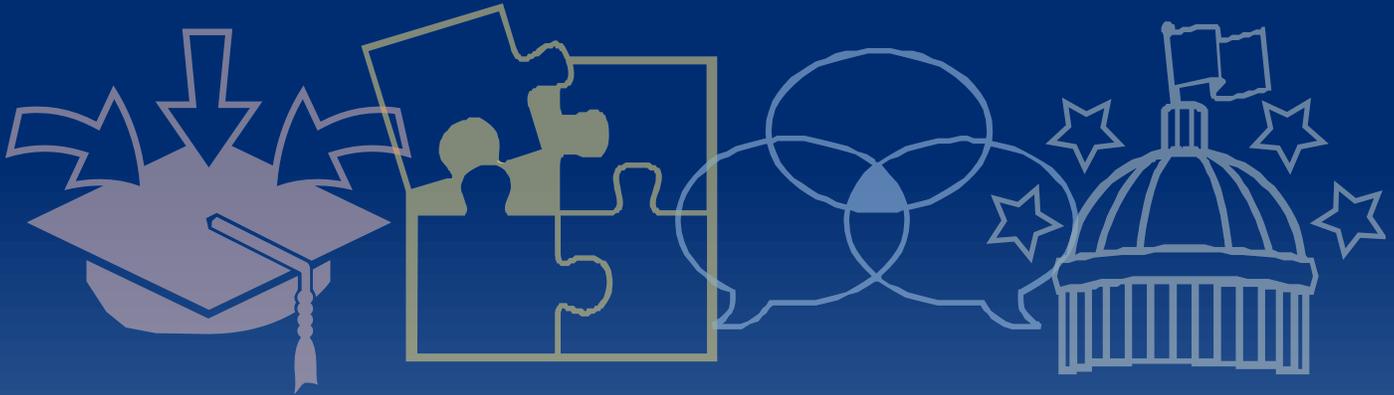




JOHNS HOPKINS
SCHOOL of EDUCATION

Institute for Education Policy



Social Studies Knowledge MapTM

BILL *of* RIGHTS

INSTITUTE

A unique analytic resource enabling policymakers, school leaders, and parents to better understand the strengths and weaknesses of the Bill of Rights Institute's year-long civics course.

Summer 2021



The Johns Hopkins Institute for Education Policy designed the Knowledge Map™ as a unique analysis of the knowledge build provided by different curricula. Why? The academic achievement gap between low- and high-income students is, in large part, a knowledge gap. Research indicates that many pluralistic democracies require all schools to teach a standard body of knowledge;ⁱ a comprehensive, content-rich curriculum is a signature feature of high-performing systems.ⁱⁱ

Despite the research record, a majority of the United States' curricula sideline the acquisition of deep content, and instead, focus on the process of honing abstract skills. Furthermore, we know from the political science literature that students need to practice the skill of civil disagreementⁱⁱⁱ - a routine that is unfortunately rare in the United States' classrooms.^{iv} A well-designed social studies curriculum can encourage both knowledge building and the habit of civil disagreement.

The Institute's Social Studies Knowledge Map™ allows us to analyze a K-12 social studies curriculum in terms of the knowledge it helps students learn and apply. We conduct this analysis by "mapping" the knowledge domains that are implicit in the selection of the sources and texts that are discussed. This mapping enables policymakers to see not only the domains of knowledge that are opened up in the curriculum – and others that are missed – but also to what degree, and over what grade span. We also assess whether a given unit includes more than one perspective, and whether the teacher-facing materials encourage deliberation and disagreement. This is a one-of-a-kind instrument.

METHODOLOGY

- The Institute maps all items in the evaluated grades on three initial dimensions and at different grain sizes of coverage. For example, a letter by abolitionist Thomas Garrett about Harriet Tubman would be categorized like so:
 - **Domain:** U.S. History to 1865
 - **Topic:** Slavery/Abolition
 - **Subtopics:** Harriet Tubman; Underground Railroad
- The Institute evaluates the quality of every student-facing resource both individually and in the broader context of the unit.
- The Institute constructs a vertical mapping of the knowledge domains at each level, first by grade and then across multiple grades.
- The Institute creates a coverage report that visually illustrates the depth of emphasis a given domain receives across the grades.
- The Institute evaluates each unit for its presentation of distinctive viewpoints and for the presence of teacher-facing instructions that support a deliberative classroom (referred to as 'Open Classroom Climate').
- [View a sample report of a de-identified district's K-12 curriculum.](#)

PROJECT DESCRIPTION

The Institute reviewed the materials that comprise the Bill of Rights Institute's (BRI) year-long civics course. Each resource, both text and non-text, was evaluated individually, in the context of its unit, and in the cumulative curriculum's knowledge reinforcement capabilities.

Insights discussed throughout this report derive from several evaluations, including heat maps, coherence and quality maps, and evaluations of grade-specific metrics such as the presence of multiple viewpoints and the encouragement of deliberation.

Strengths of Curriculum

Heat map analysis indicates a strong specialized curriculum. Ample information appears on topics within the Civics & Government domain, and coverage is strong within the two American history domains, as well. Considering that the instruction specializes in United States civics and its development, the coverage present at these levels indicates that the Bill of Rights Institute is succeeding at its aims of providing strong civics instruction.

Additionally, the quality of individual texts is very strong across the entire course. Quality analysis later in this report reveals that all units achieved average quality scores of over 75 percent – the Institute's threshold for a high-quality unit. This indicates that at every stage of the course, students are consistently accessing well-developed, high-quality materials that contribute to a high standard of learning.

Weaknesses of Curriculum

As a general rule, the course's most striking weakness is the modest coherence of materials within each unit. In most cases, the Institute's coherence analysis determined that weak-to-moderate knowledge reinforcement occurs throughout the entire course. Topics that are addressed in one text within a unit often do not appear in other texts throughout that unit, resulting in a missed opportunity to use individual units to build upon certain ideas and themes. Though the quality of the curriculum is generally strong, further care could be taken to allow for improved knowledge building both within units and across the entire course.

Although heat map coverage within relevant domains is very strong, the Institute's analysis also found several missed opportunities. A handful of domains scored weakly for coverage, but included topics that could benefit a civics course. Namely, the Sociology and Thematic World History domains could potentially bolster the course with improved coverage, as could some topics within the Psychology and Equity & Inclusion domains. Though the aims of the BRI course should be considered when determining topical coverage, the further integration of additional domains could result in a more developed and interdisciplinary curriculum overall.

INSTITUTE RECOMMENDATIONS

The BRI year-long civics course provides students with a robust knowledge of American civics and government and provides ample historical context across U.S. history from colonialism to the present. This knowledge is built using high-quality texts and its focus on the use of primary source documents is one of its most significant strengths. To that end, developing coherence across each unit of the course and ensuring the inclusion of diverse perspectives could be an opportunity to further reinforce the strengths and objectives of the curriculum.

- Consider ways to incorporate a broader range of perspectives into units one and eight.
- Look for opportunities to align content more smoothly across lessons in a unit, and center recurrent themes where possible.
- Ensure adequate coverage of diverse populations and experiences by expanding coverage of domains such as Sociology and discuss historical events in relation to diverse groups where relevant.

BILL OF RIGHTS INSTITUTE HEAT MAPS: SINGLE-GRADE CIVICS COURSE

One of the Institute’s critical gateway questions addresses the level of exposure students receive to each important domain of knowledge and to the topic within those domains. Each heat map expresses the findings visually using a color-coding scheme, as shown in Figure 1. Lighter blue squares represent fewer knowledge-building texts, such as one or no text, while darker blue squares represent more knowledge-building texts, such as eight or more. The results for each of the twenty topical domains in the course (evaluated as a Grade 12 curriculum) appear in the figures below. Though the evaluated curriculum is specifically a civics course, all domains are included in order to provide a full data set. The context and goals of the Bill of Rights Institute’s course should be kept in mind when reviewing the results of heat map analysis.

A mere mention of a topic does not necessarily indicate exposure to that topic. The Institute tags a topic only when the text’s presentation of it is robust enough for a student to convey specific facts about it. This metric is age-dependent; a topic is tagged if the average elementary student could speak about it for one minute, a middle school student for three minutes, and a high school student for five minutes.

No Text **1 Text** **2-4 Texts** **5-7 Texts** **8+ Texts**

Figure 1. The color-coded rating scheme used in heat maps, where lighter blue indicates fewer texts and darker blue indicates more texts.

Strong Knowledge-Building Domains

The curriculum presents robust knowledge building in several domains and additional topics, shown below alphabetically when similarly rated. Strong knowledge-building domains appear in the heat maps as dark blue, indicating that many texts address the topic (for instance, the heat map categories of 8+ Texts or 5-7 Texts).

The BRI course presents strong knowledge building in three domains: Civics & Government (Figure 2), US History Since 1685 (Figure 3), and US History to 1865 (Figure 4). Strong reinforcement in these domains reflects the nature of the course; the Civics & Government domain is covered significantly in all of its topics, indicating that the curriculum provides well-rounded and detailed civics instruction to its students. Additionally, high performances from the two American history domains indicates that this instruction is reinforced by relevant historical context. Overall, the strongest heat maps in this curriculum are those that are most relevant to the course's aims, which signifies that BRI provides a good depth of coverage on its main ideas.



*Figure 2. Heat map analysis of the **Civics & Government** knowledge domain in the BRI civics course.*

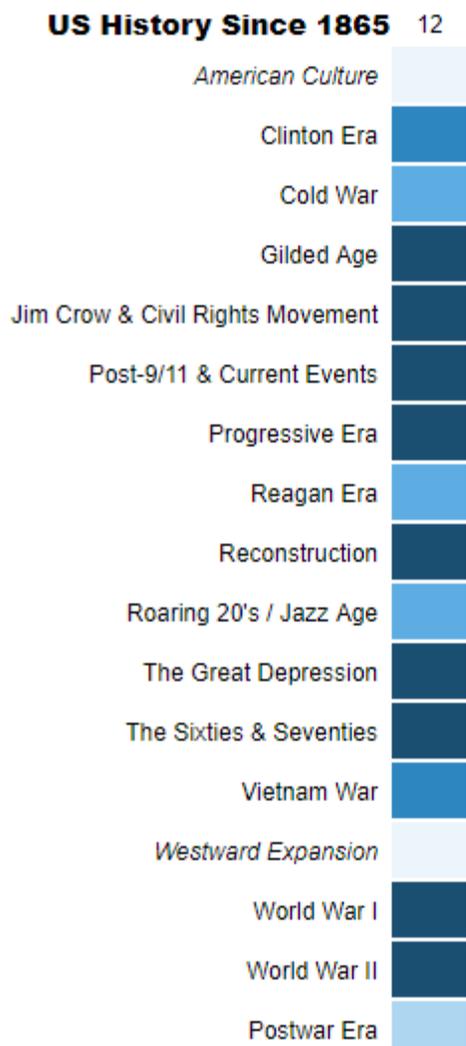


Figure 3. Heat Map analysis of the **US History Since 1865** knowledge domain in the BRI civics course.



Figure 4. Heat map analysis of the **US History to 1865** knowledge domain in the BRI civics course.

Moderate Knowledge-Building Domains

The curriculum presents several moderate knowledge-building domains and topics. Moderate knowledge-building domains appear in the heat maps as mixed blue, indicating that few or some texts address the topics within them (for instance, the heat map category of 2-4 Texts).

The course presents moderate knowledge building in five domains: Classical History (Figure 5), Economics (Figure 6), Equity & Inclusion (Figure 7), Law & Criminology (Figure 8), and Philosophy (Figure 9). Though topics in these domains do not feature as prominently as their strong counterparts, they appear frequently enough that students receive some reinforcement of their ideas throughout the course. Topics covered within these domains typically reflect the larger focus on civics; in the Classical History domain, for instance, coverage occurs within the

topics of Ancient Greece and Ancient Rome, reflecting the historical basis for the United States' governing ideals. Knowledge gaps in these domains should be considered in the course's broader context, as they may provide opportunities to further develop the instruction.



Figure 5. Heat map analysis of the **Classical History** knowledge domain in the BRI civics course.



Figure 6. Heat map analysis of the **Economics** knowledge domain in the BRI civics course.



Figure 7. Heat map analysis of the **Equity & Inclusion** knowledge domain in the BRI civics course.

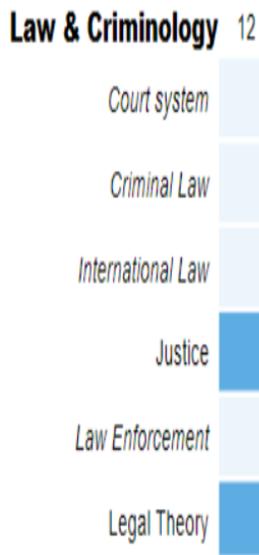


Figure 8. Heat map analysis of the **Law & Criminology** knowledge domain in the BRI civics course.

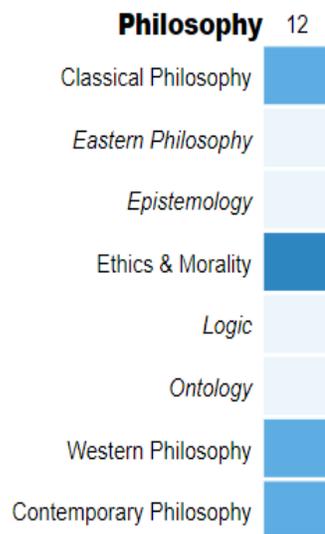


Figure 9. Heat map analysis of the **Philosophy** domain in the BRI civics course.

Additional Knowledge-Building Domains

Twelve domains were not supported in the BRI course: African History, Ancient Civilizations, Anthropology, Asian History, European History, Geography, Media, Mesoamerican History, Psychology, Religion, Sociology, and Thematic World History. The Institute attributes this to the focused nature of the one-year course.

BRI QUALITY & COHERENCE

As mentioned previously, the Institute’s analysis includes tagging each text for the knowledge domains, topics, and subtopics that it reinforces. The evaluation also rates each individual text for quality according to the rubric below. For each item, the Institute applies a tagging system that rates how well supplemental materials reinforce the knowledge found in the anchor text.

Quality and coherence findings vary and are not linked to each other. A unit may score highly on overall quality, shown as a percentage, but have a low coherence rating in terms of how well the supplemental texts reinforce the knowledge built in the anchor text. In other words, units with high overall quality scores may only weakly reinforce central themes through the inclusion of additional materials, and vice versa.

Rubrics for Quality

The Institute applies three rubrics for analysis of individual text quality – a rubric for written primary sources, visual primary sources, and all secondary sources.

Primary Sources: Written, Spoken, and Verbal

- **Emotion:** The degree to which the source is memorable due to its impact upon the reader.
- **Language:** The degree to which the source is an example of outstanding or representative writing.
- **Universal Questions:** The degree to which the source addresses important aspects of the human condition or the relevant historical context.
- **Content Knowledge:** The degree to which the source contributes to students' background knowledge of the tagged domains and topics.
- **Prominence:** The degree to which the source reflects its historical period or provides important context to the related events or documents.

Primary Sources: Visual, Artistic, or Non-Verbal

- **Emotion:** The degree to which the source is memorable due to its impact upon the reader.
- **Authenticity:** The degree to which the source reflects authentic interpretive experience or visual representation of the historical context.
- **Universal Questions:** The degree to which the source addresses important aspects of the human condition or the relevant historical context.
- **Content Knowledge:** The degree to which the source contributes to students' background knowledge about the tagged domains and topics.
- **Prominence:** The degree to which the source reflects its historical period or provides important context to the related events or documents.

Secondary Sources: Written, Spoken, and Visual

- **Accuracy:** The degree to which the source is empirically accurate.
- **Language/Artistic Technique:** The degree to which the source is an example of outstanding writing or artistic expression.
- **Source:** The quality and trustworthiness of the source.
- **Content Knowledge:** The degree to which the source contributes to students' background knowledge about the tagged domains and topics.

The quality and coherence review also includes an evaluation that measures the presence or absence of two factors: multiple perspectives on a given subject and encouragement to create a deliberative classroom.

Unit Quality and Coherence Analysis

The Knowledge Map™ project allows for a unit-level analysis of quality and coherence. The Institute begins its analysis with heat maps, which illustrate coverage by grade bands of crucial knowledge domains and topics. It then builds upon that analysis through a quality scoring system that reflects the review of each individual text, outlined in the above rubrics and averaged across the entire text set. Finally, the Institute generates coherence graphs that

illustrate the extent to which the supplemental materials reinforce the knowledge built by the anchor text (as measured through assigned topic tags). For most units in a social studies curriculum, the textbook is the anchor text. In units or grades lacking a textbook or other predefined anchor text, the highest-quality text serves as the anchor.

The coherence graph utilizes a ball-and-spoke visual, where the central ball represents the anchor and the surrounding balls represent the supporting materials. The numbers shown on each ball represent the number of topics in each supplemental material that correlate to the topics assigned to the anchor. The anchor always reinforces itself entirely; as such, the number on the central ball always equates to the total number of tags. The proximity of each spoke to the central ball visually conveys this relationship.

The quality and coherence findings for each grade level follow in the sections below. This report highlights the highest- and lowest-quality units for each grade, and provides a discussion of knowledge reinforcement within those units. The caption below each graph provides an overall quality score for the unit. The Institute considers units with a text quality score of 75% or above to be high quality. A unit is acceptable as low as 66%, and any quality score below 66% denotes poor quality. The caption contains additional information about each graphic, including the grade level and unit number represented. In the graphic itself, the anchor text rating appears in the center, while individual supplemental text ratings appear on the nodes.

BRI QUALITY & COHERENCE FINDINGS: SINGLE-GRADE CIVICS COURSE

Overall Quality Score

The course as a whole receives an overall quality score of 78.98%, placing it in the high-quality band. This score was established by averaging the individual quality scores of each individual unit in the course.

Highest-Rated Unit

Unit 2 is the course's top-performing unit, with an average text quality score of 88.24%. This quality score reflects the generally high quality of individual texts within the unit; as the figures below demonstrate, nearly all texts scored in the upper percentage brackets, indicating that students are accessing strong, well-developed materials. The Institute's analysis for coherence, however, indicates weak-to-moderate knowledge reinforcement across the unit's resources. The figures below demonstrate the unit's coherence with several different texts as the anchor; the numbers on the outer nodes indicate that in most cases, the texts only partially link to each other in terms of the topics they address. This suggests that, although

the resources are strong on their own, further efforts should be made to link the ideas presented in each one to the unit as a whole.

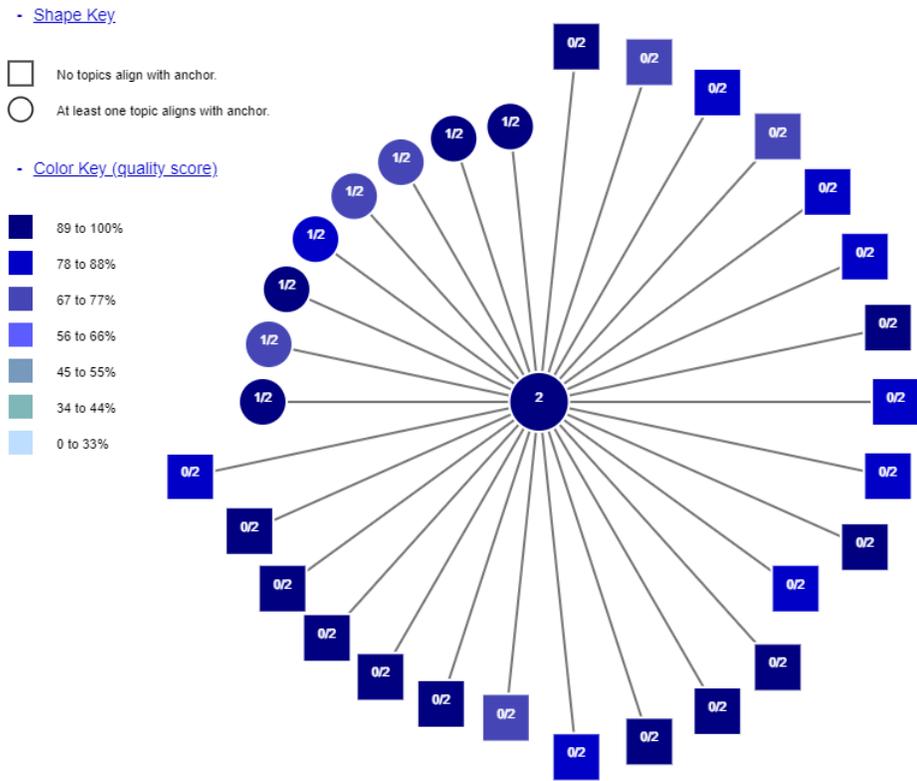


Figure 10. Coherence map of the BRI civics course, Unit 2, Champion of Liberty: James Madison and Diligence and related texts. Supporting materials weakly reinforce the anchor. The average unit score for text quality is 88.24%.

- [Shape Key](#)

- No topics align with anchor.
- At least one topic aligns with anchor.

- [Color Key \(quality score\)](#)

- 89 to 100%
- 78 to 88%
- 67 to 77%
- 56 to 66%
- 45 to 55%
- 34 to 44%
- 0 to 33%

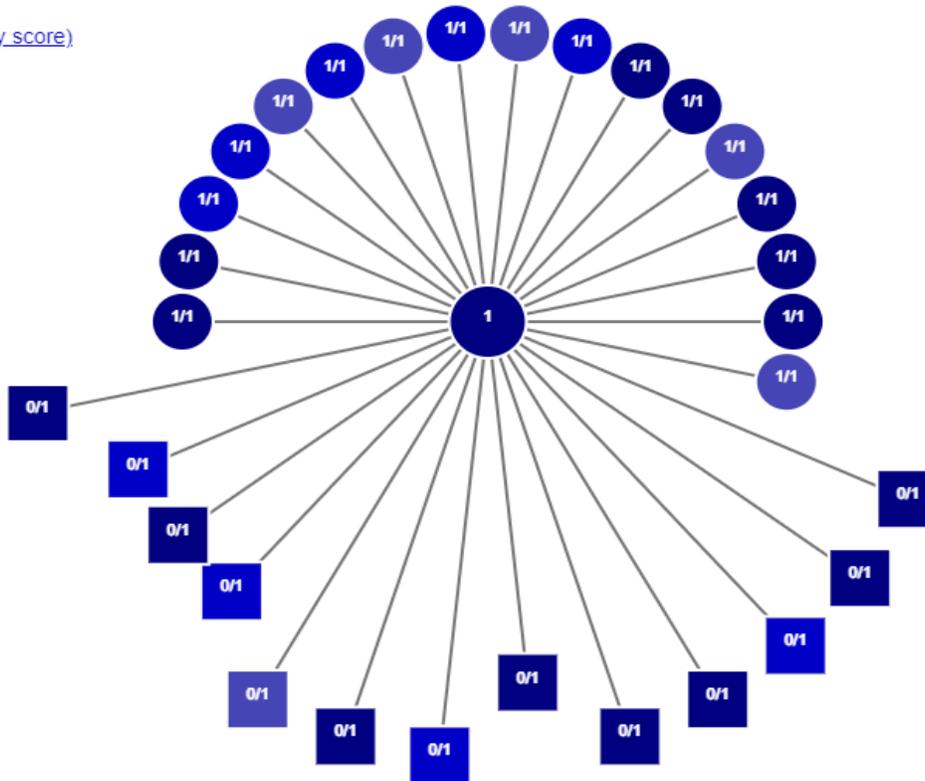


Figure 12. Coherence map of the BRI civics course, Unit 2, The Articles of Confederation and related texts. Supporting materials moderately reinforce the anchor. The average unit score of text quality is 88.24%.

Lowest-Rated Unit

Unit 1 is the lowest-quality unit in the course, with an average text quality score of 75.31%. This score is notable for the lowest-quality unit, as it still falls into the Institute’s range for a high-quality unit despite being the weakest in the curriculum. Coherence analysis once again suggests weak-to-moderate knowledge building within the unit. Though anchor topic tags typically reappear across the unit, indicating some level of reinforcement within those topics, the graphics below once again demonstrate limited connections in topics across multiple texts, even when different texts are placed as the anchor. Both within this unit and as a general rule, the BRI civics course could benefit from a greater focus on linking ideas through various resources.

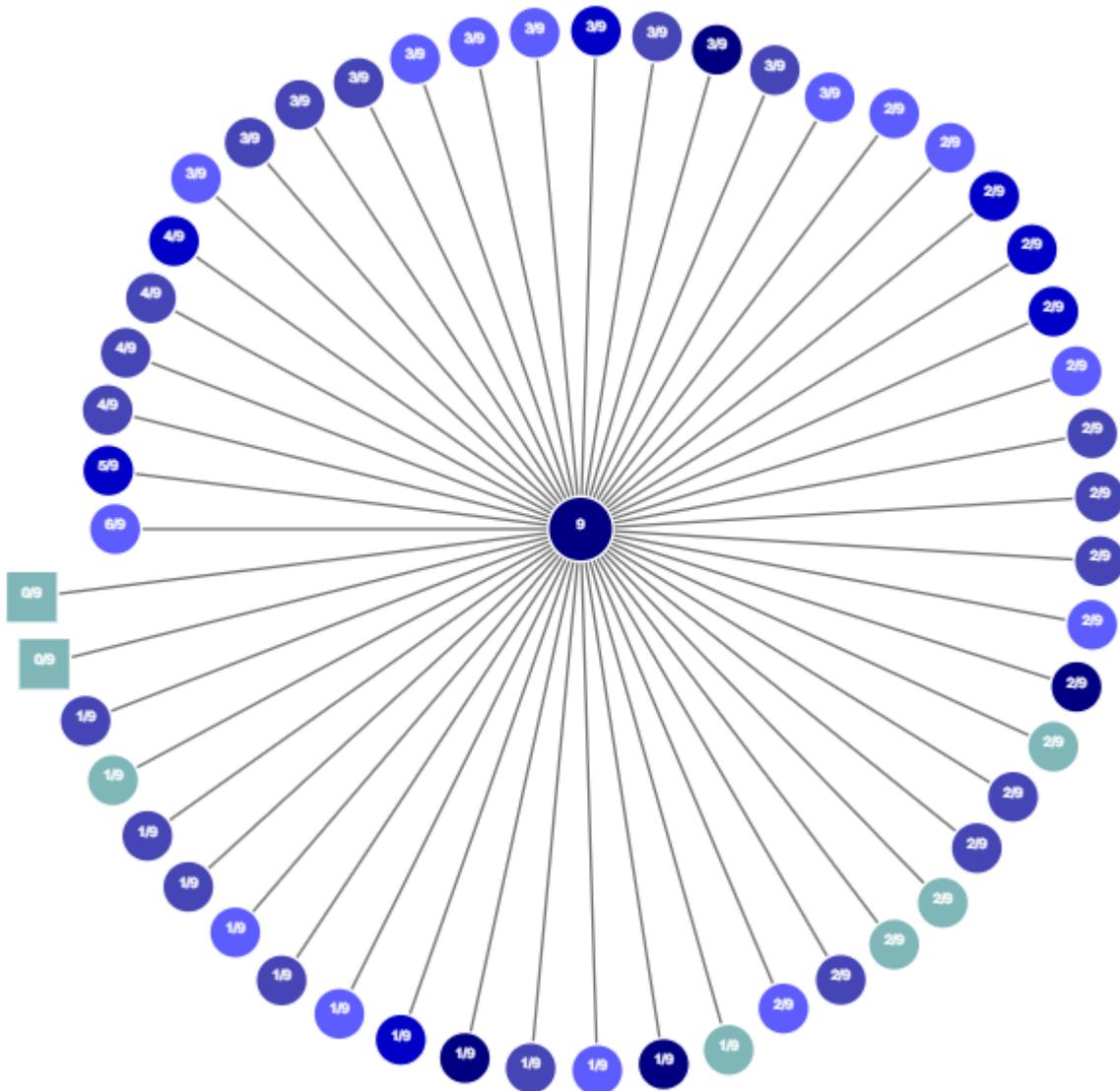


Figure 14. Coherence map of the BRI civics course, Unit 1, All Legislative Powers Herein Granted and related texts. Supporting materials weakly-to-moderately reinforce the anchor. The average unit score for text quality is 75.31%

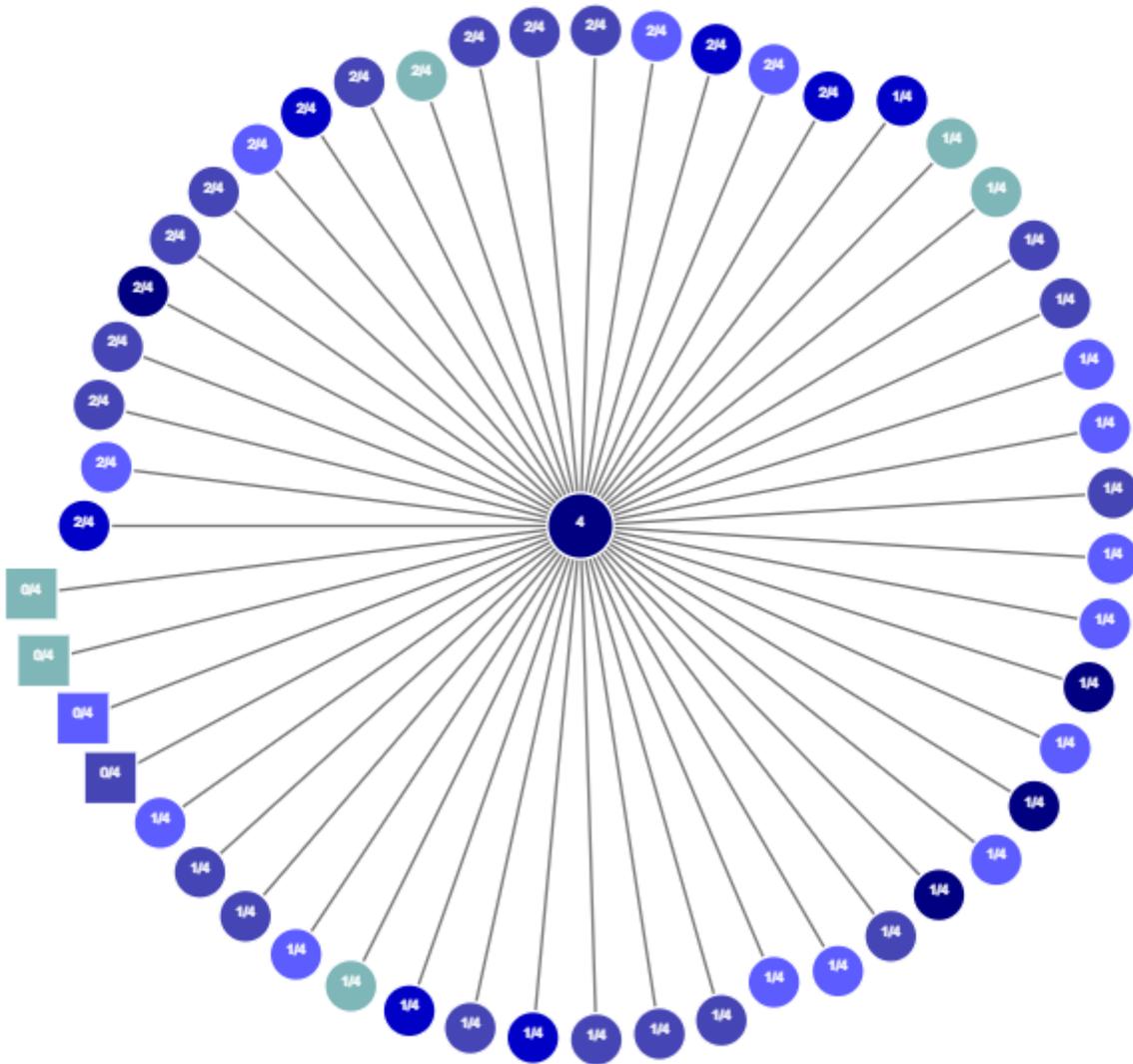


Figure 15. Coherence map of the BRI civics course, Unit 1, Congress in the Twentieth and Twenty-First Centuries and related texts. Supporting material weakly reinforce the anchor. The average unit score for text quality is 75.31%

UNIT ANALYSIS OF OPEN CLASSROOM CLIMATE & MULTIPLE PERSPECTIVES

The Social Studies Knowledge Map™ also includes a unit-level assessment of the inclusion of multiple perspectives and the intended open classroom climate. The multiple perspectives score measures the extent to which the unit provides a holistic approach to its broader context by representing a range of voices and viewpoints. The open classroom climate score analyzes teacher-facing materials to determine the extent to which instructors are encouraged to include discussion and student inquiries. It also evaluates whether appropriate space is left for students to form their own opinions on controversial or contested issues. The bar graphs below provide the scores for each unit, and include an average for the entire grade on both measures. Scores in both categories range from 1 to 3; an average score of 2.5 or above is considered high, while a score between 2 and 2.5 is considered acceptable.

As Figure 16 indicates, the Bill of Rights Institute course achieves average scores of 2.13 for multiple perspectives and 2.75 for open classroom climate. The multiple perspectives score falls within the Institute's range for acceptable quality, while the open classroom climate score meets the Institute's standard for high quality. Three units achieved perfect scores on both metrics, indicating that there are certain topics within the curriculum that provide exceptional opportunities for discussion. Units 1 and 8 were the weakest points in the course on this metric, as they were the only two units to achieve the lowest possible multiple perspectives score. Overall, a very strong score for open classroom climate and a solid score for multiple perspectives suggests that some additional work could be done, but that the Bill of Rights Institute generally contributes to honing critical thinking skills in students.

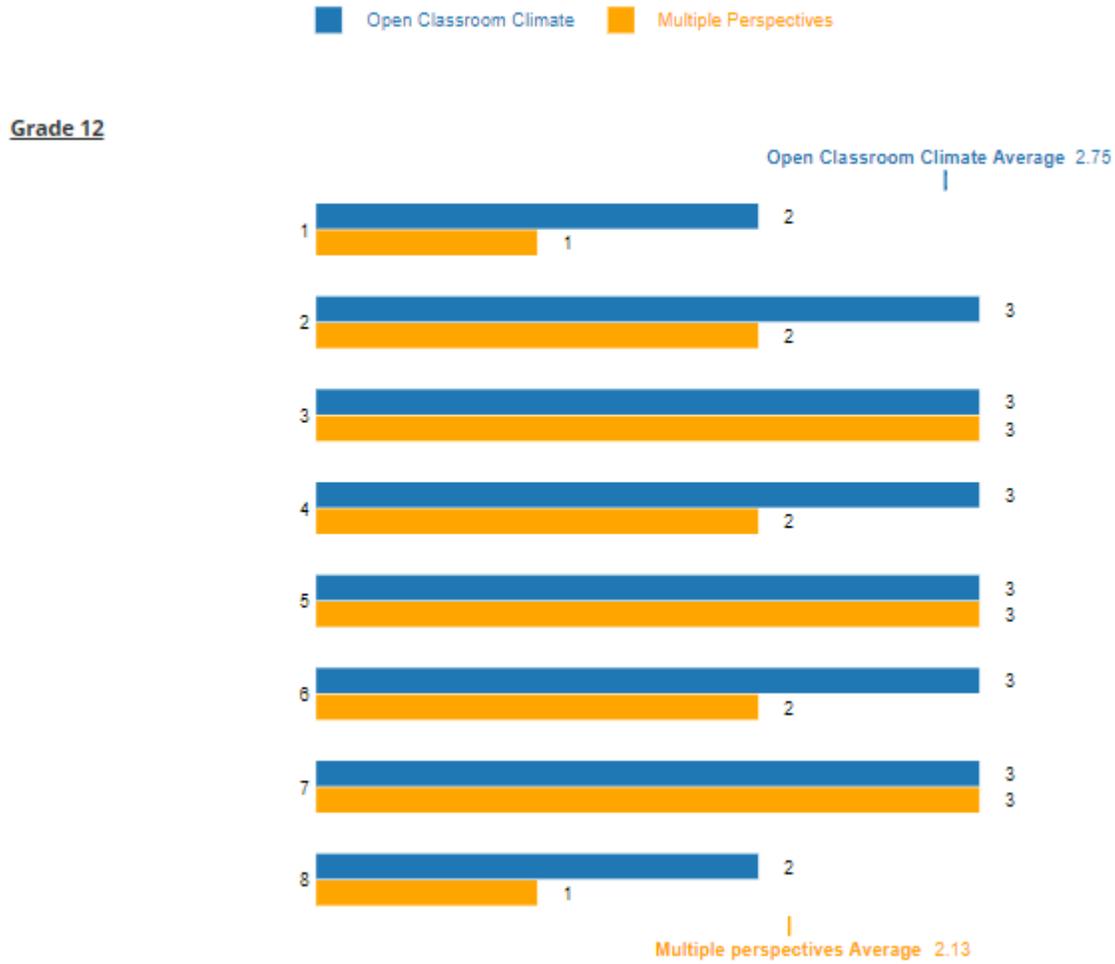


Figure 16. Visual representation of Multiple Perspectives and Open Classroom Climate scores for Grade 12.

LEARN MORE

This report is one of five Social Studies Knowledge Map reports released in Summer 2021 by the Johns Hopkins Institute for Education Policy. The release of these reports was accompanied by a Findings Brief, outlining the overarching themes across all social studies curricula analyzed. View the other Social Studies Knowledge Map reports and learn more about the importance of high-quality curriculum at edpolicy.education.jhu.edu.

About the Institute

The [Johns Hopkins University Institute for Education Policy](https://www.jhu.edu/institute-for-education-policy) is dedicated to integrating research, policy, and practice to achieve educational excellence for all of America's students. Specifically, we connect research to the policies and practices that will ensure all children have access to intellectually challenging curricula, highly-effective educators, and school models that meet students' diverse needs. By delivering the strongest evidence to the policymakers who set the course and the practitioners who teach and lead, we hope to serve the American children who enter our classrooms every day.

About the Bill of Rights Institute

The Bill of Rights Institute is committed to providing the highest quality resources and programs for students, teachers, and parents. Our materials are produced and reviewed by teachers and scholars who are experts in their fields. The Institute's resources invite young people to a thoughtful inquiry of primary source documents related to American ideas and institutions. All Institute resources are animated by the ideas of the Declaration of Independence and the Constitution—not aligned to the dictates of any external entity.

ⁱ Ashley Berner, “Funding Schools,” in *Balancing Freedom, Autonomy, and Accountability in Education*, ed. Charles Glenn and Jan De Groof, vol. 1 (Tilburg: Wolf Legal Publishers, 2012), 115–29. E. D Hirsch, *The Knowledge Deficit: Closing the Shocking Education Gap for American Children* (Boston: Houghton Mifflin, 2016).

ⁱⁱ Common Core, “Why We’re behind: What Top Nations Teach Their Students but We Don’t.” (Washington, D.C.: Common Core, 2009). Amy von Heyking, “Alberta, Canada: How Curriculum and Assessments Work in a Plural School System” (Baltimore, MD: Johns Hopkins Institute for Education Policy, June 2019), <https://jscholarship.library.jhu.edu/bitstream/handle/1774.2/62962/alberta-brief.pdf?sequence=1&isAllowed=y>

ⁱⁱⁱ David E Campbell, “Voice in the Classroom: How an Open Classroom Climate Fosters Political Engagement Among Adolescents,” *Political Behavior* 30, no. 4 (2008): 437–54.

^{iv} Robert Kunzman, *Grappling with the Good: Talking about Religion and Morality in Public Schools* (Albany: State University of New York Press, 2006); Katherine G Simon, *Moral Questions in the Classroom: How to Get Kids to Think Deeply about Real Life and Their Schoolwork* (New Haven: Yale University Press, 2001).



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