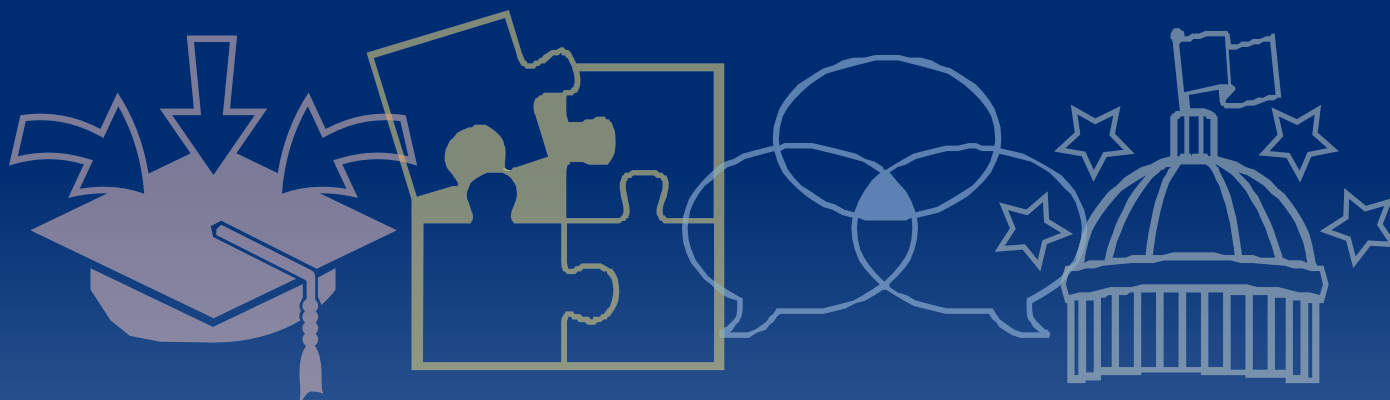




JOHNS HOPKINS  
SCHOOL of EDUCATION

Institute for Education Policy



## ELA Knowledge Map™



*A unique analytic resource enabling  
policymakers, school leaders, and parents to  
better understand the strengths and weaknesses  
of McGraw Hill's Open Court Reading Grades K-5 English  
language arts curriculum.*

Winter 2022



The achievement gap is, in large part, a knowledge gap. Compelling research strongly affirms that students' reading levels – particularly from fifth grade onwards – relate deeply to their level of background content knowledge.<sup>i</sup> Students in more affluent systems demonstrate more success in skill-based English language arts (ELA) assessments not only because they are better at “recognizing main ideas,” but also because they are far more likely to know more about the subject matter discussed in any given text. Research from around the world shows the same: [Most democracies around the world](#) require all schools to teach a standard body of knowledge; and a comprehensive, content-rich curriculum is a signature feature of [high-performing education systems](#). Despite the research record, a large number of the United States' ELA curricula treat texts not as a source of building knowledge, but merely as a site for attempting to hone abstract reading skills.

Determining whether a particular ELA curriculum is “standards aligned” is a helpful step, but it does not tell us about the knowledge-building capacity of that curriculum.<sup>ii</sup> For example: Instructional materials may use publisher-written texts that satisfy the standards-based requirement for “textual complexity,” but if the materials fail to offer students a sequenced, knowledge-rich learning experience they miss a critical opportunity to build reading fluency. Merely drilling students on “finding the main idea” will never help them become better readers. Instead, they need to understand what the text is really about - something that can only be achieved by acquiring the background knowledge.

The Johns Hopkins Institute for Education Policy (Institute) has developed the ELA Knowledge Map™, a tool with which to evaluate an ELA curriculum in terms of the knowledge it offers students, both about the world (mainly through nonfiction texts) and about psychology and the human condition (through both nonfiction and fiction texts). The Institute conducts this analysis by “mapping” the knowledge domains implicit in the selection of the documents to be read, while also evaluating each text's quality and the coherence of the unit in which is taught. To measure coherence, we assess the degree to

which supporting materials in a unit amplify and deepen the specific knowledge offered in the anchor text.

Each review generates two visual reports: *Knowledge Heat Maps* and *Unit Coherency Maps*.<sup>1</sup> The maps depict the fields of knowledge opened and those missed, in each grade and cumulatively, and with what quality of texts.

The Knowledge Map™ is a one-of-a-kind analytic resource that enables policymakers, school leaders, and parents to better understand the overall strengths and weaknesses of a given curriculum; instructional leaders to “fill in gaps” that might exist; and publishers to continuously improve the materials they offer the public.

For the following report, the Institute evaluated the Open Court curriculum for grades K-5. This analysis covers a representative sample based on materials provided and does not account for more specific variety in the selected texts.

## 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.

## HIGH-LEVEL FINDINGS

Open Court Reading is a K – 5 ELA curriculum that covers phonics, reading comprehension, writing, vocabulary, and grammar. The curriculum presents a wide variety of text types, as well as videos, interactive games, and activities to strengthen relevant student skills. The Knowledge Map™ project examined the texts, decodables, and videos referenced in Open Court’s daily lessons.

The heat map analysis presents strengths in various domains and topics; the Social-Emotional domain demonstrates particularly strong coverage across all grade bands. Other domains show more specialized pockets of strong coverage regarding specific topics. For example, in the Regional Literature domain, the topic of ‘Characteristics of genres’ is covered in depth at all grade levels, revealing the wide variety of texts used in the curriculum. Specific topics within the Science and American History domains are also covered in depth, a reflection of the focus of the curriculum’s unit themes and the connection texts available throughout. Most evaluated domains achieve either strong or moderate

<sup>1</sup> Unit coherency maps will only be generated if the curriculum materials enable that form of analysis.

coverage scores, suggesting that a wide breadth of topics are discussed and built upon throughout this curriculum.

The four domains that achieved minimal coverage scores are Economics, Mathematics & Reasoning, Religion & Philosophy, and World History. For an elementary ELA curriculum, these absences may reflect curricular progression decisions; however, absences in the latter two domains may be worth exploring in order to determine if any relevant topical coverage can be built in.

Quality findings on the Open Court curriculum demonstrate variable quality scores, with overall grade quality ranging from poor to strong. Quality scores increase with individual grade levels; kindergarten is the weakest grade on this metric, while grade 5 is the strongest. Grades 3-5 present strong quality scores as a whole, with all three grades' lowest-quality units still falling within the Institute's range for high quality.

Across all grade levels, coherence scores trend towards the low-to-moderate range. Though pockets of strong coherence appear within every grade level, most units achieve scores that reveal minimal topical connections from text to text. This indicates that even in higher-quality units, further attention could be placed on building upon a unit's core ideas or themes.

**INSTITUTE RECOMMENDATIONS**

Open Court Reading incorporates high-interest, engaging texts to foster a love for reading in students. The Knowledge Map™ analysis highlights the crucial areas of knowledge building and assesses associated strengths and weaknesses as well as text quality. As a result of this analysis, the Institute recommends that the curriculum designers:

- Incorporate awarded, classical, and/or global literature, especially in primary grades. For example, in the first grade's fourth unit, the theme of light and sound is explored through informational texts, poetry, realistic fiction, and historical fiction; however, the curriculum could further explore topics addressed in the unit through myths or legends such as *Why the Sun and the Moon Live in the Sky* by Elphinstone Dayrell. Classical literature, such as "My Shadow" by Robert Louis Stevenson, would also be an excellent fit within this unit.
- Improve the general coherence of units by ensuring, where necessary, higher levels of reinforcement between the unit's texts. For example, grades 3 – 5 each include a designated unit on American History. However, each grade level covers a wide variety of time periods in the text selections, resulting in often just surface level coverage. Focusing on a particular time period per grade level would be one way to build deeper knowledge within these units.

The report will now elaborate on the specific findings of the Knowledge Map™ exercises.

**OPEN COURT READING KNOWLEDGE/HEAT MAPS: GRADES K-5**

One of the Institute's critical gateway questions addresses the level of exposure children receive to each important domain of knowledge and to the topics within those domains. 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. The results for each of the topical domains in Grades K-5 appear in the figures below. Additionally, texts that do not provide robust exposure to any topic are marked with the 'No Meaningful Knowledge' tag; results of that tagging system can also be found below.

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 considers the context of age and grade level.



Figure 1. Heat map color-coded rating scheme of knowledge building, where lighter blue indicates fewer texts and darker blue indicates a larger number of 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).

Three domains rate strongly for topical coverage across all grade levels –Regional Literature (Figure 2), Science (Figure 3), and Social-Emotional (Figure 4). Social-Emotional is the strongest domain in terms of coverage, showing several topics addressed with a high number of texts and across grade bands. For example, all topics but one (Conflict Resolution) are addressed with 8+ texts in kindergarten and Grade 2.

Additional knowledge domains exhibit patterns of strength in specific topics across grade bands. One pattern appears as large numbers of texts on a particular topic across all grades. This pattern can be found in the Diversity, Equity, and Inclusion domain (Figure 8); the curriculum moderately covers topics in this domain, but strongly addresses the immigrant experience across all grade levels. A second pattern presents large numbers of texts across domain topics within an individual grade band. For instance, the World Geography domain (Figure 12) achieves moderate coverage overall but presents strong knowledge building at the grade 5 level. These patterns reveal additional topical reinforcement across the curriculum.

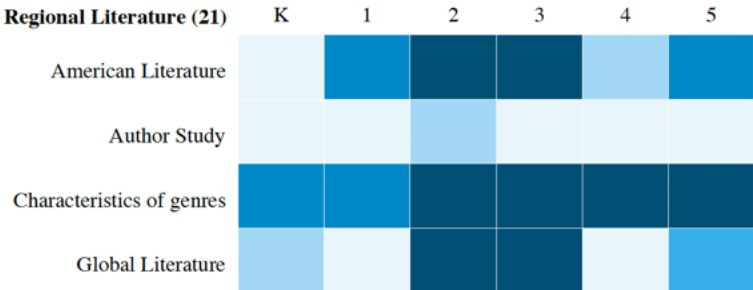


Figure 2. Heat map analysis of the Regional Literature knowledge domain in Grades K-5.





Figure 3. Heat map analysis of the Science knowledge domain in Grades K-5.

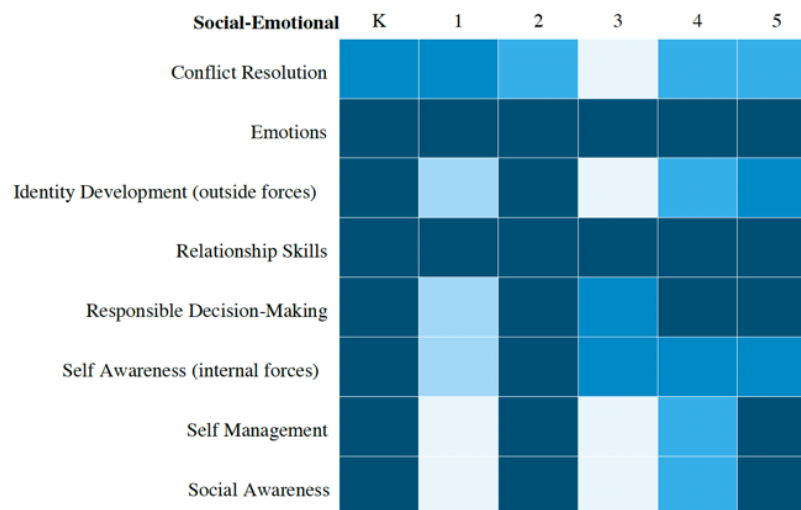


Figure 4. Heat map analysis of the Social-Emotional knowledge domain in Grades K-5.

## 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).

Eight domains score moderately for overall topical coverage – American History (Figure 5); Communities (Figure 6); Concepts & Language (Figure 7); Diversity, Equity, & Inclusion (Figure 8); Government, Civics, & Citizenship (Figure 9); Music & Performing Arts (Figure 10); Visual Arts (Figure 11); and World Geography (Figure 12). These domains present meaningful coverage across all topics as a whole; however, topical absences are more often found here than in their strong counterparts.

Other domains present specific patterns of moderate knowledge building. As with the strong knowledge-building level, one pattern appears as moderate coverage in topics across grade levels. For example, the Science domain (Figure 3) achieves a strong score overall but presents more moderate coverage in topics such as Aquatic Science and Physical Sciences. A second pattern demonstrates moderate numbers of texts across a domain's topics at individual grade levels. The Economics domain (Figure 13) achieves minimal overall coverage but demonstrates moderate knowledge building within the grade 3 band.

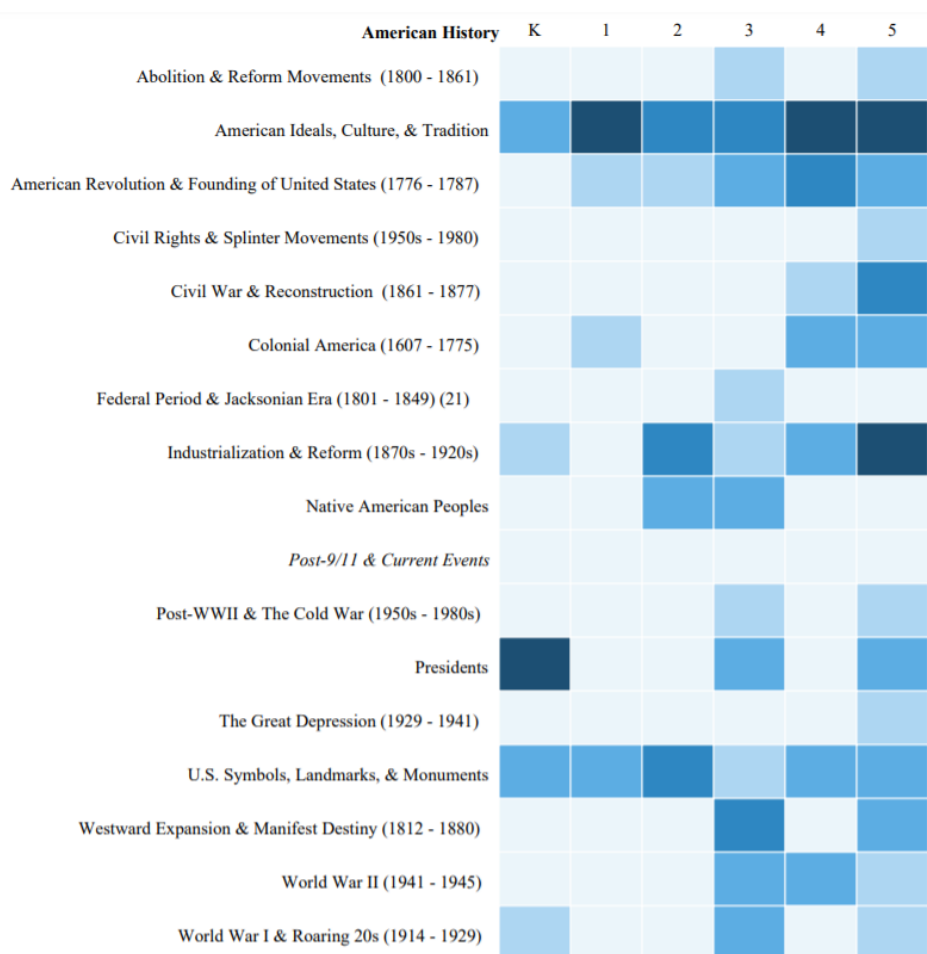


Figure 5. Heat map analysis of the American History knowledge domain in Grades K-5.



Figure 6. Heat map analysis of the Communities knowledge domain in Grades K-5.

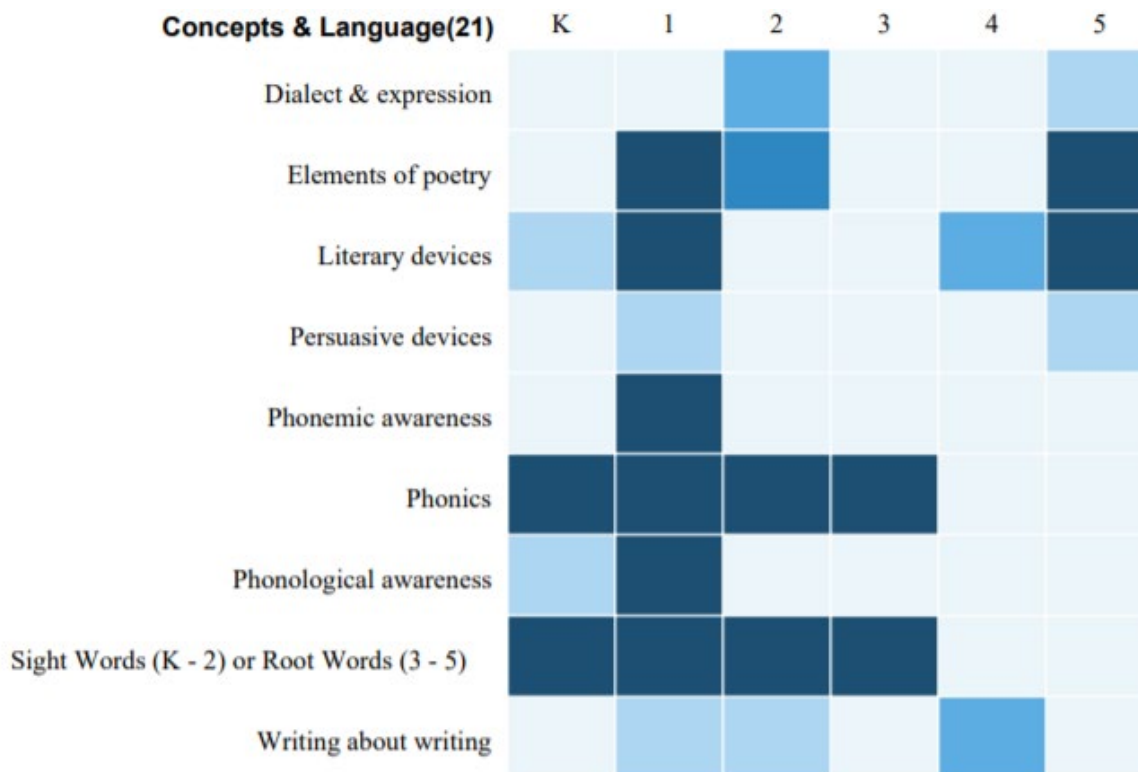


Figure 7. Heat map analysis of the Concepts & Language knowledge domain in Grades K-5.



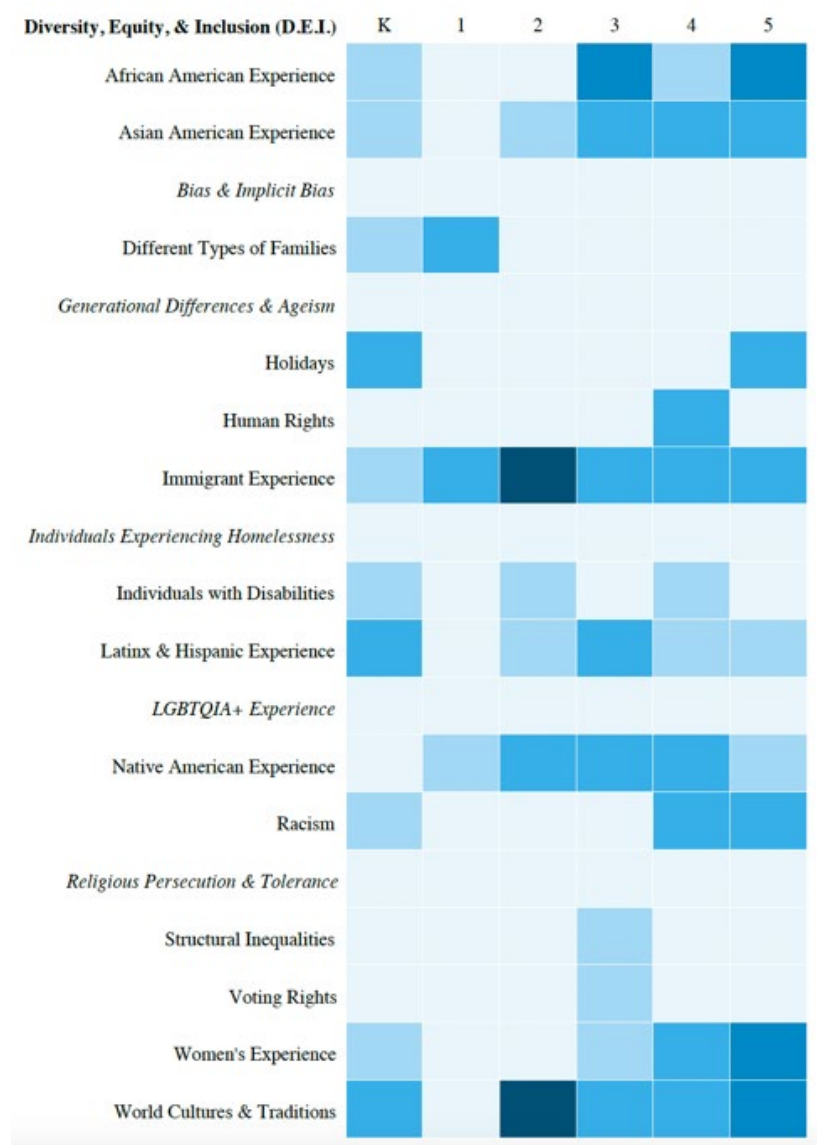


Figure 8. Heat map analysis of the Diversity, Equity, and Inclusion knowledge domain in Grades K-5.

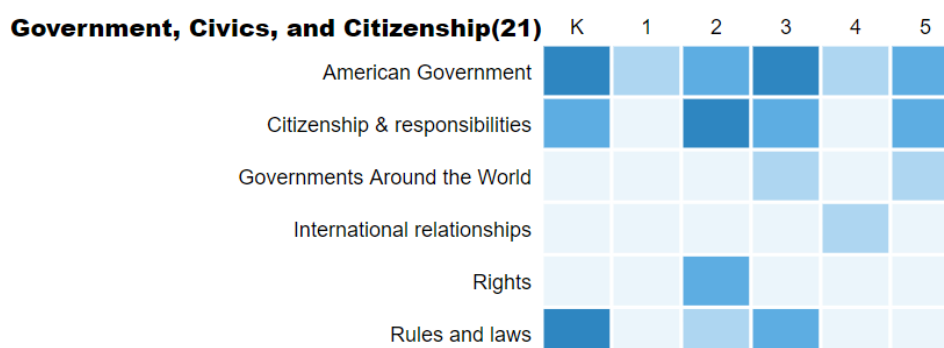


Figure 9. Heat map analysis of the Government, Civics, & Citizenship knowledge domain in Grades K-5.

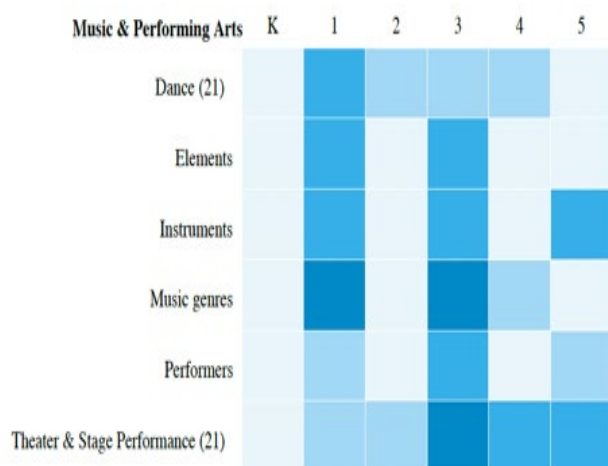


Figure 10. Heat map analysis of the Music & Performing Arts knowledge domain in Grades K-5.

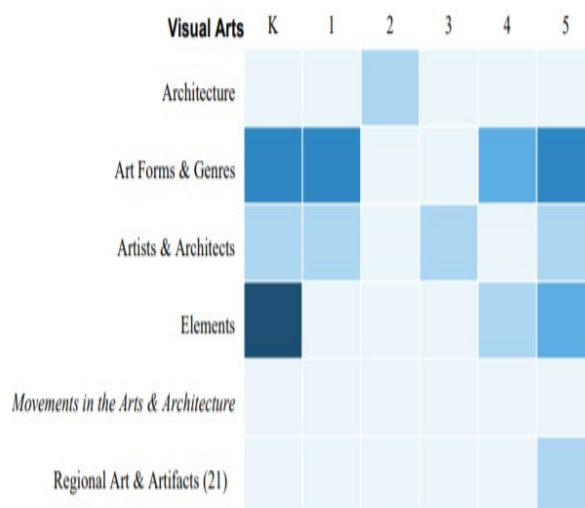


Figure 11. Heat map analysis of the Visual Arts knowledge domain in Grades K-5.

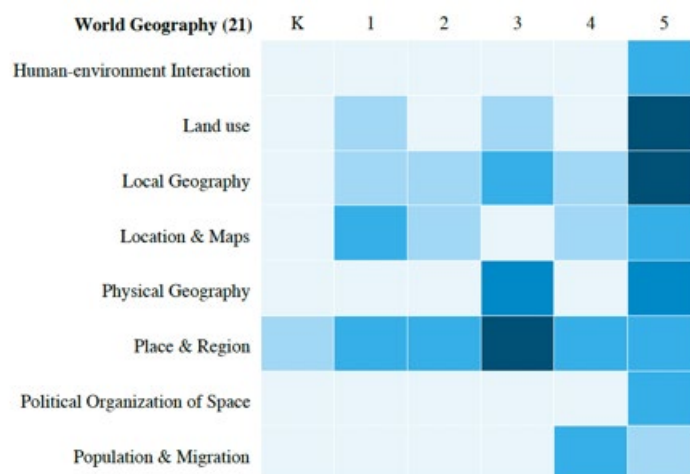


Figure 12. Heat map analysis of the World Geography knowledge domain in Grades K-5.

## Minimal Knowledge-Building Domains

The curriculum presents minimal knowledge building in several knowledge domains and topics. Minimal 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 curriculum as a whole. However, significant gaps may be worth examining in order to further develop knowledge reinforcement within the curriculum.

The remaining four knowledge domains score for minimal knowledge building across all grade levels in topics. Specifically, these domains are Economics (Figure 13), Mathematics & Reason (Figure 14),

Religion & Philosophy (Figure 15), and World History (Figure 16). Religion & Philosophy is the curriculum’s least addressed domain, with only one topic covered at any grade level.

Besides these generally minimal domains, other knowledge domains present specific weaknesses. One pattern appears as an absence of texts regarding particular topics across grade levels. The American History domain (Figure 5), for example, scores moderately for overall coverage but contains no texts addressing Post-9/11 & Current Events. An additional pattern of weakness presents itself as a lack of domain coverage within a grade band. Visually, this appears in the Knowledge Map™ as empty columns beneath individual grade levels and can be found in grade 4 of the Communities domain (Figure 6). As previously mentioned, these absences may be intentional but should be measured against the context of the system’s curricular goals.

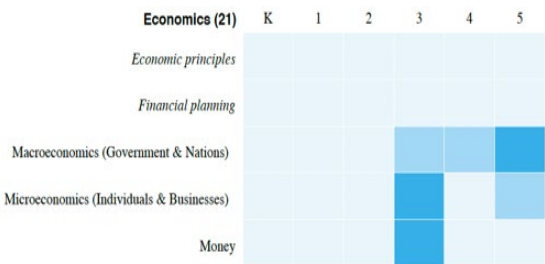


Figure 13. Heat map analysis of the Economics knowledge domain in Grades K-5.

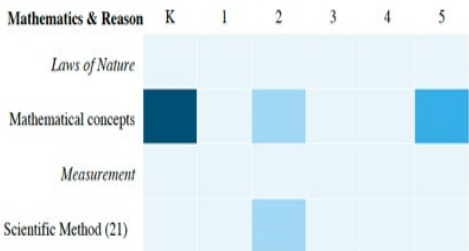


Figure 14. Heat map analysis of the Mathematics & Reason knowledge domain in Grades K-5.

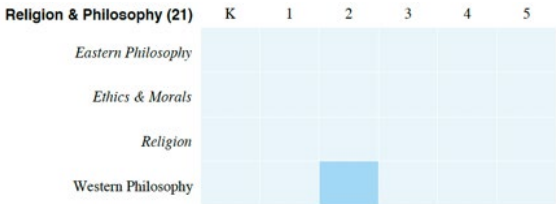


Figure 15. Heat map analysis of the Religion & Philosophy knowledge domain in Grades K-5.

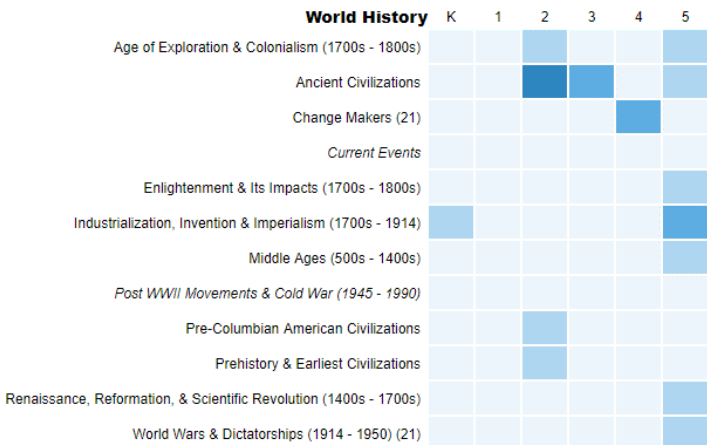


Figure 16. Heat map analysis of the World History knowledge domain in Grades K-5.

## Diversity, Equity, & Inclusion Domains

Among the domains evaluated as part of the heat map exercise is the Diversity, Equity, & Inclusion domain, which measures the presence of texts addressing the experiences of specific cultural groups. Ideally, culturally responsive texts should represent a spectrum of positive, neutral, and negative aspects of a group's experience in the United States. Heat Maps with strong results for the Diversity, Equity, & Inclusion domain indicate that students receive meaningful instruction related to these experiences. Many academic materials can be rated for cultural responsiveness, including everything from picture books to documentary films. The Institute reviewed the Open Court curriculum's materials for cultural responsiveness across the evaluated grade levels.

The Diversity, Equity, & Inclusion in this curriculum domain includes both strengths and weaknesses in terms of high- and low-performing grade levels and knowledge building across grade levels. One strength of the domain is its focus on building knowledge in specific topics over time. For example, knowledge on the Asian American Experience is introduced in kindergarten and reinforced in grades 2-5, with one text in kindergarten and grade 2, and 2-4 texts in grades 3, 4, and 5. Most notably, the World Cultures & Traditions topic is introduced with 2-4 texts in kindergarten and reinforced with a moderate to strong number of texts in grades 2-5.

The domain also includes several topics that are poorly covered. For example, no texts at any level address the topics of Bias & Implicit Bias, Generational Differences & Ageism, Individuals Experiencing Homelessness, LGBTQIA+ Experience, and Religious Persecution & Intolerance. Similarly, the topics of Structural Inequality and Voting Rights, respectively, are minimally mentioned, with only one text in grade 3 covering either. This may reflect the conscious choice to teach about particular cultural experiences later to older students, but it is still worth noting where absences occur across the entire K – 5 curricula.

## OPEN COURT READING QUALITY AND 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 rubrics below.

### Rubrics for Quality

The Institute applies three rubrics for text quality analysis – a fiction rubric, nonfiction rubric, and literary nonfiction rubric. All rubrics consider content knowledge and language. Rubrics for fiction and literary nonfiction (nonfiction material presented in a narrative format) include additional factors relevant to the genres, such as emotion and prominence. The nonfiction rubric omits these factors in favor of focusing on the source's accuracy and quality.

### Fiction and Literary Nonfiction (Total of 15 possible Points)

**Evocation of Emotion:** The degree to which the text is memorable due to its impact upon the reader's affect. Works that may achieve high emotion scores include Shakespeare's *Romeo & Juliet* and Morrison's *The Bluest Eye*.

**Language:** The degree to which the text contains outstanding language and derives effect from several factors, including:

- Clarity (Hemingway's *Old Man & The Sea*, Austen's *Emma*)
- Appeal to the imagination (Tolkien's *Lord of the Rings*)
- Sophisticated capacity at multiple levels, including cultural, social, metaphorical, and/or theological (Chinua Achebe's *Things Fall Apart*, Dante's *Divine Comedy*, de Cervantes' *Don Quixote*, Toni Morrison's *The Bluest Eye*).

**Timeless and Profound Questions:** The degree to which a text addresses perpetual issues of the human condition, such as private or public ethics, obedience to the state, family allegiance, meaning, and purpose. Works that may achieve high scores on this metric include Sophocles' *Antigone* and Camus's *The Stranger*.

**Content Knowledge:** The degree to which text builds students' background knowledge about the world. Strong examples on this metric include Erdrich's *Birchbark House* for elementary students or Austen's *Pride & Prejudice* for secondary students.

**Prominence:** The degree to which a text is widely known. Several factors determine a text's prominence, including:

- Longevity: The degree to which the text has entered the American literary canon, meaning that the text remains widely read for at least fifty years since its publication (Steinbeck's *The Grapes of Wrath*, Thoreau's *Walden*).
- Current prominence: The degree to which the text is a contemporary classic, meaning that it appears widely in American schools in recent years (Cisneros's *Last House on Mango Street*, Satrapi's *Persepolis*).
- Awards: The degree to which the text has been recognized as outstanding by critics or through awards. Notable literary awards include the Nobel Prize in Literature, Booker Prize, John Newberry, Man Booker Award, [PEN/Faulkner Award for Fiction](#), Pulitzer Prize, the [Coretta Scott King Awards](#), or [Pura Belpre Awards](#). More examples of critical literary acclaim appear [here](#).
- Accuracy & Source (literary nonfiction only): The verifiable factual basis for the information and the bias profile of the source.

## Nonfiction (Total of 12 Possible Points)

**Accuracy:** The degree to which the text is empirically accurate.

**Source Quality:** The degree to which the text comes from a high-caliber source. The Institute assigned an initial numerical value to news sources and added quality scores upon encountering new sources. Relevant links can be found [here](#).

**Language:** The degree to which the text is well written and presents its subject matter effectively.

**Content Knowledge:** The degree to which the text effectively builds background knowledge of the topic or subtopic at hand.

## Unit Quality & Coherence Analysis

The Institute generates *Unit Coherence Maps* that illustrate the extent to which the materials reinforce the knowledge built within the unit (as measured through shared topic tags).

The *Unit Coherence Map* utilizes a spoke visual, where the unit name appears in the central square and the surrounding squares represent the materials within that unit. The percent shown on each outer square represents the percentage of shared topics weighted against the total number of shared topics within a unit. This means the more a topic is shared within a unit, the higher the percentage for each text that includes that topic; likewise, less-shared topics within a unit will result in a lower percentage for each text. The proximity of each spoke to the central unit square visually represents this relationship. In addition, there is an overall unit Coherence Score in the upper right corner in blue. The Coherence Score averages the coherency percentages of all texts within a given unit but also includes a .5% penalty for each domain that is not shared in any texts.

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 average quality score for all texts within that unit. The Institute considers a unit or text high quality if it scores 70% or above. A unit or text is acceptable as low as 60%. Any lower score indicates that a unit or text scored poorly overall.

Quality and coherence findings vary and are not linked to each other. For example, a unit may score highly for overall quality but lack in coherency in terms of how well the texts reinforce the knowledge builds. The converse is also possible, where a unit scoring low in overall quality may have moderate or strong reinforcement of a unit topic.

## OPEN COURT READING QUALITY & COHERENCE FINDINGS: GRADES K-5

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 average quality score for all texts within that unit. The Institute considers a unit or text high quality if it scores 70% or above. A unit or text is acceptable as low as 61%. Any lower score indicates that a unit or text scored poorly overall. The caption also includes the Coherency Score for that unit. Because the coherency score is dependent on the number shared topics within a unit, a strong coherency score will vary from unit to unit.

### Kindergarten

Kindergarten receives an overall quality score of 53.72%, placing it in the low-quality band. It is important to note that the decodables, which typically score low against the measured quality rubric, have been included in the coherency chart to determine how they support knowledge builds.

### Highest-Rated Unit

Unit 9 is the highest-quality unit at this grade level, with an average text quality score of 57.62%. This quality score stems from the wide variety of individual text quality scores, indicated by the shades of blue where the lighter shades represent lower-quality texts and the darker shades represent higher-quality texts. Coherence analysis performed on the unit reveals moderate coherence. While most of the texts share the Rules and Law topic of the Government, Civics, and Citizenship domain, other texts, like



*Family Rules* and *Friday Trouble*, have a topical focus of Relationship Skills and Social Awareness of the Social-Emotional domain.

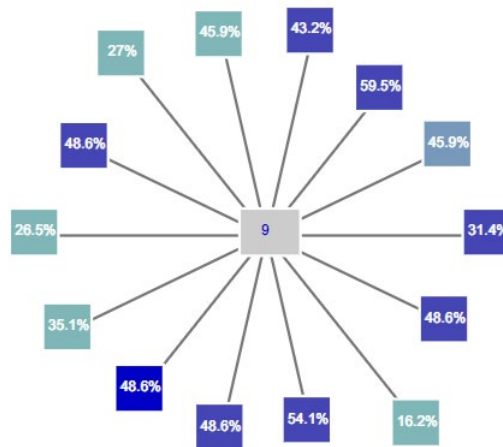


Figure 17. Coherence map of Grade K, Unit 9. The average unit score for text quality is 57.62%.

### Lowest-Rated Unit

Unit 2 is the lowest-quality unit at this grade level, with an average text quality score of 47.94%. The Institute’s coherence analysis indicates weak-to-moderate knowledge reinforcement throughout the unit. The unit’s theme of kindness utilizes a variety of topics under the Social-Emotional domain, depending on the focus of individual texts. While these topics fall under the same domain, the wide breadth of coverage results in fewer shared topics across the unit. Ensuring that students access strong and well-developed materials at this level would contribute to improved efficacy within the unit.

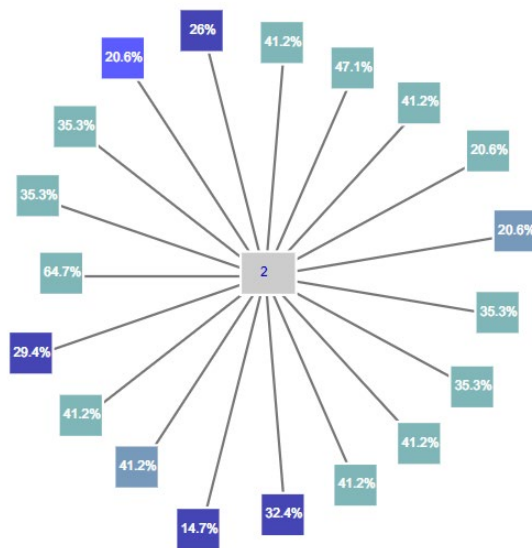


Figure 18. Coherence map of Grade K, Unit 2. The average unit score for text quality is 47.94%.

## Grade 1

Grade 1 receives an overall quality score of 61.02%, placing it in the acceptable quality band. It is important to note that the decodables, which typically score low against the measured quality rubric, have been included in the coherency chart to determine how they support knowledge builds.

### Highest-Rated Unit

Unit 11 is the highest-quality unit at this grade level, with an average text quality score of 68.79%. Coherence analysis indicates strong knowledge reinforcement within this unit. The reading materials all share the Art Forms & Genres topic of the Visual Arts domain, while the decodables focus more on the phonics topics of the Concepts & Language domain. Though further topical connections could be made throughout the unit, particularly within the decodable texts, this analysis reveals the presence of a strong theme that many texts contribute to.

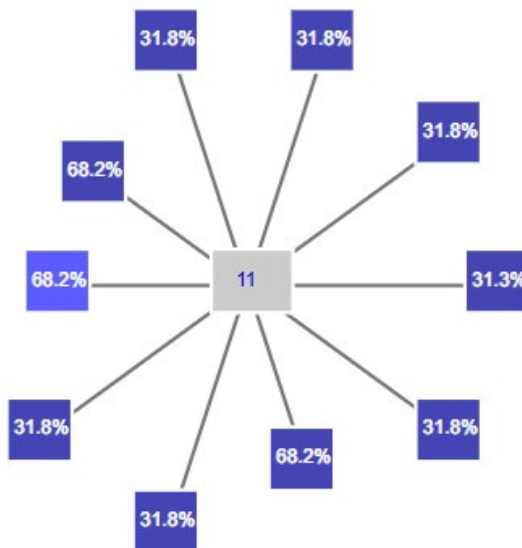


Figure 19. Coherence map of Grade 1, Unit 11. The average unit score for text quality is 68.79%.

### Lowest-Rated Unit

Unit 8 is the lowest-quality unit at this grade level, with an average text quality score of 55.14%. The wide range in coherency scores suggests a weak to moderate knowledge build. The decodable texts present higher coherency scores, as they share the phonics topics of the Concept & Language domain. Additional materials range in topical coverage, from Animal or Insect topics in the Science domain to Characteristics of genres in the Regional Literature domain.

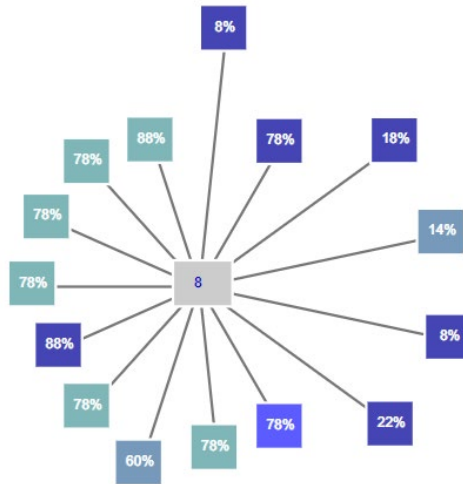


Figure 20. Coherence map of Grade 1, Unit 8. The average unit score for text quality is 55.14%.

## Grade 2

Grade 2 receives an overall quality score of 68.51%, placing it in the acceptable quality band. It is important to note that the decodables, which typically score low against the measured quality rubric, have been included in the coherency chart to determine how they support knowledge builds.

### Highest-Rated Unit

Unit 6 is the highest-quality unit at this grade level, with an average text quality score of 73.71%. The unit presents moderate coherence with most texts sharing the Characteristics of genres or Global Literature tags in the Regional Literature domain, reflecting the unit's theme. However, texts like *Find Your Rhythm* and *The Art of Storytelling* do not share these common topics, resulting in lower coherency scores. It may be worth examining the contribution of these texts to the unit's overall theme in order to determine if they would be better utilized in different units.

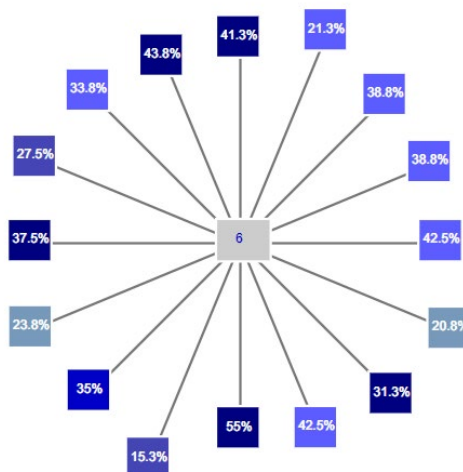


Figure 21. Coherence map of Grade 2, Unit 6. The average unit score for text quality is 73.71%.

## Lowest-Rated Unit

Unit 3 is the lowest-quality unit at this grade level, with an average text quality score of 61.23%. Coherence analysis indicates moderate knowledge reinforcement. Many of the unit's texts, including some of the decodables, share the Professions within a community, Community Helpers, and/or Public Institutions topics of the Communities domain. However, the other texts, like *The Stranger and the Soup*, do not support any topics within the Communities domain, indicating that these resources do not reinforce the knowledge build within this unit.

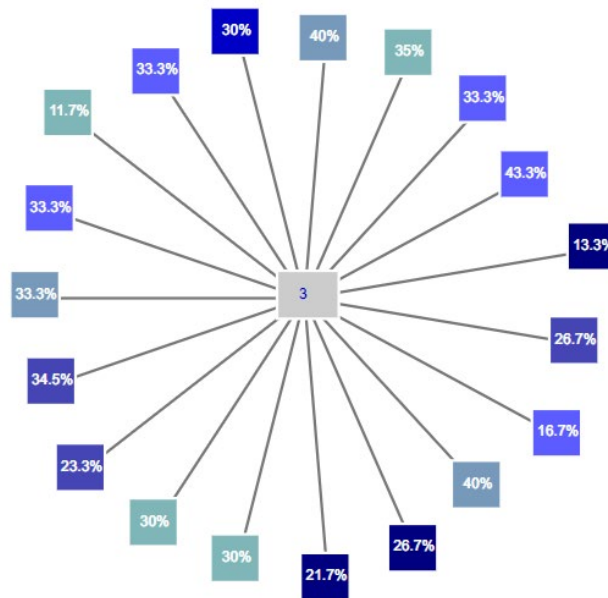


Figure 22. Coherence map of Grade 2, Unit 3. The average unit score for text quality is 61.23%.

## Grade 3

Grade 3 receives an overall quality score of 73.04%, placing it in the high-quality band. It is important to note that the decodables, which typically score low against the measured quality rubric, have been included in the coherency chart to determine how they support knowledge builds.

## Highest-Rated Unit

Unit 3 is the highest-quality unit at this grade level, with an average text quality score of 77.65%. Individual resources found within the unit are generally strong when measured against the Institute's rubric, indicating that students are accessing well-developed and well-written materials at this grade level. However, coherence analysis indicates weak knowledge reinforcement from text to text. The coherence scores ranging from 4.9% to 41% reflect the diverse coverage of topics within the American History domain for this unit. This suggests that though the individual texts are strong, additional care is needed to thematically link them.

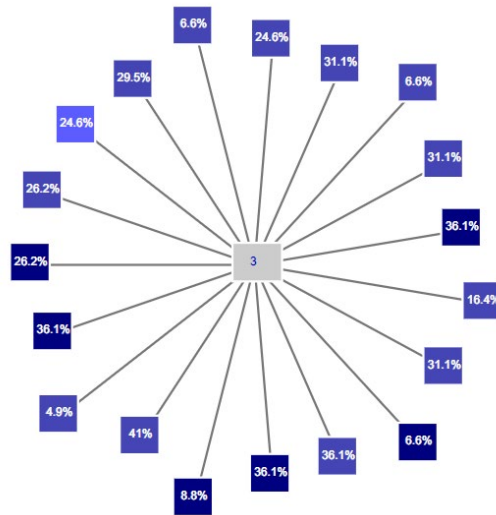


Figure 23. Coherence map of Grade 3, Unit 3. The average unit score for text quality is 77.65%.

## Lowest-Rated Unit

Unit 1 is the lowest-quality unit at this grade level, with an average text quality score of 70.31%. Despite being the grade level's lowest-quality unit, the overall quality score still falls within the Institute's range for high quality, speaking to the strong texts utilized within this grade. The Institute's coherence analysis reveals weak knowledge reinforcement within the unit. The unit's theme of respect is reflected in the tagging of texts under the Relationship Skills or Responsible Decision Making topics of the Social-Emotional domain. However, other texts, like *Language of Birds* and *Little Havana*, present different topics such as the World Cultures & Traditions topic of the Diversity, Equity, & Inclusion domain. For a unit this size, it may be worth evaluating the presence of lower-coherence resources to determine their role in instruction.

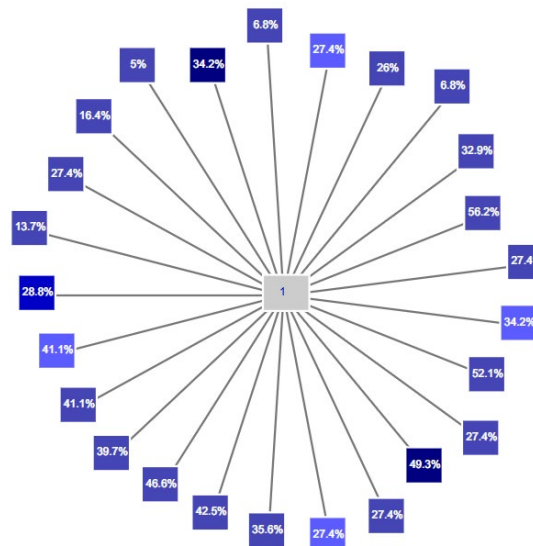


Figure 24. Coherence map of Grade 3, Unit 1. The average unit score for text quality is 70.31%.

## Grade 4

Grade 4 receives an overall quality score of 78.35%, placing it in the high-quality band.

### Highest-Rated Unit

Unit 3 is the highest-quality unit at this grade level, with an average text quality score of 84.55%. Coherence analysis indicates weak knowledge reinforcement within the unit. The texts are tagged with a wide range of topics under the American History domain. This suggests that partial topical connections are made throughout the unit; however, the inconsistency in these scores brings down the overall average.

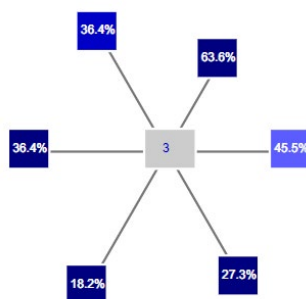


Figure 25. Coherence Map of Grade 4, Unit 3. The average unit score for text quality is 84.55%.

### Lowest-Rated Unit

Unit 1 is the lowest-quality unit at this grade level, with an average text quality score of 71.33%. As with grade 3, this lowest-quality unit score still falls within the Institute's range for high quality, revealing strong materials throughout this grade. The Institute's coherence analysis indicates moderate knowledge reinforcement within the unit. Many texts share the Change Makers topic in the World History domain, which supports the unit's theme. However, other texts, like Ava and Pip and Alice's Adventures in Wonderland, do not support this topic. While the texts found within these unit are strong in terms of quality, they differ considerably in their scope of coverage and their relation to each other.

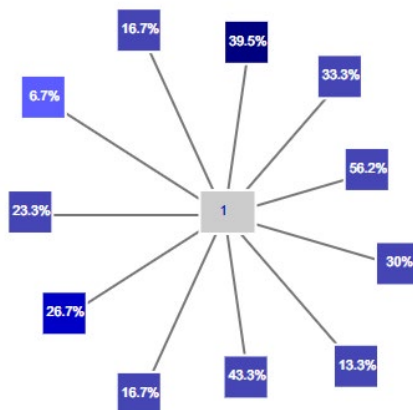


Figure 26. Coherence Map of Grade 4, Unit 1. The average unit score for text quality is 71.33%.



## Grade 5

Grade 5 receives an overall quality score of 84.25%, placing it in the high-quality band.

### Highest-Rated Unit

Unit 5 is the highest-quality unit at this grade level, with an average text quality score of 94.33%. This is the curriculum's highest-scoring unit, a direct result of the strong student-facing materials found here. The Institute's coherence analysis reveals weak-to-moderate knowledge reinforcement. Individual coherence scores range from 12.8% to 63.3%, reflecting the wide range of topics covered in the American History domain and suggesting that some texts connect more meaningfully to the unit's themes. This unit is exemplary in terms of quality but could be even better utilized with further attention to topical connections.

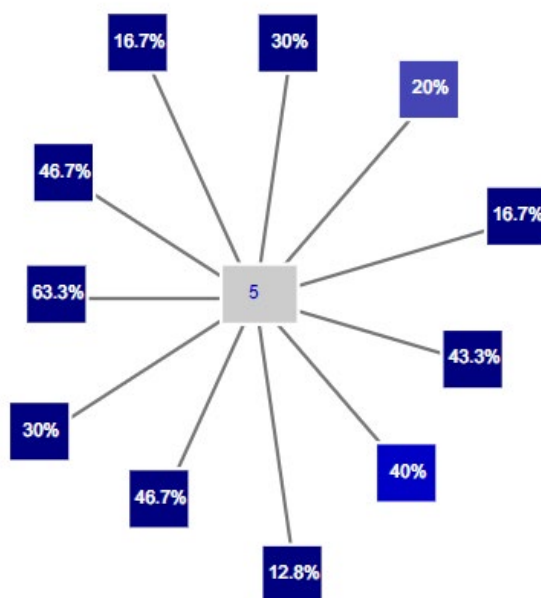


Figure 27. Coherence Map of Grade 5, Unit 5. The average unit score for text quality is 94.33%.

### Lowest-Rated Unit

Unit 2 is the lowest-quality unit at this grade level, with an average text quality score of 77.16%. Individual texts vary considerably in quality scores, and lower-quality materials should be further evaluated to determine their continued inclusion; however, the overall score still falls within the Institute's range for high quality. While 2 – 3 texts share the topic of Life & Living Things in the Science domain, another 2 – 3 texts share the Seasons, Weather, & Meteorology topic of the same domain. Another commonly shared topics include Land Use and Local Geography of the World Geography domain. These range of topics are illustrated in the large range in coherency scores and suggests weak knowledge reinforcement overall.

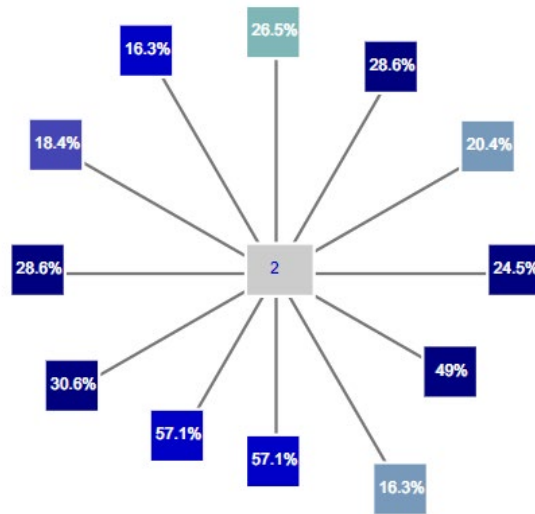


Figure 28. Coherence Map of Grade 5, Unit 2. The average unit score for text quality is 77.16%.

## OPEN COURT READING QUALITY ASSESSMENT

In summary, the Open Court curriculum varies in quality, with notable sequential improvements from grade to grade. Of the six grades evaluated, one (kindergarten) fell below the Institute’s range for acceptable quality; two fell within the acceptable range, and three fell within the high-quality range. As students’ progress through the curriculum, the overall quality scores within each grade level grow; this may be a result of increased sophistication in materials, but the poor-quality scores found at the kindergarten level should still be observed as an area for improvement.

The rightmost column in the table below demonstrates the percentage difference between each grade’s highest- and lowest-quality unit score. Generally, the Open Court curriculum presents low differences, revealing a consistency in quality across a grade’s units. Despite being the curriculum’s highest-quality grade, Grade 5 is also its least consistent, with a 17.17% difference in quality percentages. Grades K and 3 both present differences of under ten percent, revealing strong consistency from unit to unit.

Grade	Overall Quality Score	Unit High Score	Unit Low Score	Difference (High-Low)
K	53.72%	57.62%	47.94%	9.68%
1	61.02%	68.79%	55.14%	13.65%
2	68.51%	73.71%	61.23%	12.48%
3	73.04%	77.65%	70.31%	7.34%
4	78.35%	84.55%	71.33%	13.22%
5	84.25%	94.33%	77.16%	17.17%

Figure 29. Summary of unit quality scores in Grades K-5.

## LEARN MORE

This report is one of twelve ELA Knowledge Map™ reports released in Winter 2022 by the Johns Hopkins Institute for Education Policy. The release of these reports was accompanied by a Findings Summary, outlining the overarching themes across all ELA curricula analyzed. View the other ELA Knowledge Map™ reports and learn more about the importance of high-quality curriculum at [edpolicy.education.jhu.edu](https://edpolicy.education.jhu.edu).

### About the Institute

The [Johns Hopkins University Institute for Education Policy](https://edpolicy.education.jhu.edu) 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 Open Court Reading

[Open Court Reading](#) is a research-based comprehensive K–5 reading, writing, and language arts curriculum that aligns with what we know about how students learn to read. Using systematic, explicit instruction, Open Court Reading helps all students master the foundational skills needed not only to move to proficiency, but also to achieve greater goals of reading independently with confidence inside and outside the classroom.

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<sup>i</sup> Reid Smith et al., "[The Role of Background Knowledge in Reading Comprehension: A Critical Review](#)," *Reading Psychology* 42, no. 3 (April 3, 2021): 214–40). Sonia Q. Cabell and Hyejin Hwang, "Building Content Knowledge to Boost Comprehension in the Primary Grades," *Reading Research Quarterly* 55, no. S1 (2020): S99–107, <https://ila.onlinelibrary.wiley.com/doi/full/10.1002/rrq.338> and also Kathryn S. McCarthy and Danielle S. McNamara, "The Multidimensional Knowledge in Text Comprehension Framework," *Educational Psychologist* 56, no. 3 (July 3, 2021): 196–214, <https://doi.org/10.1080/00461520.2021.1872379>.

<sup>ii</sup> "Standards aligned" generally refers to the Common Core State Standards.



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