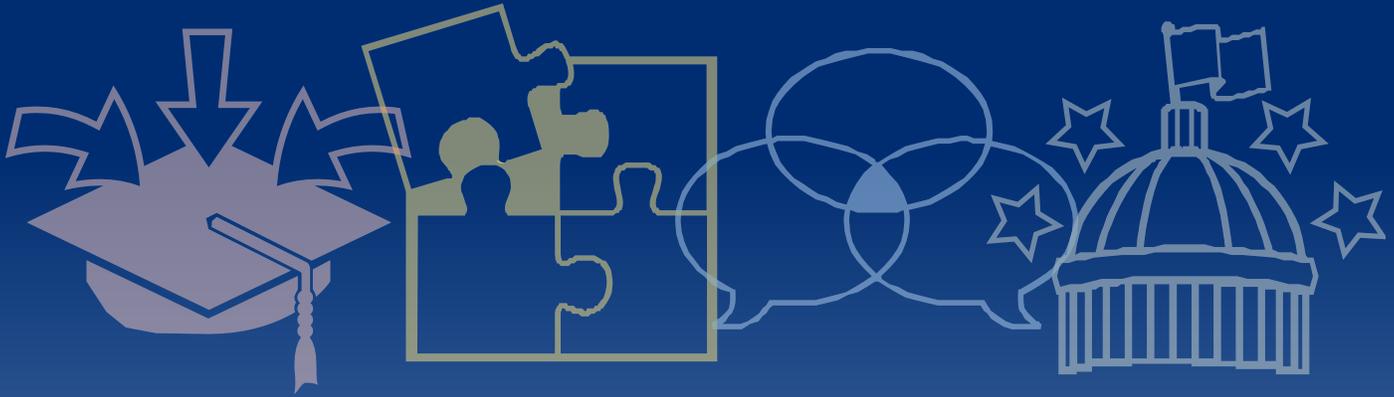




JOHNS HOPKINS
SCHOOL of EDUCATION

Institute for Education Policy



Social Studies Knowledge MapTM



*A unique analytic resource enabling
policymakers, school leaders, and parents to
better understand the strengths and weaknesses
of the McGraw Hill Grades 9-12 social studies curriculum.*

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 McGraw Hill social studies curriculum for Grades 9-12. 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.

Strengths of Curriculum

The most significant strength of the curriculum is that it exposes students to a variety of texts promoting societal awareness. Robust knowledge domains in the courses include Civics & Government, Geography, and several History domains. Moderate knowledge-building domains include Equity & Inclusion and additional History domains. This focus ensures students build and reinforce concepts about their society and beyond.

Another strength is that the curriculum exposes students to high-quality units at each course level. Six courses of eight evaluated courses scored high quality ratings (75% and above), and only two courses scored below 75%. Further, two courses scored above 95% for quality. These findings suggest that, on average, the McGraw Hill curricula are consistent and high quality.

Finally, the curricula offer inclusion of primary sources to deepen student understanding of material and nurture students' critical thinking skills. In all evaluated courses, primary sources were incorporated within each unit.

Weaknesses of Curriculum

Several domains are weak at building knowledge. These include Ancient Civilizations, Classical history, Media, Law & Criminology, Mesoamerican, South American & Caribbean History, Philosophy, and U.S. History to 1865. The Institute recognizes that McGraw Hill offers different paths and options for all possible learning units. Thus, this report is only a representative sample and does not cover the range of all possible materials taught in McGraw Hill.

Another major weakness is the inconsistency in the relevance of supporting text to the anchor texts, particularly in the courses World History: Ancient Civilizations, World History: Industrial Revolution, and Geography. Wide variation in proximity scores within this unit demonstrates an inconsistency in text alignment. For example, in the course World History: Industrial Revolution, the difference between lesson quality scores is 24%, where the highest scoring unit for quality rated 93% and the lowest 69%. Incoherence between anchor texts and supporting texts within and among course levels suggest weaknesses in the knowledge-building curriculum.

INSTITUTE RECOMMENDATIONS

The McGraw Hill curricula provide students with a robust knowledge within the courses, improve knowledge building through quality texts, and employ primary source materials to strengthen student understanding. The Knowledge Map™ analysis highlights crucial areas of knowledge building and assesses associated strengths and weaknesses as well as text quality. Therefore, the Institute recommends the following strategies for improvement:

- Look for opportunities to align supplemental content more smoothly across lessons in a unit and center recurrent themes for example in Grade 4 Unit 15, Grade 6 Unit 21, Grade 8 Unit 9, Grade 9 Unit 3, Grade 10 Unit 2, Grade 11 Unit 10, and Grade 12 Unit 13.
- Increase the grade level reinforcement of knowledge building within Domains such as the Media and Religion domains.
- Examine Topics for opportunities to increase knowledge building such as Religious Persecution in the Equity & Inclusion Domain or Archaeology in the Anthropology Domain.
- Build in more opportunities to foster an open classroom climate, such as by scaffolding debates or suggesting seminar-style questions.

MCGRAW HILL HEAT MAPS: GRADES 9-12

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. Twelve courses were evaluated for knowledge building in courses for Grades 9-12.

Table 1. Global Key for Matching Course Titles

Table 1 serves as a global key for matching McGraw Hill’s course titles and course levels with the corresponding Institute’s Knowledge Map™ course levels used for analysis. Table 1 also shows the figures relevant to each course.

McGraw Hill Course Title	Social Studies Knowledge Map™ (SSKM) Course Number	Relevant Figures
Government & Civics	4	2-21 (column 4)
U.S. History (Pre-Reconstruction)	5	2-21 (column 5)
U.S. History (Post-Reconstruction)	6	2-21 (column 6)
World History (Ancient Civilizations)	7	2-21 (column 7)
World History (Middle Ages)	8	2-21 (column 8)
World History (Industrial Revolution)	9	2-21 (column 9)
Geography	10	2-21 (column 10)
Sociology	11	2-21 (column 11)
Psychology	12	2-21 (column 12)

Table 1. The key matches Knowledge Map™ database course levels with each McGraw Hill course title and course level. Information about each course can be found in the corresponding figures. The database-level assignments were necessary to perform the analysis using the Institute system.

Further, each heat map expresses the findings visually using a color-coding scheme, as shown in Figure 1 below. 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.



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

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, and takes the education level of the student into account.

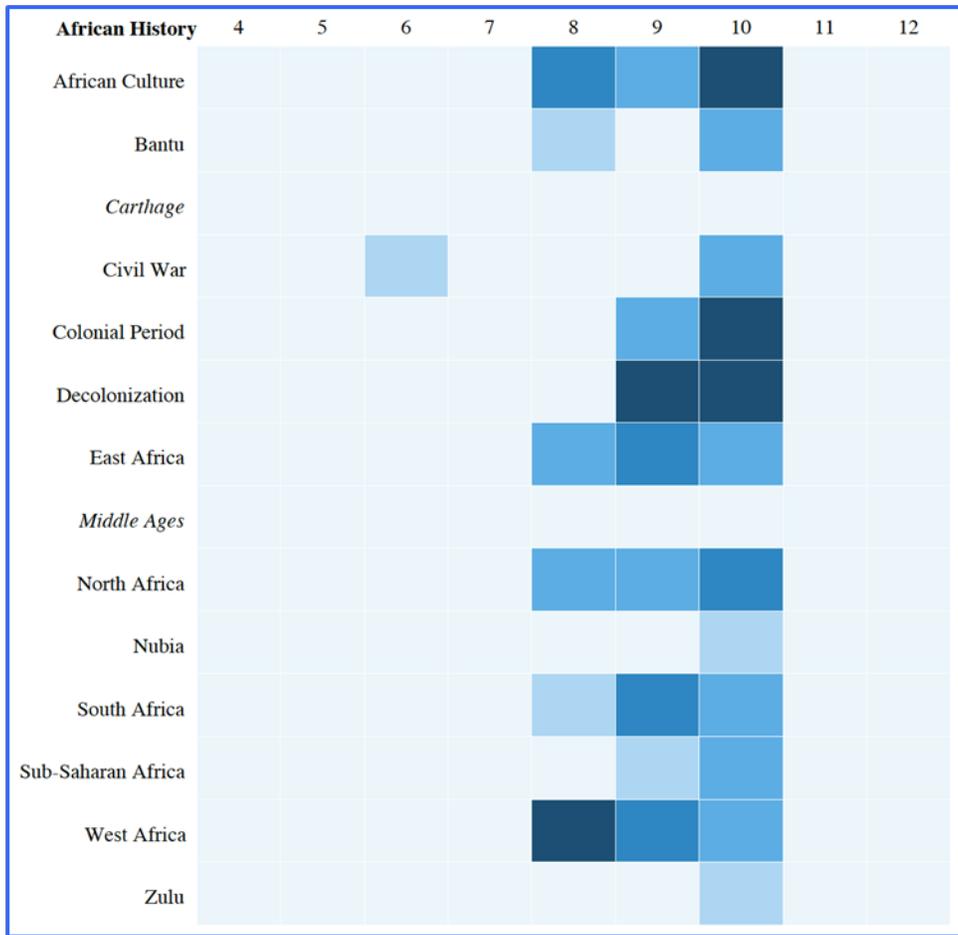


Figure 2. Heat map analysis of the African History knowledge domain in the McGraw Hill social studies courses. See Table 1 for the key to database course levels and corresponding course titles in Courses 4-12 (Grades 9-12).

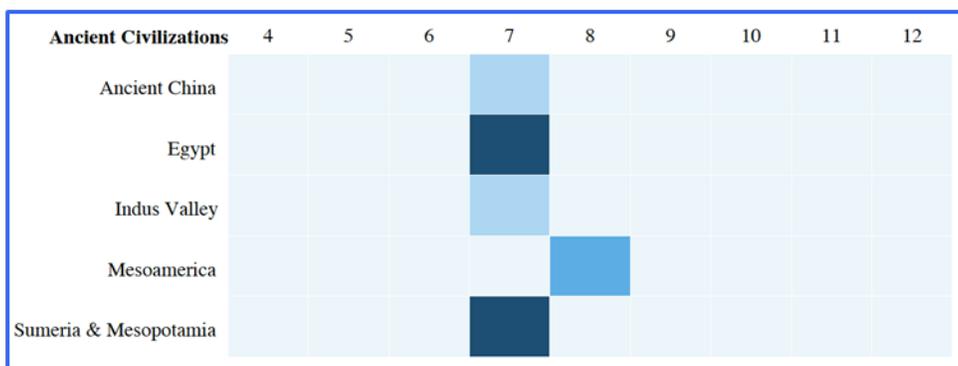


Figure 3. Heat map analysis of the Ancient Civilizations knowledge domain in the McGraw Hill social studies courses. See Table 1 for the key to database course levels and corresponding course titles in Courses 4-12 (Grades 9-12).

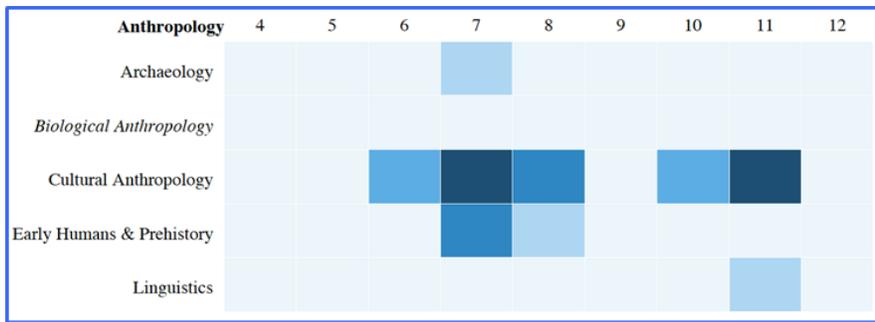


Figure 4. Heat map analysis of the Anthropology knowledge domain in the McGraw Hill social studies courses. See Table 1 for the key to database course levels and corresponding course titles in Courses 4-12 (Grades 9-12).

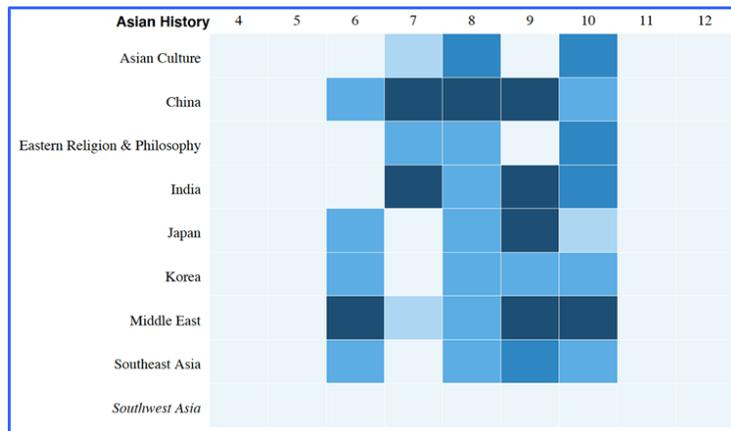


Figure 5. Heat map analysis of the Asian History knowledge domain in the McGraw Hill social studies courses. See Table 1 for the key to database course levels and corresponding course titles in Courses 4-12 (Grades 9-12).

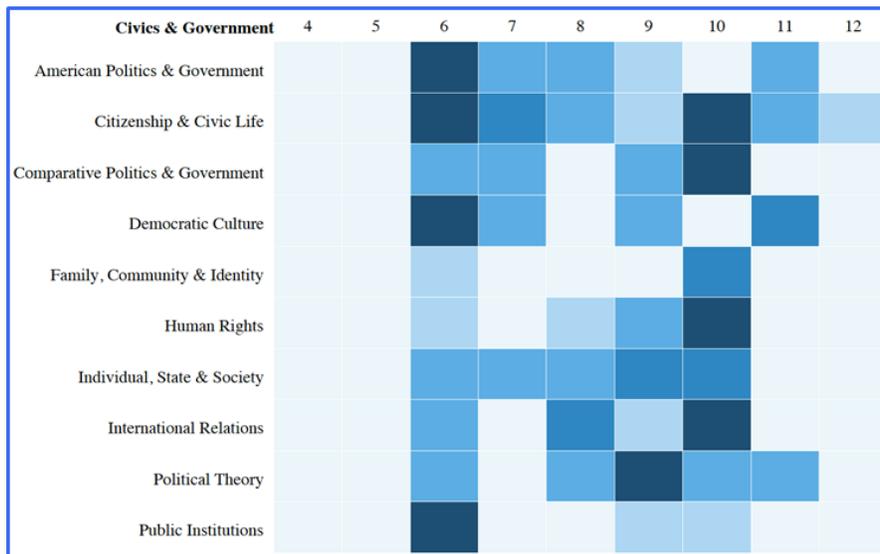


Figure 6. Heat map analysis of the Civics & Government knowledge domain in the McGraw Hill social studies courses. See Table 1 for the key to database course levels and corresponding course titles in Courses 4-12 (Grades 9-12).

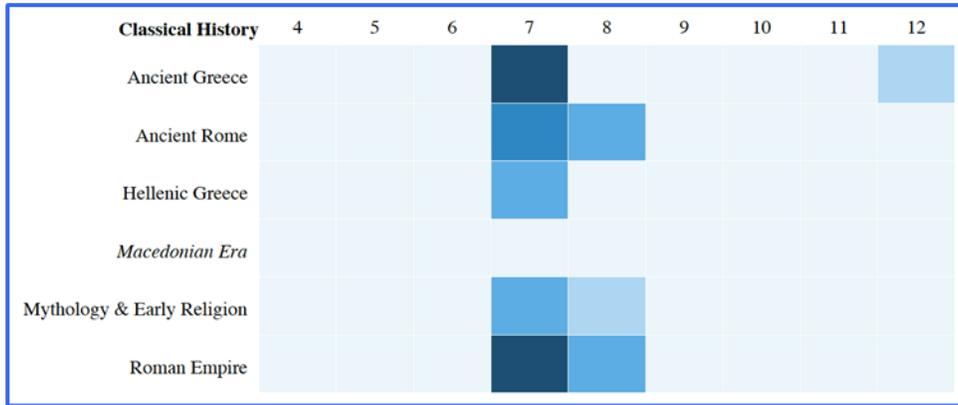


Figure 7. Heat map analysis of the Classical History knowledge domain in the McGraw Hill social studies courses. See Table 1 for the key to database course levels and corresponding course titles in Courses 4-12 (Grades 9-12).

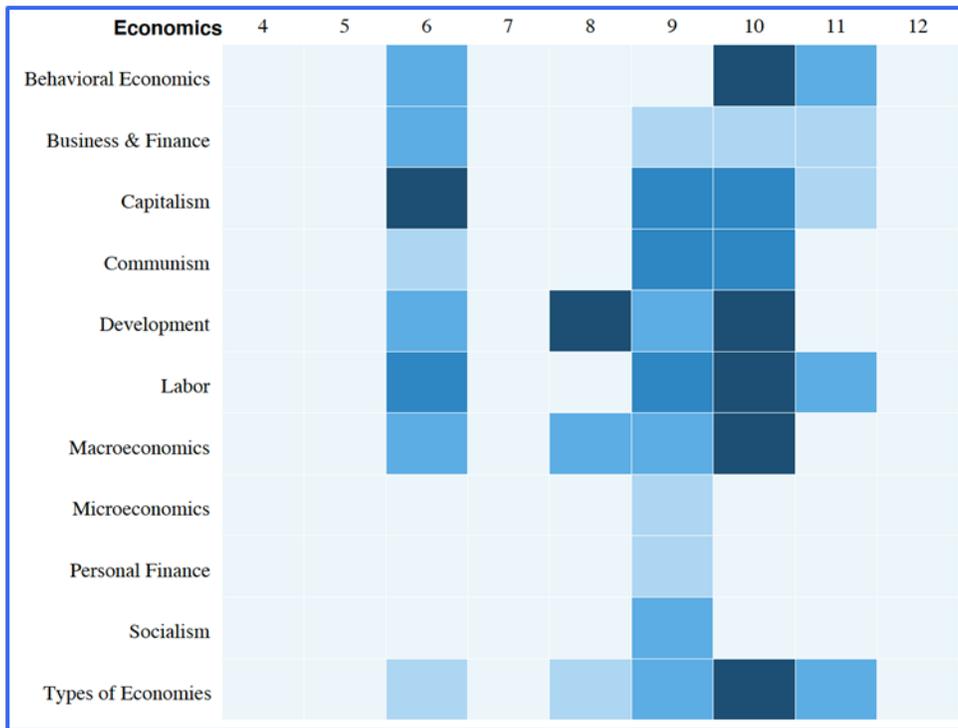


Figure 8. Heat map analysis of the Economics knowledge domain in the McGraw Hill social studies courses. See Table 1 for the key to database course levels and corresponding course titles in Courses 4-12 (Grades 9-12).



Figure 9. Heat map analysis of the Equity & Inclusion knowledge domain in the McGraw Hill social studies courses. See Table 1 for key to database course levels and corresponding titles in Courses 4-12 (Grades 9-12).

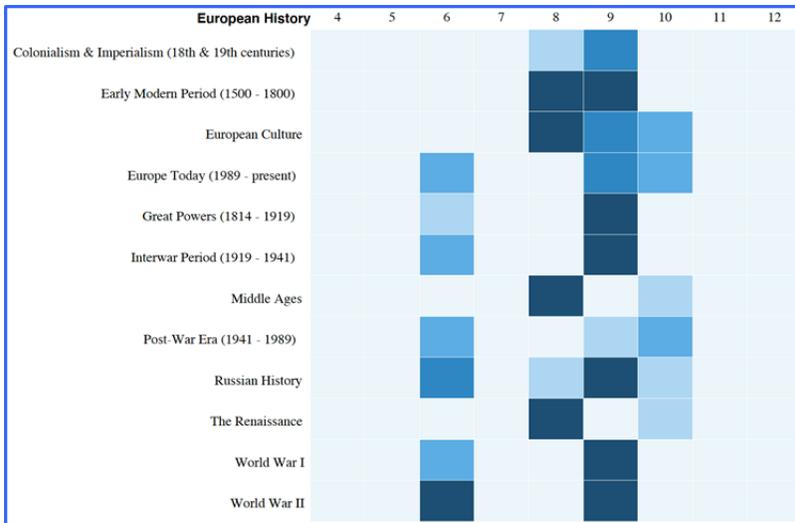


Figure 10. Heat map analysis of the European History knowledge domain in the McGraw Hill social studies courses. See Table 1 for the key to database course levels and corresponding course titles in Courses 4-12 (Grades 9-12).

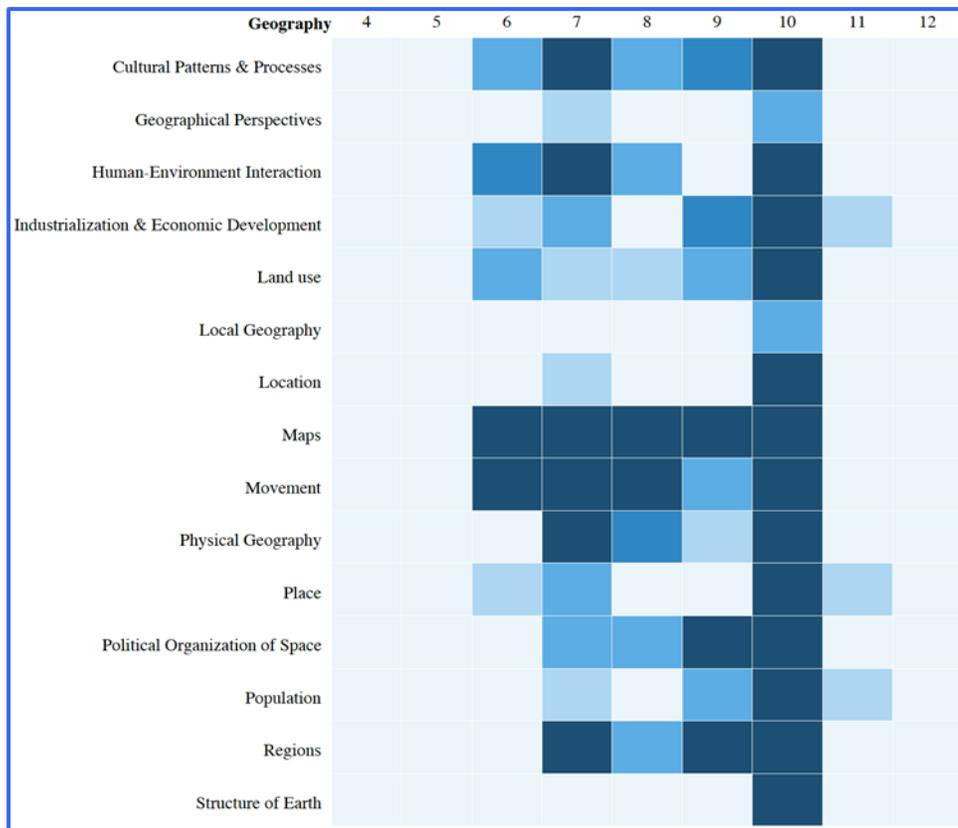


Figure 11a. Heat map analysis of the Geography knowledge domain in the McGraw Hill social studies courses. See Table 1 for the key to database course levels and corresponding course titles in Courses 4-12 (Grades 9-12).

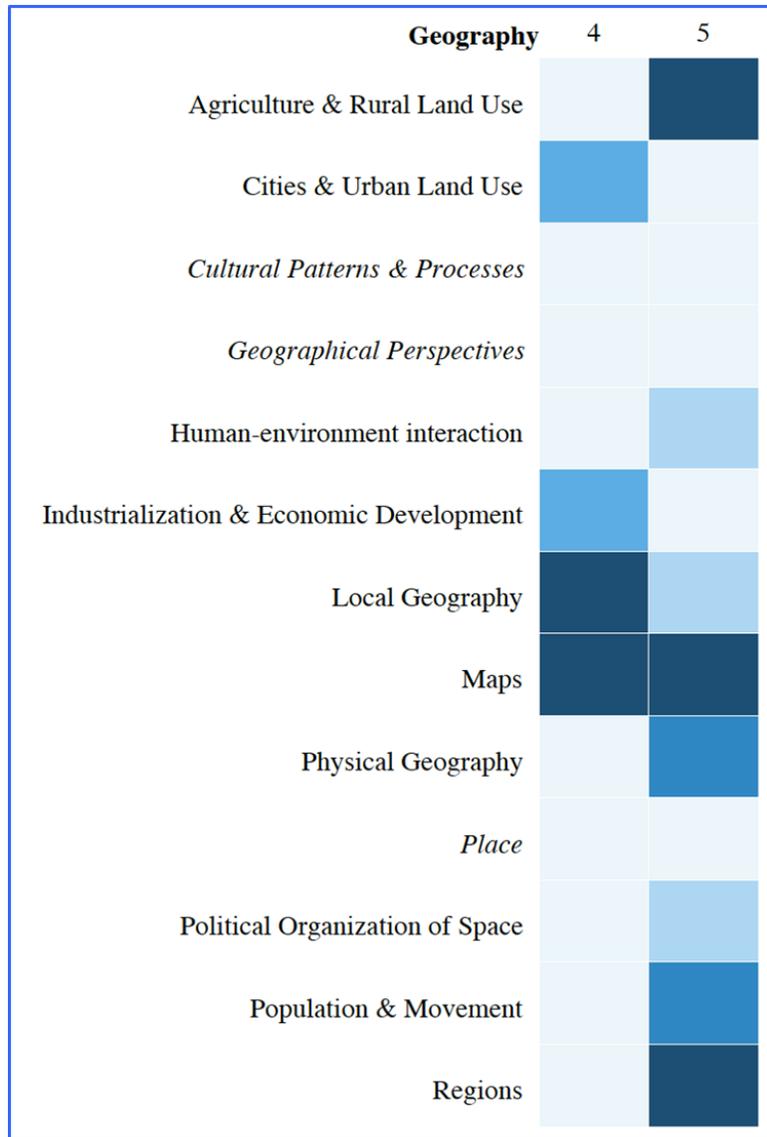


Figure 11b. Heat map analysis of the Geography knowledge domain in the McGraw Hill social studies courses. See Table 1 for the key to database course levels and corresponding course titles in Courses 4-5 (Grades 9-12).



Figure 12a. Heat map analysis of the History Themes knowledge domain in the McGraw Hill social studies courses. See Table 1 for the key to database course levels and corresponding course titles in Courses 6-12 (Grades 9-12).



Figure 12b. Heat map analysis of the History Themes knowledge domain in the McGraw Hill social studies courses. See Table 1 for the key to database course levels and corresponding course titles in Courses 4-5 (Grades 9-12)

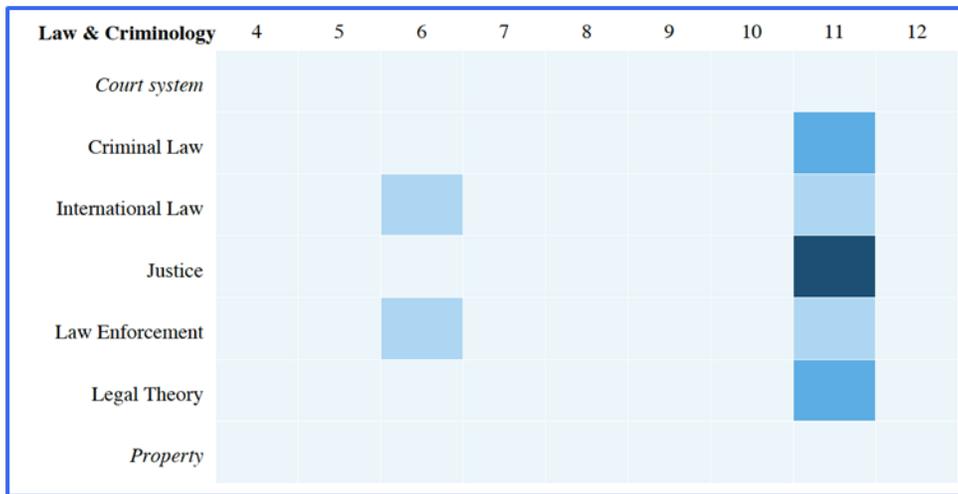


Figure 13. Heat map analysis of the Law & Criminology knowledge domain in the McGraw Hill social studies courses. See Table 1 for the key to database course levels and corresponding course titles in Courses 4-12 (Grades 9-12).

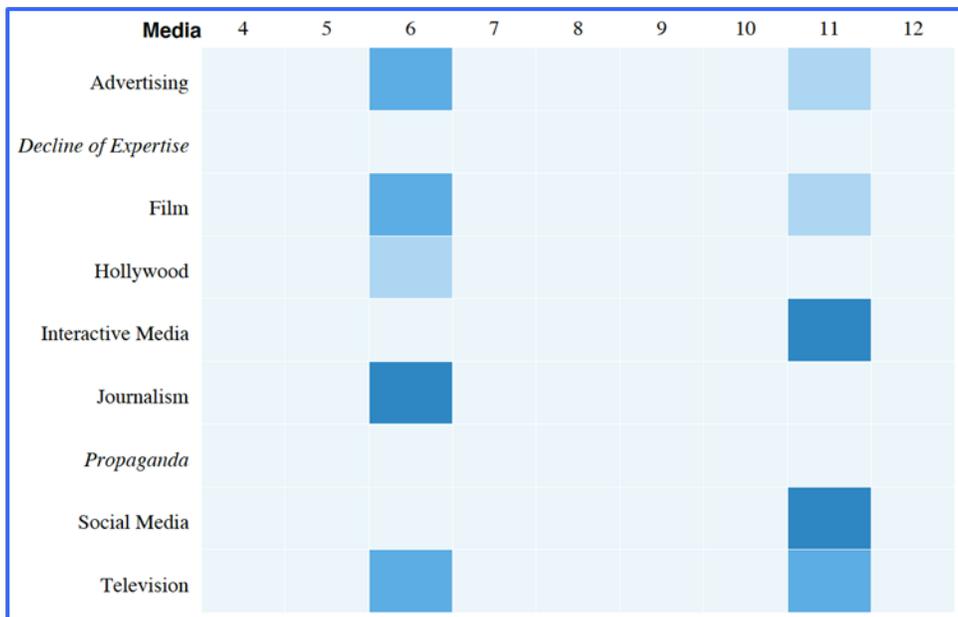


Figure 14. Heat map analysis of the Media knowledge domain in the McGraw Hill social studies courses. See Table 1 for the key to database course levels and corresponding course titles in Courses 4-12 (Grades 9-12).

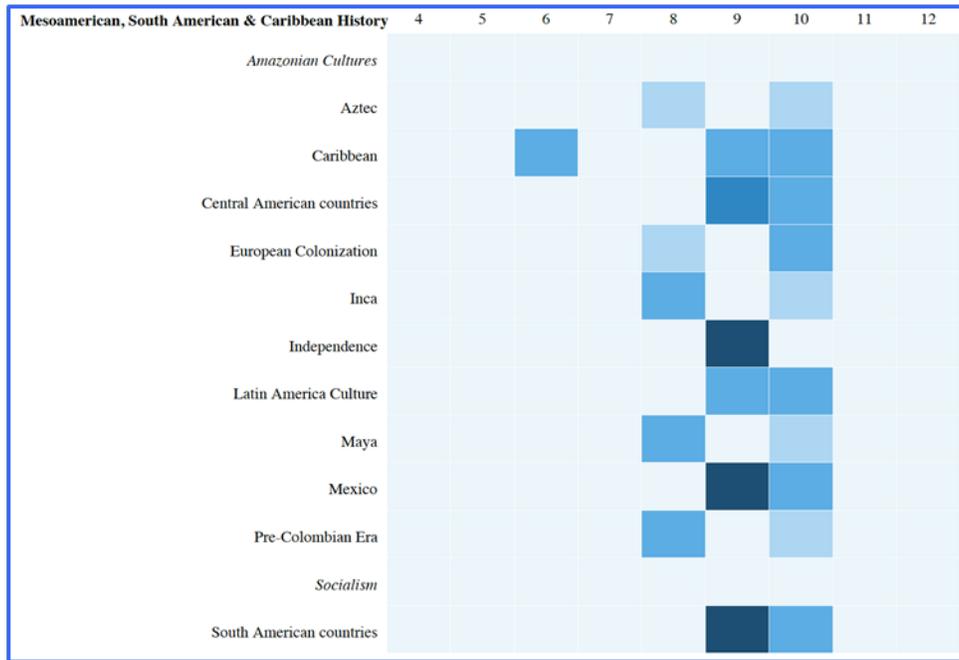


Figure 15. Heat map analysis of the Mesoamerican, South American & Caribbean History knowledge domain in the McGraw Hill social studies courses. See Table 1 for the key to database course levels and corresponding course titles in Courses 4-12 (Grades 9-12).

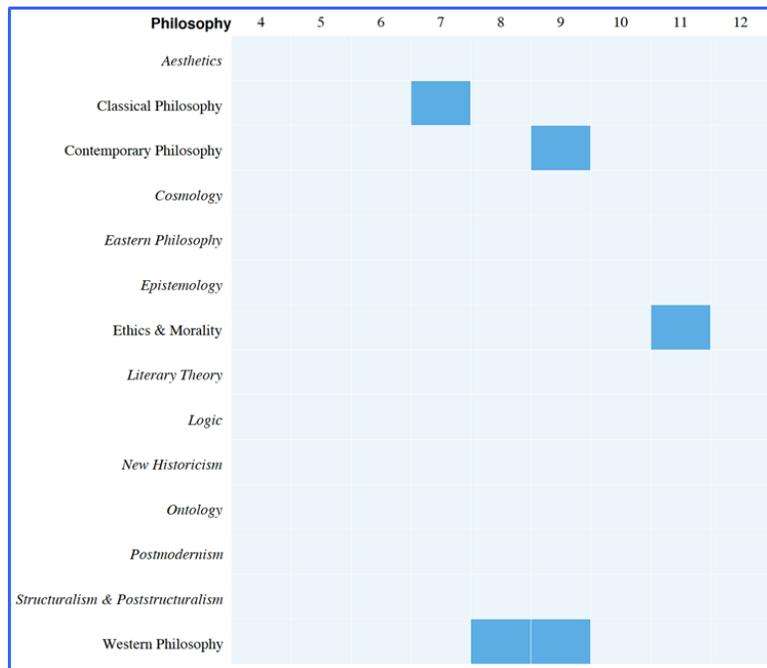


Figure 16. Heat map analysis of the Philosophy knowledge domain in the McGraw Hill social studies courses. See Table 1 for the key to database course levels and corresponding course titles in Courses 4-12 (Grades 9-12).

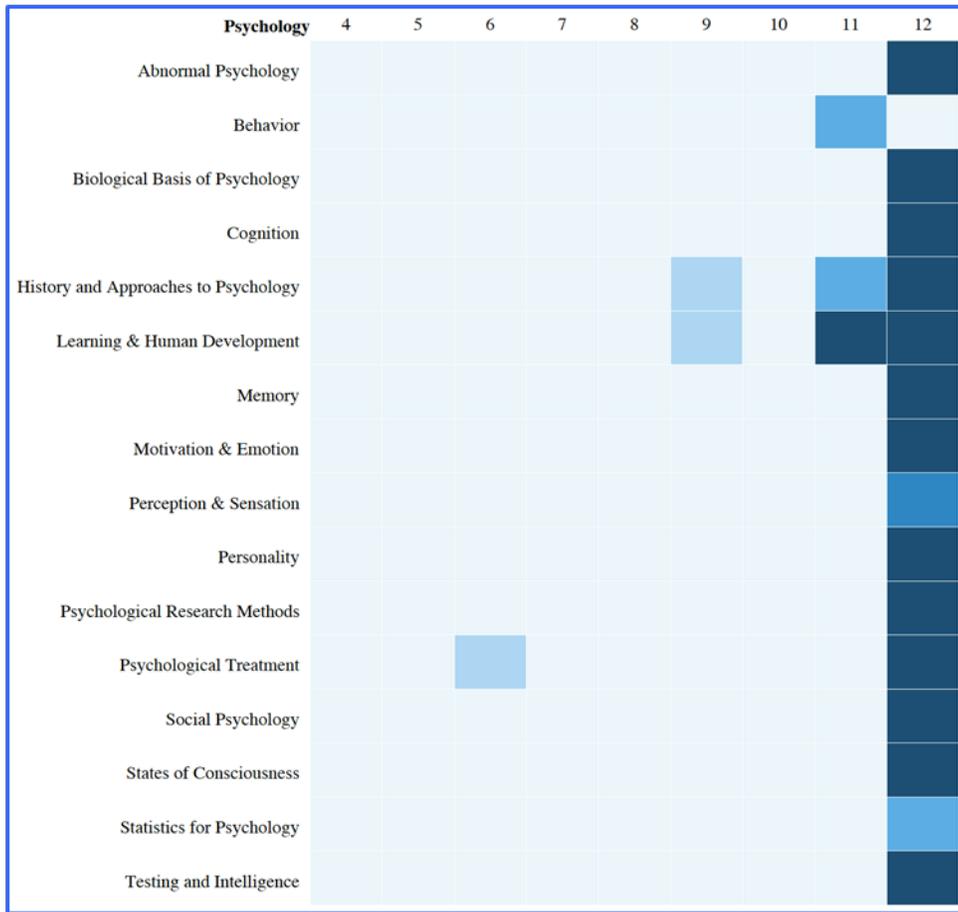


Figure 17. Heat map analysis of the Psychology knowledge domain in the McGraw Hill social studies courses. See table 1 for the key to database course levels and corresponding course titles in Courses 4-12 (Grades 9-12).

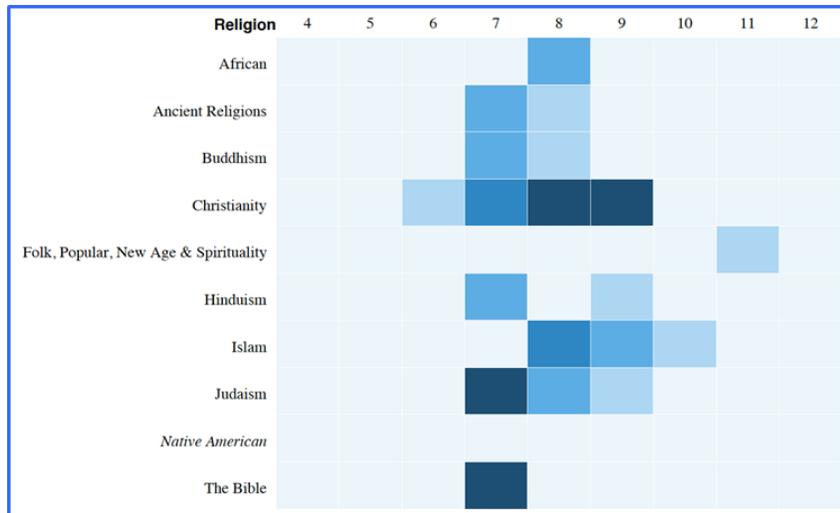


Figure 18. Heat map analysis of the Religion knowledge domain in the McGraw Hill social studies courses. See Table 1 for the key to database course levels and corresponding course titles in Courses 4-12 (Grades 9-12).

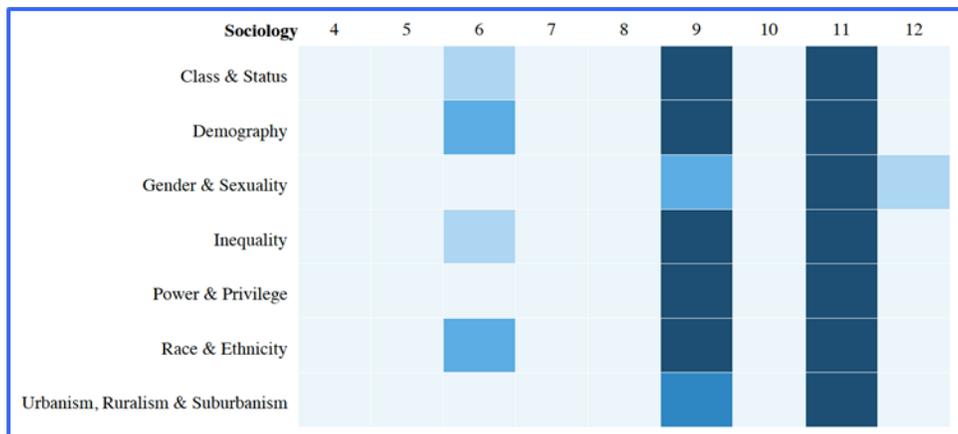


Figure 19. Heat map analysis of the Sociology knowledge domain in the McGraw Hill social studies courses. See Table 1 for the key to database course levels and corresponding course titles in Courses 4-12 (Grades 9-12).



Figure 20. Heat map analysis of the US History Since 1865 knowledge domain in the McGraw Hill social studies courses. See Table 1 for the key to database course levels and corresponding course titles in Courses 4-12 (Grades 9-12).

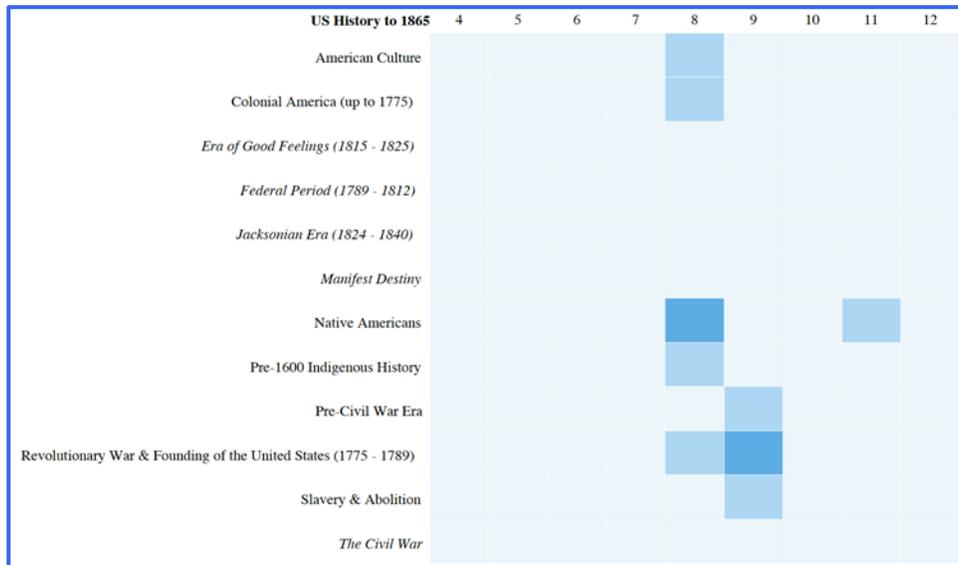


Figure 21. Heat map analysis of the US History to 1865 knowledge domain in the McGraw Hill social studies courses. See Table 1 for the key to database course levels and corresponding course titles in Courses 4-12 (Grades 9-12).

Strong Knowledge-Building Domains

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 5-7 Texts and 8+ Texts). Summaries appear in Table 2.

Overall, a strong domain contains greater than 50% knowledge-building texts across all topics and courses. The McGraw Hill curriculum contains several moderate (Table 2). For instance, the domain of Civics & Government (Figure 6) is particularly strong in four courses, Government & Civics, U.S. History (Pre-Reconstruction), U.S. History (Post-Reconstruction), and Geography. The heat map analysis shows the following results:

- Government & Civics has 66-76 texts addressing 8 of 9 total topics.
- U.S. History: Pre-Reconstruction has 37-47 texts addressing 6 of 9 total topics.
- U.S. History: Post-Reconstruction has 32-42 texts addressing 9 of 9 total topics.
- Geography has 45-55 texts addressing 7 of 9 total topics.

Geography is another strong group of knowledge-building domains shown in Figures 11a and 11b. The focus is particularly strong in four of nine courses, Government & Civics, U.S. History (Pre-Reconstruction), U.S. History (Post-Reconstruction), and Geography. The heat map analysis shows the following results:

- Government & Civics has 66-76 texts addressing 8 of 9 total topics.
- U.S. History: Pre-Reconstruction has 37-47 texts addressing 6 of 9 total topics.
- U.S. History: Post-Reconstruction has 32-42 texts addressing 9 of 9 total topics.

- Geography has 45-55 texts addressing 7 of 9 total topics.

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). Summaries appear in Table 2.

Overall, a moderate domain contains 25%-50% of knowledge-building texts across topics and courses. The McGraw Hill curriculum contains several moderate domains (Table 2). The domains of Asian History (Figure 5), Equity & Inclusion (Figure 9), and History Themes (Figures 12a and 12b) each have moderate knowledge building in three of nine courses. For instance:

- Asian History shows moderate coverage of most topics in the courses World History: Ancient Civilizations, World History: Middle Ages), and U.S. History: Post-Reconstruction.
- Equity & Inclusion shows moderate treatment with about half of the topics addresses in the courses Government & Civics, U.S. History: Pre-Reconstruction, and World History: Industrial Revolution.
- History Themes shows moderate treatment of about half of the topics in the courses U.S. History: Pre-Reconstruction, World History: Ancient Civilizations, and World History: Middle Ages.

Weak Knowledge-Building Domains

The curriculum presents insufficient or weak knowledge building in several knowledge domains and topics. Weak knowledge-building domains appear in heat maps as primarily light blue or gray, indicating that one or no texts address the topic. It is important to note that absences at certain levels may reflect curricular progression decisions and other factors, and that the heat maps should be considered in the context of the evaluated system. However, significant gaps may be worth examining in order to further develop knowledge reinforcement within the curriculum. Summaries appear in Table 2.

Overall, a weak domain contains 1%-25% of knowledge-building texts across topics and courses. The McGraw Hill curriculum contains several weak domains (Table 2). The domains of Ancient Civilizations (Figure 3), Classical History (Figure 7), Media (Figure 14), and Meso, South American & Caribbean History (Figure 15) are weak, but in different ways. At least two weakness patterns present in the data.

Weakness Pattern 1

- Ancient Civilizations shows moderate treatment one course, World History: Ancient Civilizations, and little or no treatment in the other courses.
- Classical History follows a similar pattern and shows moderate treatment in two courses (i.e., World History: Ancient Civilizations and World History: Middle Ages), and little or no treatment in the other courses.

Weakness Pattern 2

- Media shows moderate-to-weak treatment in two courses (i.e., U.S. History: Post-Reconstruction and Sociology).
- Meso, South American & Caribbean History follows a similar pattern and shows moderate-to-weak treatment in three courses (i.e., World History: Middle Ages, World History: Industrial Revolution, and Geography), and little or no treatment in the other courses.

Finally, there are many courses with domains that have 10 or fewer knowledge building texts across all courses (Table 2). This may be a function of course design and focus. These domains include Philosophy and U.S. History to 1865.

Table 2. Heat Map Analysis Summary

The curriculum presents robust knowledge building in several domains and additional topics, shown alphabetically. Empty Domains contain 0% of knowledge-building texts. Weak Domains contain 1%-25% of knowledge-building texts. Moderate Domains contain 25%-50% of knowledge-building texts. Strong Domains contain greater than 50% of knowledge-building texts.

McGraw Hill Course Title	SSKM Course Number	Empty Domains	Weak Domains	Moderate Domains	Strong Domains
Government & Civics	4	African History; Ancient Civilizations Anthropology; Asian History; Classical History; Economics; History Themes; Media; Meso, South American & Caribbean History; Philosophy; Psychology; Religion; Sociology; US History Since 1865; US History To 1865	European History; Geography; Law & Criminology	Equity & Inclusion	Civics & Government
U.S. History (Pre-Reconstruction)	5	Ancient Civilizations Anthropology; Asian History; Classical History; Law & Criminology; Meso, South American & Caribbean History; Philosophy; Psychology; Sociology; US History Since 1865; US History To 1865	European History	Equity & Inclusion; Geography; History Themes	Civics & Government
U.S. History (Post-Reconstruction)	6	Ancient Civilizations; Classical History; Philosophy; US History To 1865	African History; Anthropology; Law & Criminology; Meso, South American & Caribbean History Psychology; Religion; Sociology	Asian History; Economics; European History; Geography; Media	Civics & Government; Equity & Inclusion; History Themes; US History Since 1865
World History (Ancient Civilizations)	7	African History; Economics; Equity & Inclusion; European History; Law & Criminology; Media; Meso, South American & Caribbean History; Psychology; Sociology; US History Since 1865; US History To 1865	Ancient Civilizations; Philosophy	Anthropology; Asian History; Civics & Government; History Themes; Religion	Classical History; Geography

McGraw Hill Course Title	SSKM Course Number	Empty Domains	Weak Domains	Moderate Domains	Strong Domains
World History (Middle Ages)	8	Civics & Government; Law & Criminology; Media; Psychology; Sociology; US History Since 1865	Ancient Civilizations; Anthropology; Classical History; Economics; Equity & Inclusion; Meso, South American & Caribbean History; Philosophy; US History To 1865	African History; Asian History; History Themes; Religion	European History; Geography
World History (Industrial Revolution)	9	Ancient Civilizations Anthropology; Classical History; Law & Criminology;	Philosophy; Psychology; US History To 1865;	Civics & Government; Economics; Equity & Inclusion; Religion; US History Since 1865;	African History; Asian History; European History; Geography; History Themes; Media; Meso, South American & Caribbean History; Sociology;
Geography	10	Ancient Civilizations; Classical History; Law & Criminology; Media; Philosophy; Psychology; Sociology; US History To 1865	Anthropology; Equity & Inclusion; European History; History Themes; Religion; US History Since 1865	Meso, South American & Caribbean History	African History; Asian History; Civics & Government; Economics; Geography
Sociology	11	African History; Ancient Civilizations Asian History; Classical History; European History; Meso, South American & Caribbean History	Civics & Government; Economics; Geography; History Themes; Philosophy; Psychology; Religion; US History Since 1865; US History To 1865	Anthropology; Law & Criminology; Media	Equity & Inclusion; Sociology
Psychology	12	African History; Ancient Civilizations Anthropology; Asian History; Economics; European History; Geography; History Themes; Law & Criminology; Media; Meso, South American & Caribbean History; Philosophy; Religion; US History Since 1865; US History To 1865	Civics & Government; Classical History; Equity & Inclusion; Sociology		Psychology

Table 2. Summary of the Institute’s knowledge-building analysis of McGraw Hill courses in Courses 4-12 (Grades 9-12). Empty Domains contain 0% of knowledge-building texts. Weak Domains contain 1%-25% of knowledge-building texts. Moderate Domains contain 26%-50% of knowledge-building texts. Strong Domains contain greater than 50% of knowledge-building texts.

McGraw Hill 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.

McGRAW HILL QUALITY & COHERENCE FINDINGS: COURSES 4-12

Course 4: Government & Civics

Course 4 receives an overall quality score of 84.63%, placing it in the high-quality band.

Highest-Rated Unit

The highest-quality unit of this course is unit 8 with an average text quality score of 88.37%. This score represents the range in text quality within the unit. The Institute's analysis for coherence indicates high knowledge reinforcement, as seen in Figure 22 below. In unit 8 lessons 1-4, all anchor tags have matches in supplementary texts except for Lesson 3: Commander in Chief and Chief Diplomat. The anchor tag "Public Institutions" is not supported, which represents an opportunity for improvement in an otherwise quality unit.

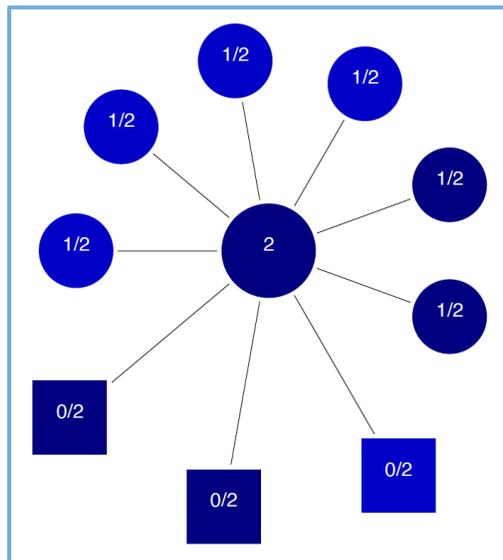


Figure 22. Coherence map of Course 4, Government & Civics by McGraw Hill, Unit 8 Lesson 3 entitles "Commander in Chief and Chief Diplomat" and related texts. Supporting materials reinforce the anchor text. The average unit score for text quality is 88.37%.

Lowest-Rated Unit

The lowest-quality unit of this course is unit 6 with an average text quality score of 80.46%. The Institute's analysis for coherence indicates acceptable knowledge reinforcement, as seen in Figure 23 below. In unit 6 lessons 1-4, all anchor tags have matches in supplementary texts except for Lesson 3: Influencing Congress. The anchor tag "Democratic Culture" is not supported, which represents an opportunity for improvement in this unit.

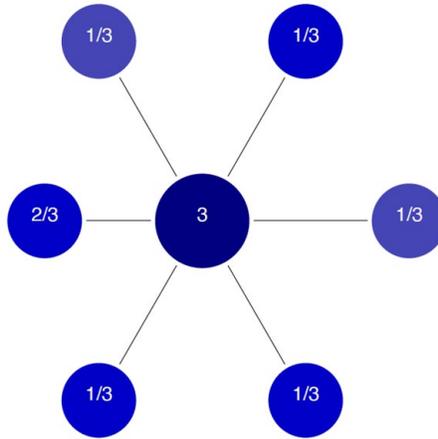


Figure 23. Coherence map of Course 4, Government & Civics by McGraw Hill, Unit 6 Lesson 3 entitled "Influencing Congress" and related texts. Supporting materials reinforce the anchor text. The average unit score for text quality is 80.46%

Course 5: U.S. History (Pre-Reconstruction)

Course 5 receives an overall quality score of 95.06%, placing it in the high-quality band.

Highest-Rated Unit

The highest-quality unit of this course is unit 5, with an average text quality score of 97.44%. This score represents the range in text quality within the unit. The Institute's analysis for coherence indicates high knowledge reinforcement, as seen in Figure 24 below. All anchor tags have matches in supplementary texts. However, two supplemental texts did not reference any anchor tags.

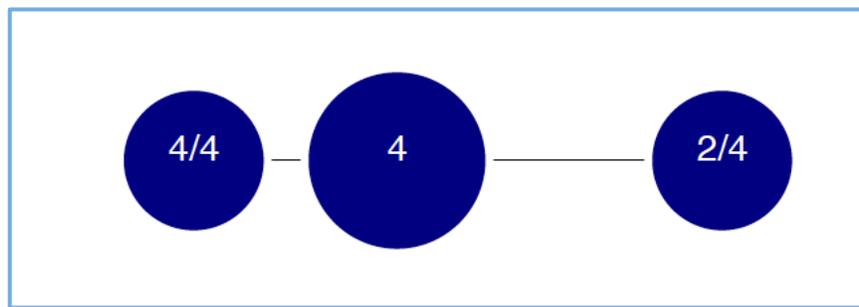


Figure 24. Coherence map of Course 5, U.S. History (Pre-Reconstruction) by McGraw Hill, Unit 5 Lesson 1 entitled "Principles of the Constitution" and related texts. Supporting materials reinforce the anchor text. The average unit score for text quality is 97.44%.

Lowest-Rated Unit

The lowest-quality unit of this course is unit 8, with an average text quality score of 92.59%. The Institute's analysis for coherence indicates high knowledge reinforcement, as seen in Figure 25 below. Three anchor tags have no matches in supplementary texts. These include

Manifest Destiny, Great Powers, and Business & Finance. Supporting these anchor tags presents an opportunity for improvement.

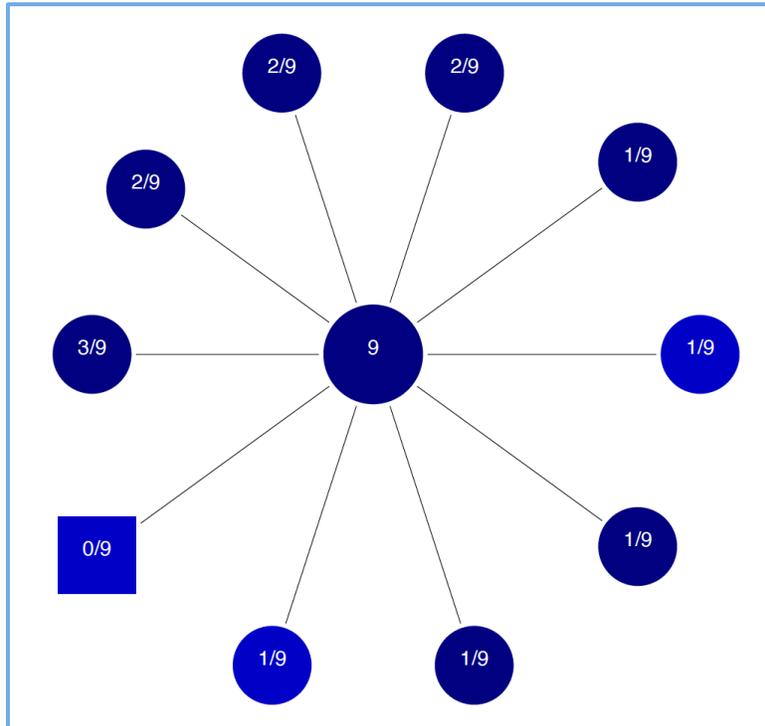


Figure 25. Coherence map of course 5, U.S. History (Pre-Reconstruction) by McGraw Hill, Unit 8 Lesson 3 entitled "Unity and Sectionalism" and related texts. Supporting materials moderately reinforce the anchor text. The average unit score for text quality is 92.59%.

Course 6: U.S. History (Post-Reconstruction)

Course 6 receives an overall quality score of 90.88%, placing it in the high-quality band.

Highest-Rated Unit

The highest-quality unit of this course is unit 12, with an average text quality score of 98.15%. This score represents the range in text quality within the unit. The Institute's analysis for coherence indicates high knowledge reinforcement, as seen in Figure 26 below. Six anchor tags have no matches in supplementary texts, including Hollywood, Advertising, Political Theory, Family, Community & Identity, Indigenous peoples, Histories & Cultures, and Latinx and Hispanic American Experience. Addressing this anchor tag represents an opportunity to improve this high-quality unit.

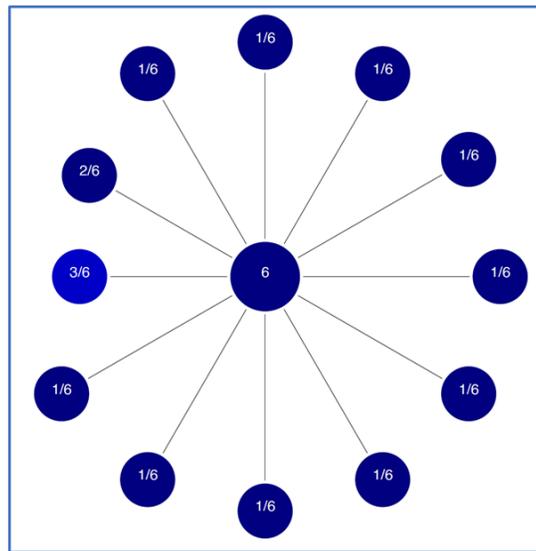


Figure 26. Coherence map of Course 6, U.S. History (Post-Reconstruction) by McGraw Hill, Unit 12 Lesson entitled "The Affluent Society" and related texts. Supporting materials moderately reinforce the anchor text. The average unit score for text quality is 98.15%.

Lowest-Rated Unit

The lowest-quality unit of this course is unit 1, with an average text quality score of 83.33%. The Institute's analysis for coherence indicates high knowledge reinforcement, as seen in Figure 27 below. Two anchor tags have no matches in supplementary texts, including Gilded Age and Treaties & Peace Negotiations. Further, several supplemental texts are of low quality.

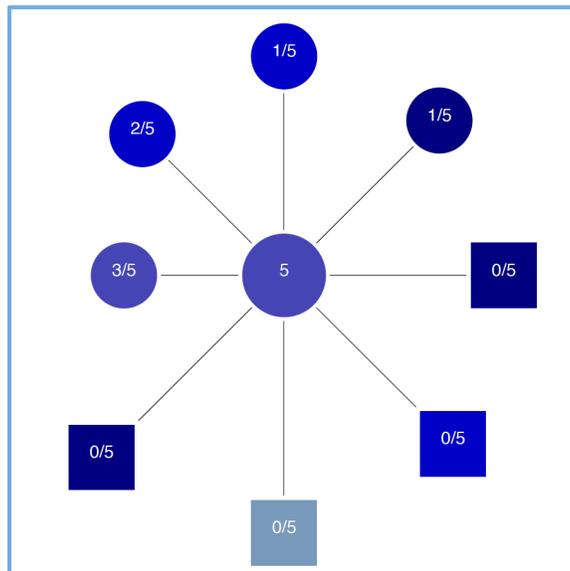


Figure 27. Coherence map of Course 6, U.S. History (Post-Reconstruction) by McGraw Hill, Unit 1 Lesson 3 entitled "Native Americans" and related texts. Supporting materials moderately reinforce the anchor text. The average unit score for text quality is 83.33%.

Course 7: World History (Ancient Civilizations)

Course 7 receives an overall quality score of 65.55%, placing it in the poor-quality band.

Highest-Rated Unit

The highest-quality unit of this course is unit 4, with an average text quality score of 78.43%. This score represents the range in text quality within the unit. The Institute's analysis for coherence indicates high knowledge reinforcement, as seen in Figure 28 below. Supplemental texts ranged in quality.

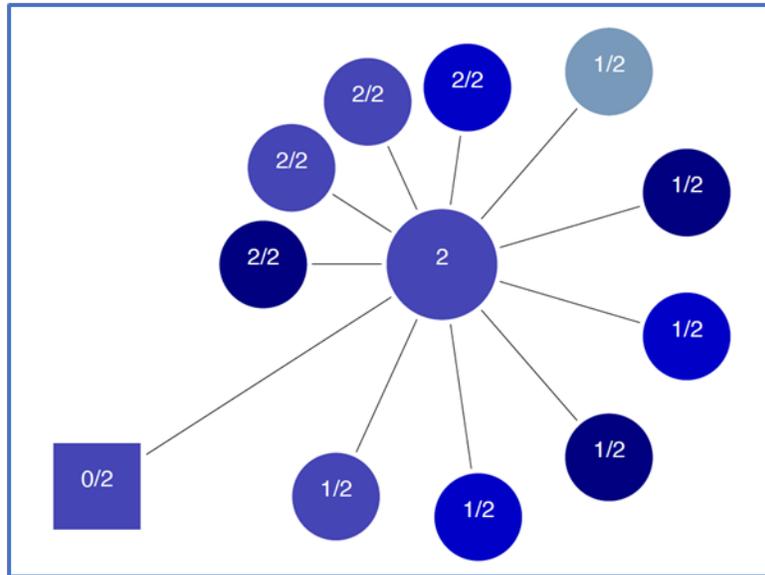


Figure 28. Coherence map of Course 7, World History (Ancient Civilizations) by McGraw Hill, Unit 4 Lesson 1 entitled "Beginnings" and related texts. Supporting materials moderately reinforce the anchor text. The average unit score for text quality is 78.43%.

Lowest-Rated Unit

The lowest-quality unit of this course is unit 5, with an average text quality score of 59.18%. The Institute's analysis for coherence indicates acceptable knowledge reinforcement, as seen in Figure 29 below. Two anchor tags have no matches in supplementary texts, including Democratic Culture and Citizenship & Civic Life. Supporting these anchor tags high-quality texts represents an opportunity for improvement this unit.

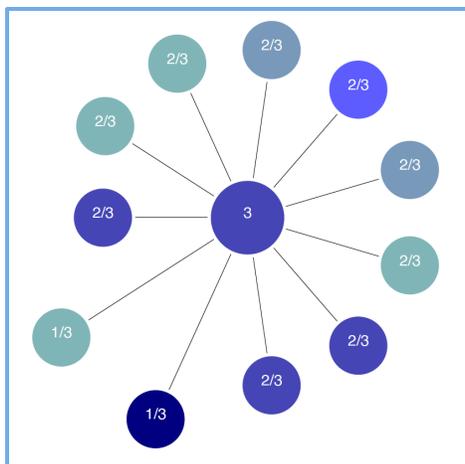


Figure 29. Coherence map of Course 7, World History (Ancient Civilizations) by McGraw Hill, Unit 5 Lesson 1 entitled "Rise of Greek Civilization" and related texts. Supporting materials weakly reinforce the anchor text. The average unit score for text quality is 59.18%.

Course 8: World History (Middle Ages)

Course 8 receives an overall quality score of 95.46%, placing it in the high-quality band.

Highest-Rated Unit

The highest-quality unit of this course is unit 10, with an average text quality score of 97.58%. This score represents the range in text quality within the unit. The Institute's analysis for coherence indicates high knowledge reinforcement, as seen in Figure 30 below. Three anchor tags have no matches in supplementary texts, including Technology (impact of), Colonial America (up to 1775), and European Colonization. Supporting these anchor tags with high-quality texts represents an opportunity for improvement.

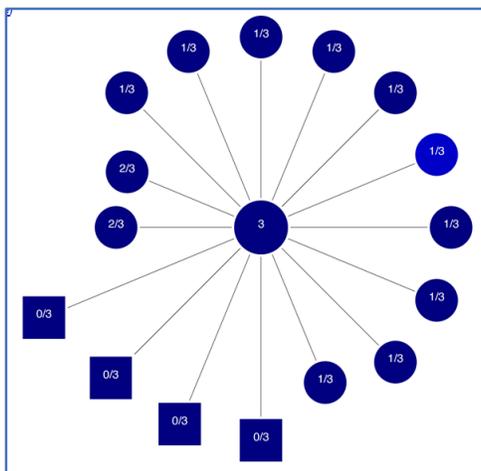


Figure 30. Coherence map of Course 8, World History (Middle Ages) by McGraw Hill, Unit 10 anchor text entitled "Europe Gets Ready to Explore" and related texts. Supporting materials strongly reinforce the anchor text. The average unit score for text quality is 97.58%.

Lowest-Rated Unit

The lowest-quality unit of this course is unit 4, with an average text quality score of 90.30%. The Institute’s analysis for coherence indicates low knowledge reinforcement, as seen in Figure 31 below. Two anchor tags have no matches in supplementary texts, including Eastern Religion & Philosophy and Southeast Asia. Further, several texts were moderate quality. This represents an opportunity for improvement.

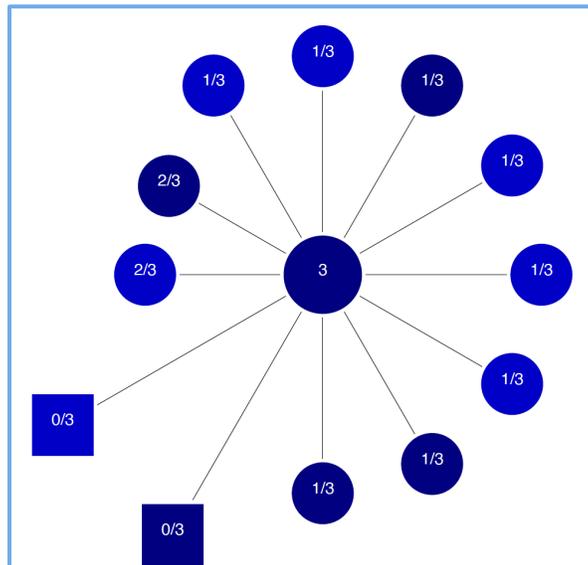


Figure 31. Coherence map of Course 8, World History (Middle Ages) by McGraw Hill, Unit 4 Lesson 2 entitled "Chinese Society" and related texts. Supporting materials somewhat reinforce the anchor text. The average unit score for text quality is 90.30%.

Course 9: World History (Industrial Revolution)

Course 9 receives an overall quality score of 87.34%, placing it in the high-quality band.

Highest-Rated Unit

The highest-quality unit of this course is unit 3, with an average text quality score of 93.33%. This score represents the range in text quality within the unit. The Institute’s analysis for coherence indicates high knowledge reinforcement, as seen in Figure 32 below. One anchor tag has no matches in supplementary texts, Transitions of power. However, many supplemental texts did not reference any anchor tags. These represent opportunities for improvement.

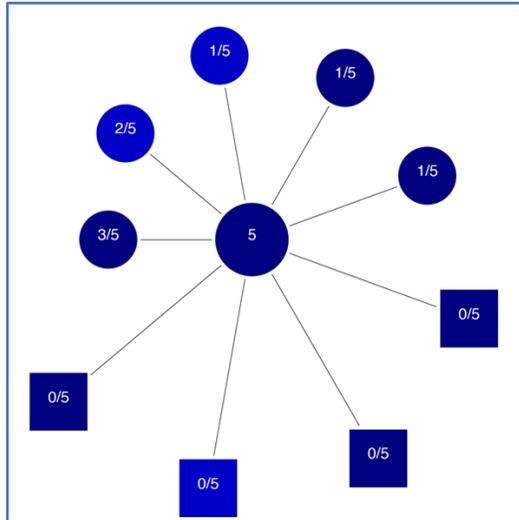


Figure 32. Coherence map of Course 9, World History (Industrial Revolution) by McGraw Hill, Unit 3 Lesson 3 entitled "Rise of Napoleon and Napoleonic Wars" and related texts. Supporting materials reinforce the anchor text. The average unit score for text quality is 93.33%.

Lowest-Rated Unit

The lowest-quality unit of this course is unit 1, with an average text quality score of 84.53%. The Institute’s analysis for coherence indicates moderate knowledge reinforcement, as seen in Figure 33 below. All anchor tags have matches in supplementary texts. However, many supplemental texts did not reference any anchor tags, and several supplemental texts were low quality. This represents an opportunity for improvement.

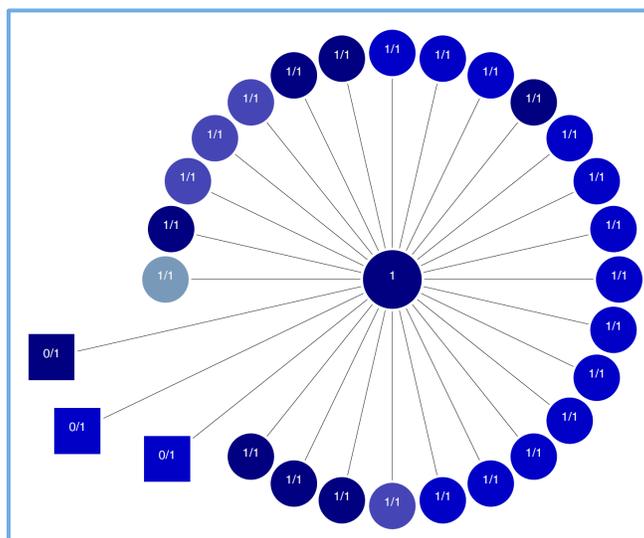


Figure 33. Coherence map of Course 9, World History (Industrial Revolution) by McGraw Hill, Unit 1 Lesson 3 entitled "Absolutism in Europe" and related texts. Supporting materials reinforce the anchor text with a range of supplemental text quality. The average unit score for text quality is 84.53%.

Course 10 (Geography)

Course 10 receives an overall quality score of 79.65%, placing it in the high-quality band.

Highest-Rated Unit

The highest-quality unit of this course is unit 23, with an average text quality score of 93.33%. The Institute's analysis for coherence indicates high knowledge reinforcement, as seen in Figure 34 below. Five anchor tags have no matches in supplementary texts, including Bantu, African Culture, Land use, Comparative Politics & Government, and Human Rights.

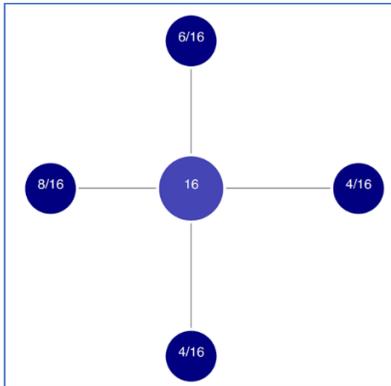


Figure 34. Coherence map of Course 10, Geography by McGraw Hill, Unit 23 anchor text entitled "Equatorial Africa" and related texts. Supporting materials mostly reinforce the anchor text. The average unit score for text quality is 93.33%.

Lowest-Rated Unit

The lowest-quality unit of this course is unit 3, with an average text quality score of 68.94%. The Institute's analysis for coherence indicates moderate knowledge reinforcement, as seen in Figure 35 below. All anchor tags have matches, but most supplementary texts are of moderate quality. This represents an opportunity for improvement.

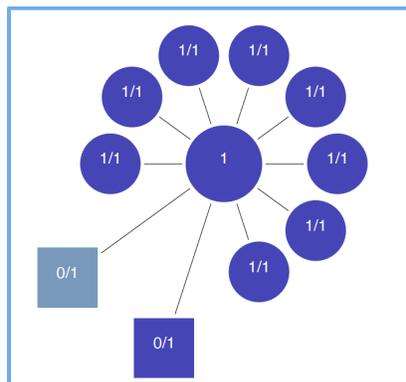


Figure 35. Coherence map of Course 10, Geography by McGraw Hill, Unit 3 anchor text entitled "Latitude, Climate, and Elevation" and related texts. Supporting materials moderately reinforce the anchor text. The average unit score for text quality is 68.94%.

Course 11: Sociology

Course 11 receives an overall quality score of 73.96%, placing it in the moderate-quality band.

Highest-Rated Unit

The highest-quality unit of this course is unit 10, with an average text quality score of 78.00%. This score represents the range in text quality within the unit. The Institute's analysis for coherence indicates moderate knowledge reinforcement, as seen in Figure 36 below. One anchor tag has matches in supplementary texts, Income Inequality & Wealth Gap. In addition, several supplemental texts did not reference any anchor tags and were of moderate or low quality. These factors represent opportunities for improvement.

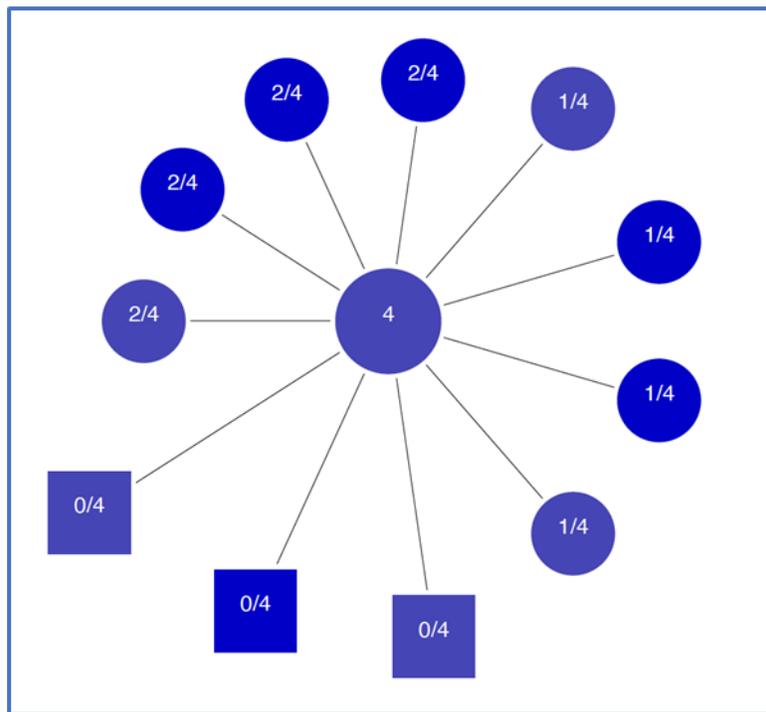


Figure 36. Coherence map of Course 11, Sociology by McGraw Hill, Unit 10 anchor text entitled "Inequality in America's Elderly Population" and related texts. Supporting materials moderately reinforce the anchor text. The average unit score for text quality is 78%.

Lowest-Rated Unit

The lowest-quality unit of this course is unit 4, with an average text quality score of 69.05%. The Institute's analysis for coherence indicates moderate knowledge reinforcement, as seen in Figure 37 below. All anchor tags have matches in supplementary texts. However, many supplemental texts did not reference any anchor tags and were of moderate quality.

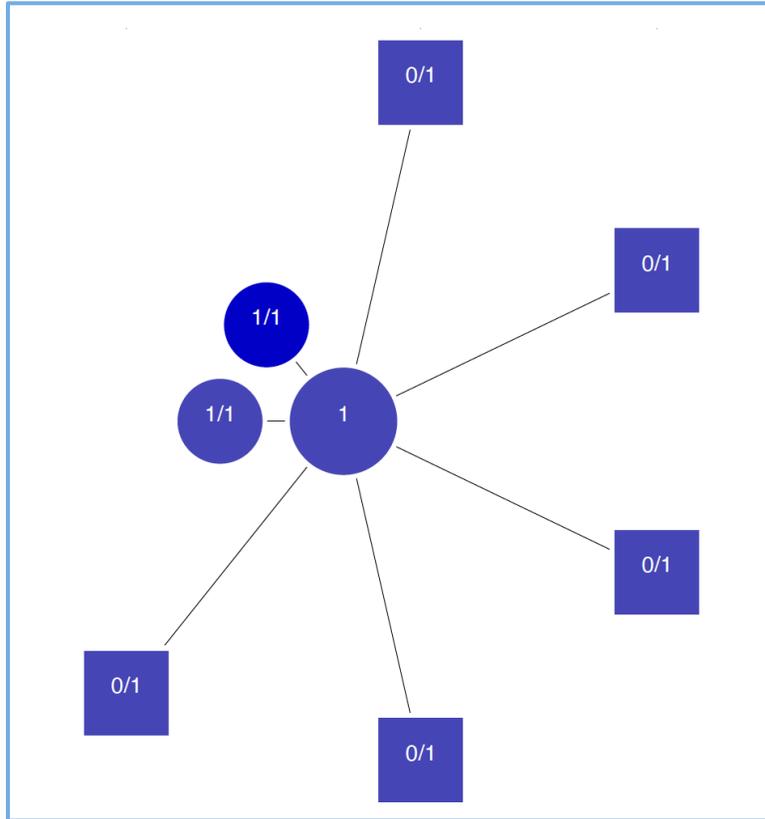


Figure 37. Coherence map of Course 11, Sociology by McGraw Hill, Unit 4 anchor text entitled "Process of Socialization" and related texts. Supporting materials moderately reinforce the anchor text. The average unit score for text quality is 69.05%.

Course 12 (Psychology)

Course 12 receives an overall quality score of 75.12%, placing it in the high-quality band.

Highest-Rated Unit

The highest-quality unit of this course is unit 17, with an average text quality score of 81.82%. This score represents the range in text quality within the unit. The Institute's analysis for coherence indicates high knowledge reinforcement, as seen in Figure 38 below. Two anchor tags, States of Consciousness and Learning & Human Development, have no matches in supplementary texts. In addition, many supplemental texts did not reference any anchor tags. However, the texts were moderate or high quality.

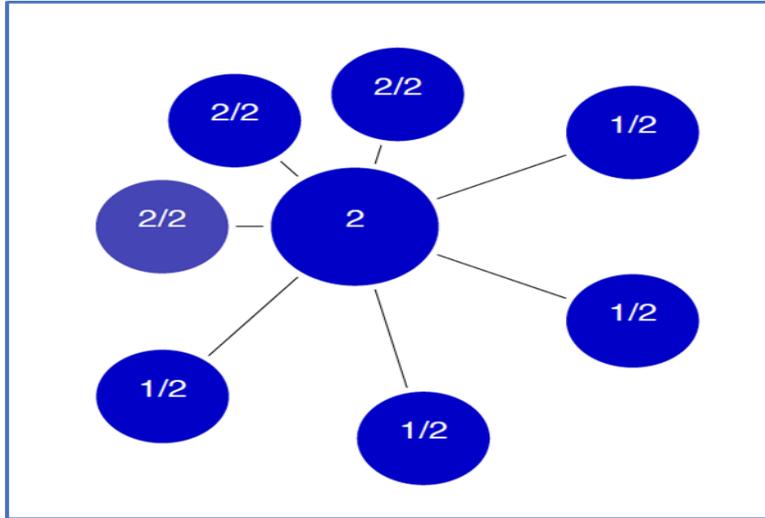


Figure 38. Coherence map of Course 11, Psychology by McGraw Hill, Unit 17 anchor text entitled "What is Psychotherapy?" and related texts. Supporting materials reinforce the anchor text. The average unit score for text quality is 81.82%.

Lowest-Rated Unit

The lowest-quality unit of this course is unit 1, with an average text quality score of 64.29%. The Institute’s analysis for coherence indicates high knowledge reinforcement, as seen in Figure 39 below. All anchor tags have matches in supplementary texts. However, several supplemental texts did not reference any anchor tags, and many texts were low or moderate quality.

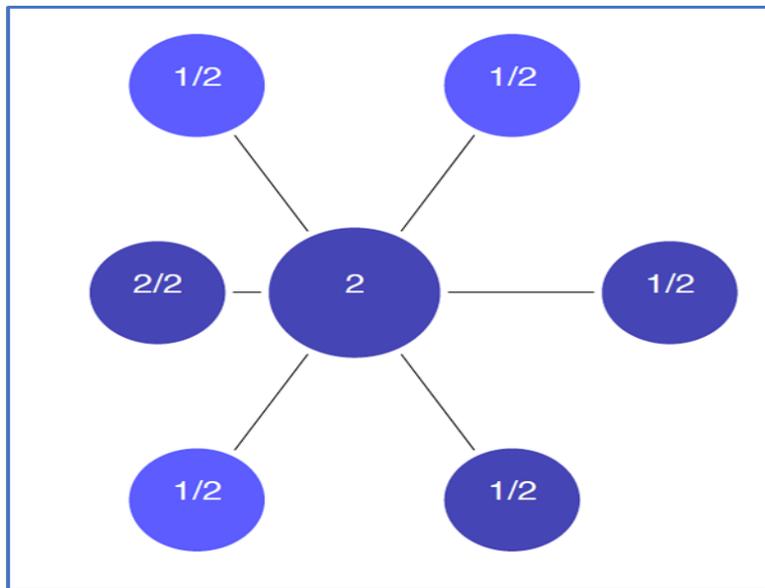


Figure 39. Coherence map of Course 12, Psychology by McGraw Hill, Unit 1 anchor text entitled "A Brief History of Psychology" and related texts. Supporting materials mostly reinforce the anchor text. The average unit score for text quality is 64.29%.

McGRAW HILL QUALITY ASSESSMENT

The summary of unit quality shown in Table 3 addresses the differences between each course level's highest and lowest quality scores. Large differences indicate inconsistency in instruction. While all units rate as high quality, a finer grain of understanding appears in the differences between unit high and low scores. Course 10 (24%) shows the largest unit quality differences. Courses 6 (15%), 7 (19%), and 12 (18%) show moderate differences in unit quality, while courses 9 (9%), 11 (9%), 4 (8%), 8 (7%), 5 (5%), and 4 (1%) show low differences in unit quality.

Table 3. Summary of Unit Quality Scores

SSKM Course Number	Overall Quality	Unit High Score	Unit Low Score	Range (High-Low) *
4	84.63%	88.37%	80.46%	8%
5	95.06%	97.44%	92.59%	5%
6	90.88%	98.15%	83.33%	15%
7	65.55%	78.43%	59.18%	19%
8	95.46%	97.58%	90.30%	7%
9	87.34%	93.33%	84.53%	9%
10	79.65%	93.33%	68.94%	24%
11	73.96%	78.00%	69.05%	9%
12	75.12%	81.82%	64.29%	18%

*Table 3. Summary of unit quality scores in Course 4-12. *Note: Calculated range scores are rounded to the nearest whole number approximation for ease of comparison.*

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. The score 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. These include an average for the entire course 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. A score below 2.0 is considered low. Scores for open classroom climate appear in blue, and those for multiple perspectives appear in orange. Table 4, below, shows a summary of scores for the evaluated course numbered 4-12.

Table 4. Summary of Multiple Perspectives Scores

SSKM Course Number	Open Classroom	Multiple Perspectives	Rating
4	3.0	3.0	High
5	3.0	2.44	High
6	2.75	2.75	High
7	2.75	2.75	High
8	3.0	3.0	High
9	3.0	3.0	High
10	2.0	2.0	Acceptable
11	1.94	1.81	Low
12	2.19	2.28	Acceptable
All Course Levels	2.63	2.56	

Table 4. Summary of scores for inclusion of multiple perspectives and the intended open classroom climate in Courses 4-12.

Of the nine courses evaluated, the vast majority achieved high rankings on both metrics, as the table above demonstrates. Only Course 11 scored low overall, while Courses 10 and 12 achieved acceptable ratings. Courses 4, 8, and 9 achieved perfect scores on both Open Classroom Climate and Multiple Perspectives; these courses provide ample resources for teachers to encourage a healthy discussion environment in their classrooms. The implication of the scores is that the system is generally working well in all courses to hone critical thinking skills in students.

Multiple Perspectives Visual Representations by Course



Figure 40. Visual representation of Multiple Perspectives and Open Classroom Climate scores for Course 4, Government & Civics

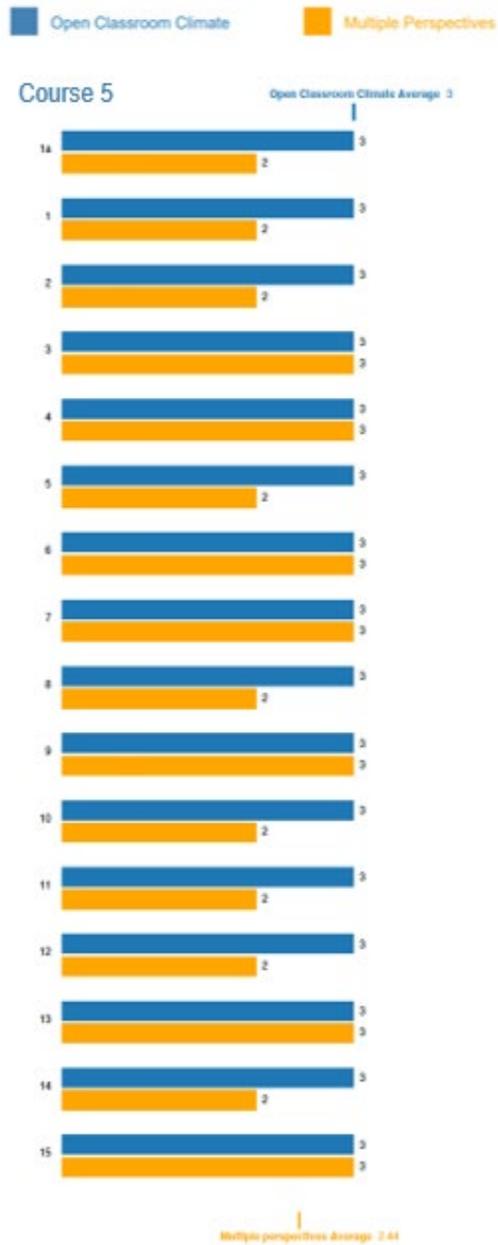


Figure 41. Visual representation of Multiple Perspectives and Open Classroom Climate scores for Course 5, U.S. History (Pre-Reconstruction).

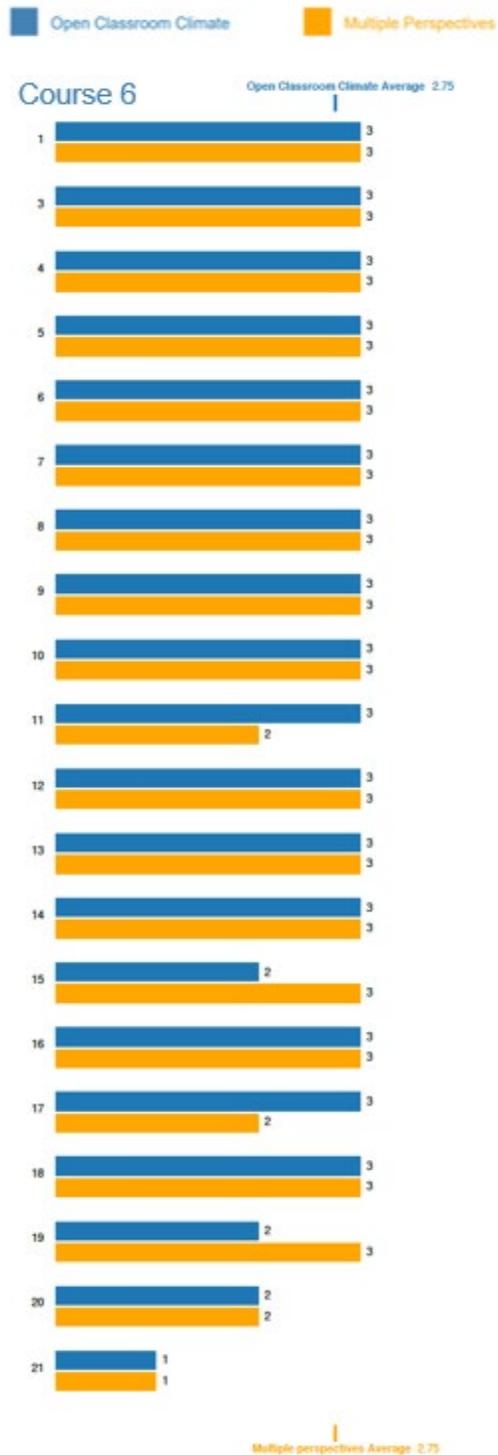


Figure 42. Visual representation of Multiple Perspectives and Open Classroom Climate scores for Course 6, U.S. History (Post-Reconstruction).



Figure 43. Visual representation of Multiple Perspectives and Open Classroom Climate scores for Course 7, World History (Ancient Civilizations).



Figure 44. Visual representation of Multiple Perspectives and Open Classroom Climate scores for Course 8, World History (Middle Ages).

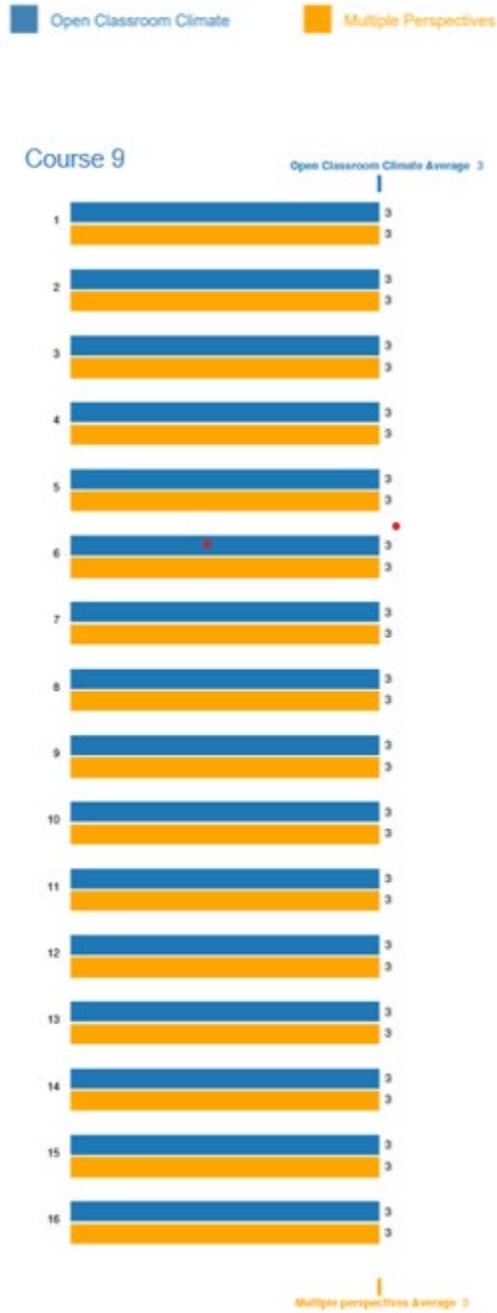


Figure 45. Visual representation of Multiple Perspectives and Open Classroom Climate scores for Course 9, World History (Industrial Revolution).

■ Open Classroom Climate
 ■ Multiple Perspectives

Course 10

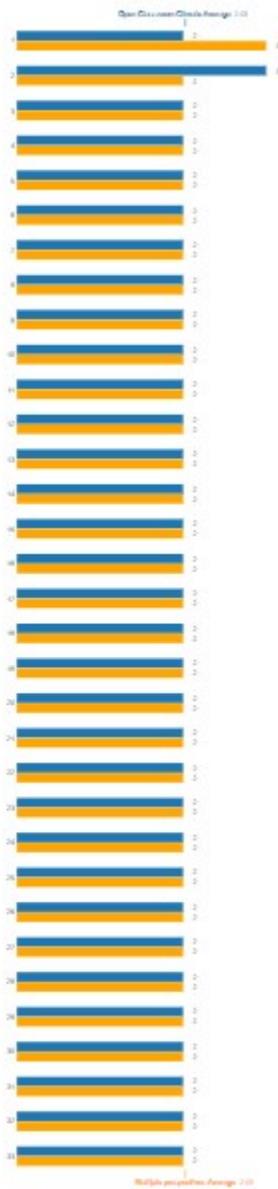


Figure 46. Visual representation of Multiple Perspectives and Open Classroom Climate scores for Course 10, Geography.

■ Open Classroom Climate
 ■ Multiple Perspectives

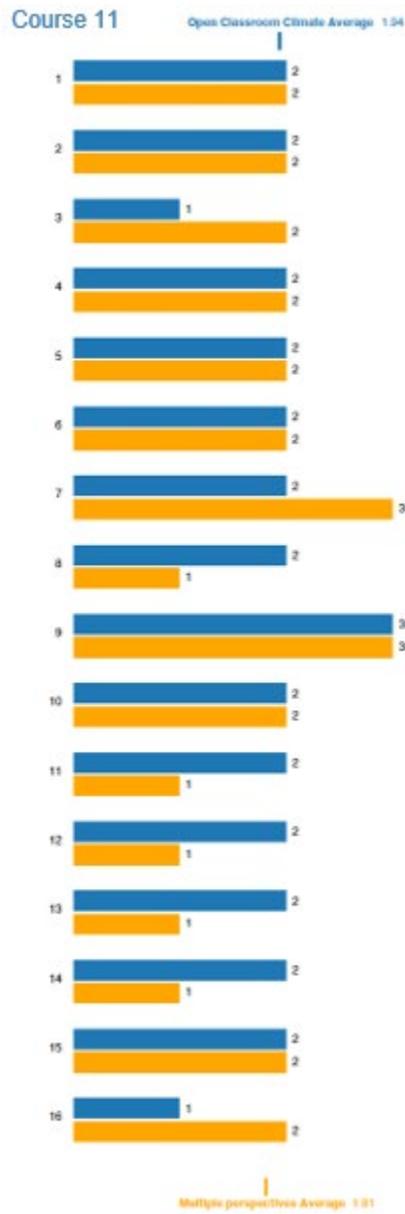


Figure 47. Visual representation of Multiple Perspectives and Open Classroom Climate scores for Course 11, Sociology.

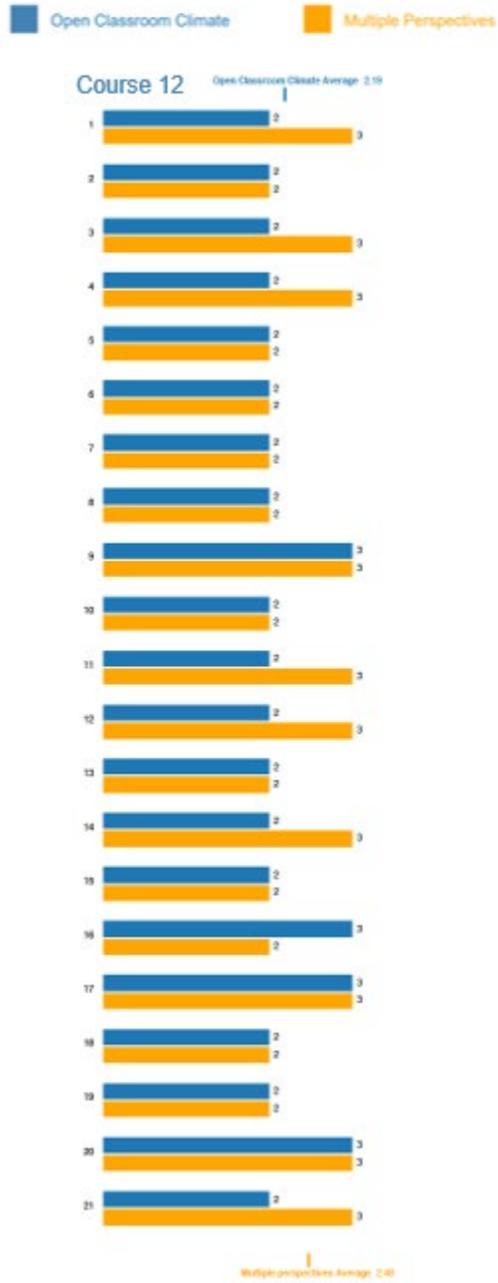


Figure 48. Visual representation of Multiple Perspectives and Open Classroom Climate scores for Course 12, Psychology.

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.

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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 McGraw Hill

McGraw Hill's vision is to unlock the full potential of each learner and mission is to accelerate learning. The company accomplishes this by creating intuitive, engaging, efficient, and effective learning experiences — grounded in research. We're helping create a brighter future for students worldwide by applying our deep understanding of how learning happens and how the mind develops. Learning science is the key.

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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