for the external referents was the most comparable level in each set of referent standards. For the purposes of review and presentation, data were organized using the current structure and sequence of the CO-PFL.

The External Referent. Since the PISA Framework included an analysis of many other countries standards, CDE selected one external referent to which the CO-PFL would be compared. Included in the selection criteria was whether the standards were respected for their strong overall academic performance and quality of their standards. To enable maximal usefulness in guiding standards revisions, a set of standards was sought that would be relevant in both content areas. Additionally, it was hoped that by reviewing a set of external referent standards, the comparison would benefit from any cross-content elements or guiding philosophies that might not be apparent in any one social studies content area. To this end, CDE selected standards from the Ohio Department of Education.

Criteria Used for Comparative Analyses. The external referent comparison was intended to serve as a holistic review of the similarities and differences between each external referent and the CO-PFL in its current 2009 form, as compared to similar analyses completed prior to the last revisions. These data may be used to inform CDE during the upcoming PFL standards revision process. Specifically, comparisons were documented for two criteria, organization/structure and content. Analysts' considerations for judging each are defined as follows:

- ***Organization/Structure.*** Analyst's considerations related to standards organization and structure included similarities and differences in grade articulation (standards articulated by individual grade, grade-span, course, etc.; cross-grade strands versus no repetition of content), hierarchy of standards (number of levels in standards, e.g., strand, standard, benchmark, indicator), number of standards (number of strands, standards, indicators), design/format (organization and structure of standards), and ways in which intended knowledge and skills are communicated.
- ***Concepts and Skills.*** Analyst's considerations related to standards concepts and skills included similarities and differences in standards scope and sequence (the depth and breadth of concepts and skills described in the standards), grade spans (the sequencing

and distribution of concepts and skills within and across the grade spans), and wording (specificity of language; focus on action verbs, knowledge, etc.).

Holistic Rating Scale. For each criterion, analysts recorded a holistic rating reflecting the similarity of the external referent standards to the CO-PFL. These ratings were as follows:

- *Similar* — Referent standards are mostly similar to CO-PFL in substantive ways
- *Different* — Referent standards are mostly different from CO-PFL in substantive ways

In order to arrive at these holistic ratings, the analyst recorded descriptive comments on the specific similarities and differences between the CO-PFL and referent standards. Comments included rationale and evidence to support judgments and conclusions about the impact or relative importance of the differences (or in some cases, similarities). It is important to note that differences in structure or content of state standards may be qualitative, but may also be attributable to differences in history, purpose, and/or context. Thus, the implication is that a variety of approaches and combinations of approaches may be considered, should they be determined to be appropriate for Colorado.

III. ALIGNMENT REVIEW FINDINGS AND RECOMMENDATIONS

This section contains findings and recommendations related to the PISA alignment review and the external referent review for the analysis of the CO-PFL. Detailed review criteria can be found in the Methodology section of this report. A brief description of the criteria and guiding questions are also provided here for convenience.

Overall Findings

This section provides an overview of key findings, including areas of full, partial, and no alignment and a review of whether current CO-PFL provides students the opportunity to learn the knowledge, skills, and practices outlined in the PISA Framework.

Although the guiding question was how the set of CO-PFL connected directly to the PISA Framework, some CO-PFL standards did not align with any part the PISA Framework. As CDE transitions to reviewing the Personal Financial Literacy standards, these CO-PFL may not be needed. Some indicators of the PISA Framework are not addressed by the current CO-PFL. As CDE begins to review standards, reviewing the PISA components could be helpful in ensuring full coverage of the framework. The full framework can be found at: <http://www.oecd-ilibrary.org/docserver/download/9816021e.pdf?expires=1478538454&id=id&accname=guest&checksum=55613FF43AB4EBF7A4628472C06EE52A> (starting at pg. 79).

Alignment Review – GLE

As described in the Methodology section of this report, the CO-PFL GLE statements were reviewed for their quality according to three specific criteria: content and skills, in comparison to

components provided in the PISA Framework. The scale used for evaluating each criterion was as follows: Fully (F) or Partially (P).

Grade Level Alignment Review

Tables 1-3 provide a visual overview of the degree of alignment between the PISA Framework and the CO-PFL at each grade band and level. Although the graphs and accompanying narratives provide a summary at each grade level, it is essential that the CDE team review the Alignment chart in order to closely examine each specific grade-level standard.

Alignment Review – K-5

Table 1 provides a grade banded overview of the alignment across the PISA expectations within the grades. The chart identifies where there are full and partial connections to the PISA expectations.

Table 1. PISA Elements Addressed in K-5 PFL Grade Level Expectations

Mathematics

	Content								Processes									
	Money and Transactions		Planning and Managing		Risk and reward		Financial Landscape		Identify Financial Information		Analyze information in a financial Context		Evaluate Financial issues		Apply Financial Knowledge			
	F	P	F	P	F	P	F	P	F	P	F	P	F	P	F	P		
PK	XX																X	
K	X	X																X
1	X								X									X
2				X													X	
3			X														X	
4				X							X							
5	X								X								X	

Table 1. PISA elements addressed in K-5 PFL Grade Level Expectations

Social Studies

	Content								Processes							
	Money and Transactions		Planning and Managing		Risk and reward		Financial Landscape		Identify Financial Information		Analyze information in a financial Context		Evaluate Financial issues		Apply Financial Knowledge	
	F	P	F	P	F	P	F	P	F	P	F	P	F	P	F	P
PK	X								X							
K			X						X			X				
1			X						X							
2			X					X	X			X				
3			X						X						X	
4				X	X				X		X					
5					X	X	X		X		X					

Strengths

- PISA expectations in Money and Transactions and applying financial knowledge are aligned well in Mathematics
- PISA expectations in Planning and Managing and identifying financial information are aligned well in Social Studies
- There are multiple opportunities for student to analyze information in a financial context across Mathematics and Social Studies
- All four PISA content expectations are addressed in the CO-PFL.

Gaps

- There is very little in the CO-PFL in Mathematics or Social Studies that addresses the concepts in Risk and Reward and Financial Landscape
- There are no opportunities for student to evaluate financial issues in the elementary grades.

Alignment Review – 6-8

Table 3 provides a grade banded overview of the alignment across the PISA expectations within the grades. The chart identifies where there are full and partial connections to the PISA expectations.

Table 2. PISA elements addressed in 6-8 CO-PFL

Mathematics

	Content								Processes							
	Money and Transactions		Planning and Managing		Risk and reward		Financial Landscape		Identify Financial Information		Analyze information in a financial Context		Evaluate Financial issues		Apply Financial Knowledge	
	F	P	F	P	F	P	F	P	F	P	F	P	F	P	F	P
6				X			X								X	
7						X										X
8					X						X					

Social Studies

	Content								Processes							
	Money and Transactions		Planning and Managing		Risk and reward		Financial Landscape		Identify Financial Information		Analyze information in a financial Context		Evaluate Financial issues		Apply Financial Knowledge	
	F	P	F	P	F	P	F	P	F	P	F	P	F	P	F	P
6			X					X								
7							X	X								X
8					X			X		X						

Strengths

- The CO-PFL address the risk and reward components of the PISA framework
- Students are asked to apply financial knowledge across grades and content areas in the CO-PFL
- Students are asked to identify financial information in all middle school grades in social studies

Gaps

- There are no connections in the CO-PFL to money and transactions
- There are no opportunities for students to evaluate financial issues across the content areas in the CO-PFL
- There is a limited focus on key concepts in middle school, particularly in 7th grade.

Alignment Review – 9-12

Table 3 provides a grade banded overview of the alignment across the PISA expectations within the grades. The chart identifies where there are full and partial connections to the PISA expectations.

Table 3. PISA elements addressed in High School CO-PFL

Mathematics

	Content								Processes								
	Money and Transactions		Planning and Managing		Risk and reward		Financial Landscape		Identify Financial Information		Analyze information in a financial Context		Evaluate Financial issues		Apply Financial Knowledge		
	F	P	F	P	F	P	F	P	F	P	F	P	F	P	F	P	
HS			X		X	X			X		XX					X	X

Social Studies

	Content								Processes								
	Money and Transactions		Planning and Managing		Risk and reward		Financial Landscape		Identify Financial Information		Analyze information in a financial Context		Evaluate Financial issues		Apply Financial Knowledge		
	F	P	F	P	F	P	F	P	F	P	F	P	F	P	F	P	
HS			XX		X	X	X		X	X	XX					X	

Strengths

- The CO-PFL align at a high level to PISA planning and managing expectations.
- The CO-PFL align at a high level to PISA risk and reward expectations.
- Students have multiple opportunities to identify financial information in the High School CO-PFL
- Students have multiple opportunities to analyze information in a financial context in the High School CO-PFL
- Students have multiple opportunities to apply financial knowledge in the High School CO-PFL

Gaps

- There are no connections to PISA money and transactions expectations
- There are few connections to PISA financial landscape expectations.
- There are no opportunities for students to evaluate financial issues in the High School CO-PFL

Alignment Review – Comparison to External Referents

As described in the Methodology section of this report, the analyst reviewed the 2012 Ohio Financial Literacy Academic Content Standards as an external referent comparison with the CO-PFL (http://education.ohio.gov/getattachment/Topics/Academic-Content-Standards/Financial-Literacy-and-Business/Financial-Literacy/Financial_Literacy_Academic_Content_Standards_1-1-3.pdf.aspx)

The external referent standards were reviewed for two broad criteria; organization/structure and concepts and skills. Each criterion contained several subcategories about which analysts recorded observations before determining a final overall holistic rating of mostly similar (Similar) or mostly different (Different). Findings from these analyses are presented below.

Table 4. Comparison Ratings for External Referents.

Referent	Ohio
Organization/Structure	Different
Concepts and Skills	Similar

Organization and Structure. The Ohio Financial Literacy Academic Content Standards are structured very differently from the CO-PFL. Ohio has one set of standards for k-12 financial literacy. They have outlined their standards by theme, topic and content statements. Their topics connect closely with the PISA topics. They include; *financial responsibility and decision making, income and careers, planning and money management, consumerism, investing, credit and debit and risk and insurance.* Under each topic there are a set of content statements. It is expected that districts use the one set of standards to build opportunities to learn financial literacy throughout the K-12 curriculum. There is a law in Ohio that requires districts to integrate economics and personal financial literacy into at least one social studies course or another class. Ohio has also built model curricula to help teachers unpack the standards at the high school level.

In contrast the CO-PFL are integrated into the content standards for Mathematics and Social Studies. The framing areas that are deemed essential are:

- **Goal Setting, Financial Responsibility and Careers**
Understand the importance of personal financial goal setting and responsibility and apply those concepts in a consumer-driven, global marketplace.
- **Planning, Income, Saving and Investing**
Create and manage a financial plan for short-term and long-term financial security to make informed spending and saving decisions that are compatible with changing personal goals.
- **Using Credit**
Analyze and manage factors that affect the choice, credit, costs, sources and legal aspects of using credit.
- **Risk Management and Insurance**
Analyze and apply appropriate and cost effect risk management strategies.

These essential ideas are weaved throughout grades PK-12 and built within the Mathematics and Social Studies Standards.

Concepts and Skills. The concepts and skills of the CO-PFL for personal financial literacy have a number of similarities and differences with the Ohio standards. In general, the treatment of the concepts and skills is more similar than different. Common elements are the focus on credit, income, planning and managing money, investing, risk and insurance and personal decision making. The one difference is that Ohio has a focus on consumerism. Both sets of standards build in financial decision making skills throughout the document.

As identified Ohio standards cover much of the same content outlined in the CO-PFL. Ohio requires students to understand key concepts and skills similar to the four areas outlined in the CO-PFL. The major difference between Colorado and Ohio is the level of detail of the standards. Generally speaking, the CO-PFL have greater depth than Ohio, particularly at the elementary and middle school levels.

Observations for Consideration

There are numerous areas where noticeable differences between CO-PFL, the PISA Framework and the external referent can be observed. It is in these areas that we anticipate the most discussion in considering revisions to the CO-PFL and provide observations for consideration.

- **Coherence.** The CO-PFL are designed to ensure financial literacy is taught throughout grades PK-12. This structure is an opportunity to ensure coherence across grades using the four essential areas outlined at the beginning of the standards. Reviewing the standards across grades and content areas, using those four essential areas of focus could prove to provide a higher level of coherence for Colorado’s financial literacy standards. The construct of Ohio’s standards may be helpful when thinking about clarifying the key common threads throughout Colorado’s PFL standards and helping build connections across grades and content areas to ensure students have multiple opportunities to engage with the concepts. Reviewers could review the current four essential areas and discuss if they address all of the components needed for Colorado students. They could then use those essential areas as the frame for each grade and content area. For example, in high school, students are asked to “Design, analyze, and apply a financial plan based on short- and long-term financial goals” This connects directly to goal setting. It would be beneficial to build in other opportunities for students to engage in similar work throughout the grades and across the content areas to ensure students are prepared to engage in this type of work at the high school level.
- **Integration.** A hallmark feature of CO-PFL is the integration within the content areas of Mathematics and Social Studies. One thing to consider is to ensure that the ideas outlined in the Mathematics standards complement and build on the ideas outlined in the Social Studies Standards. For example, in 6th grade the social studies GLE is “Saving and

investing are key contributors to financial well-being” while the Mathematics GLE is “Quantities can be expressed and compared using ratios and rates”. It would be most beneficial to students to make clear connections between the financial literacy concepts being addressed across the content areas at each grade.

- ***Conceptual Coverage.*** Many of the PISA concepts are currently addressed in the CO-PFL. However, there are two areas that have gaps in coverage across grades; money, and transactions and evaluating financial issues. Money and transactions is addressed continuously at the elementary level and then not addressed in middle school or high school. Understandably, when there is a spiraling of concepts, there are ones that are completed by elementary in order to address more complex ideas in middle school and high school but the ideas of money and transactions seem to be essential and relevant for the middle and high school students who are planning to get jobs and for life after high school. Evaluating financial issues is not addressed at all throughout the Co PFLE. This may be an opportunity to reflect on how to connect the current standards and ask students to engage in the ideas/concepts at a higher level across grades.
- ***Context.*** State standards in the United States do not normally incorporate context within the standards. It is more often found in the curriculum and instruction built on the standards. It may prove beneficial for Colorado reviewers to remember the contexts when reviewing the standards and sharing the contexts with districts when sharing tools and resources to support implementation of the standards.