



The habit of reading closely begins with inspection of the text in order to develop a solid foundation in what it says—the literal meaning. It continues with investigation, as the reader analyzes the parts of the text to gain a sense of *how the text works*. But deep reading doesn't stop there. Skilled readers are able to consolidate. They see how the parts relate to the whole, and vice versa.

As humans, we interpret information in order to understand our world. We look at the sky, take note of the temperature, consider

the time of year, and make a decision about whether or not we'll need an umbrella. A choreographer interprets a musical composition, giving thought to the tone and tempo, the length of the piece, and the purpose of the musical message in order to create a dance. In both cases, interpretation requires understanding the details while at the same time weighing them against the whole. Much like putting a jigsaw puzzle together, interpretation requires simultaneously looking at the pieces while imagining the whole. (Try putting

a jigsaw puzzle together with the pieces turned upside down. It can be done, but it's much more difficult.)

In reading, inferencing is the ability to make meaning and arrive at conclusions using textual clues rather than explicitly stated information. There are several dimensions of inferencing as it applies to reading comprehension: lexical, predictive, and elaborative. Making lexical inferences requires the reader to make an informed judgment about the meaning of an ambiguous word using grammatical, contextual, and structural cues (e.g., determining whether the word read is a noun or verb, and whether it is past tense or present tense). Lexical inferencing is often addressed through discussion about vocabulary, which we described in detail in the previous chapter. Additionally, a reader uses her predictive inferencing skills to form a plausible hypothesis, such as whether a character reading Frankenstein might have trouble sleeping later that night. A third facet, elaborative inferencing, takes place when a reader fills in unstated information to provide more detail, such as imagining the way the character looked as she read a terrifying passage in Shelley's novel.

Skilled readers are able to consolidate. They see how the parts relate to the whole, and vice versa.

All of these inferences are cognitively demanding and are not automatic. In other words, they must be nurtured. In the last chapter we spotlighted the analytic reading needed to understand the organizational parts of a text. In this chapter, we discuss how readers synthesize and interpret the parts while considering the whole piece. This is an essential step on the way to deeply understanding a text.

Three Types of Inferencing

- Lexical: Making an informed judgment about the meaning of an ambiguous word, using grammatical, contextual, and structural cues
- Predictive: Forming a plausible hypothesis
- Elaborative: Filling in unstated information

An Invitation to Read Closely: Inferential-Level Questions

We ask students inferential questions in order to gauge their ability to draw upon information that isn't stated explicitly in the text. The texts older students read require them to marshal a great deal

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Inferences are cognitively demanding and are not automatic. In other words, they must be nurtured.

of background knowledge about topics and concepts. Think of what these texts present as a kind of shorthand—the writer assumes a certain level of knowledge that the reader possesses. Take a look at the textbooks you used at the beginning of your teacher preparation program. It's likely that those texts were written with much more in the way of explanations of terms and practices, examples, and embedded definitions than a book about teaching that you would choose to read now. Even more important, the instructional routines discussed, now fully integrated into your professional practice, were introduced in novice terms. These textbooks were useful at the very beginning of your teaching career, but now that you are a seasoned teacher, they may no longer provide you enough nuanced information for refining your skills today.

Texts written for students who are acquiring new knowledge usually have a relatively high degree of text cohesion. Cohesion is the way text is held together. Easier texts have a high degree of cohesion in that they make cause and effect relationships explicit (*Because it rained, Sue got wet*) and they make reference to ideas, events, or objects (*Sue got wet on her way to work in the city*). Those two phrases have a high degree of cohesion at the local level, because you know where Sue was headed (to the city), why she was headed there (to work), that she got wet, and that it happened because it was raining. But any other details may need to be inferred across a longer passage. What is Sue's work, and how does she feel about it? Did she get wet because she is careless, caught by surprise, or depressed?

Now let's make it more complex. Consider any of Aesop's fables as an example of a text that is less cohesive and therefore more difficult. The major passage in each fable tells a simple story, but to reach the moral of the story, a cognitive leap has to occur. For instance, the fable "The Ant and the Grasshopper" effectively portrays two contrasting work habits, relayed using familiar narrative structures. But the final sentence says that the moral of the story is that it is better to plan ahead. There are no explanatory sentences in between the end of the story and the sentence containing the moral. For young children, the lack of connectivity (cohesion) between the main part of the story and the abstract moral presents a challenge.

Inferencing is largely dependent on one's ability to develop a cohesive thread when the author does not explicitly furnish one. It requires the reader to use background knowledge in a measured way, without going too far astray from the text. There's a lot of mental discipline needed in order to form inferences that are useful and logical but not misleading. Not every inference is a good one.

Fourth grade teacher Matt Robinson saw this happen when his students used their background knowledge a bit too vigorously during a reading of a passage about the California gold rush in 1849. While the passage primarily discussed the fact that most of the money made during this period was by those who equipped, fed, and housed the miners, the students initially wanted to focus on a single sentence that an estimated \$750 million' worth of gold was discovered in a 20-year period. This information caught their attention, and when coupled with information they had read previously about a personal account of a group of early miners who struck it rich by extracting several million dollars' worth of gold in 1848, they wanted to conclude that the majority of miners were successful. The teacher used a number of prompts and cues to steer them back to the text, to no avail. "I'm hearing from many of you that you are very interested in the value of the gold," he said, "but let's look more closely. Is • that enough evidence to support your conclusion that lots of miners got rich?"

Mr. Robinson recognized that in this instance, their recently developed background knowledge about the success of one group of miners trumped their ability to make textual inferences that would help them identify the central meaning of the reading. His continued instruction, including modeling and thinking aloud, assisted them in properly using both their background knowledge and the information in the text to make the correct inference about the true beneficiaries of the Gold Rush, namely the merchants who supported the miners' endeavors.

Why Students Need This Type of Questioning

A stereotype about young children is that they think in simple and naïve ways. But all of us who are elementary educators know that our students are far more complex. They can be incredibly Inferencing is largely dependent on one's ability to develop a cohesive thread when the author does not explicitly furnish one. It requires the reader to use background knowledge in a measured way, without going too far astray from the text.



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insightful and breathtakingly wise. But when we lower our expectations about their ability to contribute to meaningful dialogue, they in turn lower their expectations about themselves. When we expect them to behave as silly beings, they oblige. We pigeonhole them at our own peril when we don't provide the forums they need to be profound; we deprive them of opportunities to experiment with ideas, to be wrong and survive the experience, to be intellectually resilient.

Using text-dependent questions that require students to synthesize and interpret information communicates to them your expectation about their cognitive capabilities. None of us intentionally pose questions to others that we don't believe they can answer. Questions that require a higher degree of cognition signal your respect for students' intellect. However, this phase of a close reading lesson serves another purpose, as it helps student build the habit of taking the time to comprehend before forming opinions. The tendency to skip over this step in order to form an uniformed opinion isn't confined to childhood. We as adults indulge in this far too often. Self-help gurus remind us to "seek first to understand, then to be understood" (Covey, 2004, p. 235). In terms of reading, Adler and Van Doren (1940/1972) call it "intellectual etiquette. . . . Do not say you agree [or] disagree . . . until you can say 'I understand'" (p. 164).

Text-dependent questions that focus on what a text means include those that cause readers to explore the author's purpose (stated or implied) and to examine them further for hidden or subversive intentions. In some cases, the writer's perspective on the topic provides insight into his or her motivation. For instance, the story in the picture book Encounter (Yolen, 1992) is told from the viewpoint of a Taino Indian boy on San Salvador meeting Christopher Columbus and his expedition. The author said that when she was invited to write the book, she initially thought it would be better coming from a Taino, but soon realized that the people and their culture had been wiped out. "So I said I would do it. The book was the only one

in that anniversary year to speak for the Taino people in a picture book edition. It still is" (http://janeyolen.com/works/encounter, ¶1). The author casts Columbus in a different light, emphasizing the high cost paid by the native cultures he and his fellow explorers encountered. For example, the narrator says, "I watched how the sky strangers touched our golden nose rings and our golden armbands but not the flesh of our faces or arms. I watched their chief smile. It was a serpent's smile—no lips and all teeth." By creating a counternarrative to the more familiar histories told about exploration, the author provides young readers and their teachers with an opportunity to examine other viewpoints and in the process gain a more nuanced understanding of the effects of European exploration on native peoples.

The meaning of a text extends to its connection to other works. The works of writers may take on an added dimension when readers consider the writer's biographical information, such as examining the life of aviator Antoine de Saint-Exupéry in order to more fully understand *The Little Prince* (1943/2000). An informational piece on the features of the moon's surface might be further contextualized with a passage about the lunar landings during the US space program. Text-dependent questions that draw on multiple sources require students to utilize critical thinking skills to make inferences within and across texts, and to consolidate ideas and concepts learned in one or more of the disciplines.



This phase of close reading helps students build the habit of taking time to comprehend before forming opinions.

How Examining What the Text Means Addresses the STANDARDS

Reading Standards

The verbs used in reading standard 7 say it all: explain, interpret, make connections, and analyze. As students solidify their understanding of what the text says and begin to grasp how the text works, they are poised to drill deeper to locate the underlying currents of the piece. Nonprint media provide an added dimension, as students are asked to apply their knowledge of multiple literacies to understand how the elements of light, sound, and motion contribute to the meaning of a literary or informational presentation. Standard 8 is about the use of reasoning in text and therefore applies only to informational pieces. In the early grades, this means identifying points that support the author's ideas, and in the later elementary grades involves the use of evidence and text structures to support an argument. Standard 9 expands textual knowledge by asking students to think across texts, topics, themes, and cultures. Taken together, standards 7 and 9 outline opportunities to utilize illustration, film, texts, and audio recordings to provide students with a means to compare and contrast how a story is variously interpreted. A chart detailing the reading standards related to text meaning can be found in Figure 4.1.

Students in Lisa Forehand's kindergarten class examined the book *No*, *David!* (Shannon, 1998b), particularly the illustrations accompanying the sparse text. Ms. Forehand asked students to describe the characteristics of David and to provide evidence for the descriptions, drawn primarily from the illustrations. Her students said that David was "naughty" and cited evidence that he sneaks cookies from the jar and drags mud into the house. On the other hand, they made a case that he had a "good imagination" by observing that he pretended to be a pirate in his bathtub and played with his food in imaginative ways. A photograph of Ms. Forehand's language chart appears in Figure 4.2. Language charts are a visual record, often of the class conversation, that students can refer to later.

Language Standards

As discussion plays such a key role in exploring what the text means, the opportunities to apply the conventions of the English language are plentiful (standard 1). In addition, discussion of the power of language should foster students' understanding of its functions in different contexts (standard 3) and its vocabulary (standard 6). The fourth grade expectation for standard 3 is an especially interesting one as it applies to meaning, as students make distinctions between conventions of spoken and written language.

Students in Rick Torres's class read and discussed *The Music of Dolphins* (Hesse, 1996) and the author's use of language structures to mirror the protagonist's development throughout the novel. Mila has been raised by dolphins but now has been captured and is being studied by scientists

Figure 4.1 ELA Reading Standards That Focus on What the Text Means

Standard (Grade)	Literary	Informational
7 (K)	With prompting and support, describe the relationship between illustrations and the story in which they appear (e.g., what moment in a story an illustration depicts).	With prompting and support, describe the relationship between illustrations and the text in which they appear (e.g., what person, place, thing, or idea in the text an illustration depicts).
7 (1)	Use illustrations and details in a story to describe its characters, setting, or events.	Use the illustrations and details in a text to describe its key ideas.
7 (2)	Use information gained from the illustrations and words in a print or digital text to demonstrate understanding of its characters, setting, or plot.	Explain how specific images (e.g., a diagram showing how a machine works) contribute to and clarify a text.
7 (3)	Explain how specific aspects of a text's illustrations contribute to what is conveyed by the words in a story (e.g., create mood, emphasize aspects of a character or setting).	Use information gained from illustrations (e.g., maps, photographs) and the words in a text to demonstrate understanding of the text (e.g., where, when, why, and how key events occur).
7 (4)	Make connections between the text of a story or drama and a visual or oral presentation of the text, identifying where each version reflects specific descriptions and directions in the text.	Interpret information presented visually, or a quantitatively (e.g., in charts, graphs, diagrams, time lines, animations, or interactive elements on Web pages) and explain how the information contributes to an understanding of the text in which it appears.
7 (5)	Analyze how visual and multimedia elements contribute to the meaning, tone, or beauty of a text (e.g., graphic novel, multimedia presentation of fiction, folktale, myth, poem).	Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently.
8 (K)	(Not applicable to literature)	With prompting and support, identify the reasons an author gives to support points in a text.
8 (1)	(Not applicable to literature)	Identify the reasons an author gives to support points in a text.
8 (2)	(Not applicable to literature)	Describe how reasons support specific points the author makes in a text.
8 (3)	(Not applicable to literature)	Describe the logical connection between particular sentences and paragraphs in a text (e.g., comparison, cause/effect, first/second/third in a sequence).
8 (4)	(Not applicable to literature)	Explain how an author uses reasons and evidence to support particular points in a text.

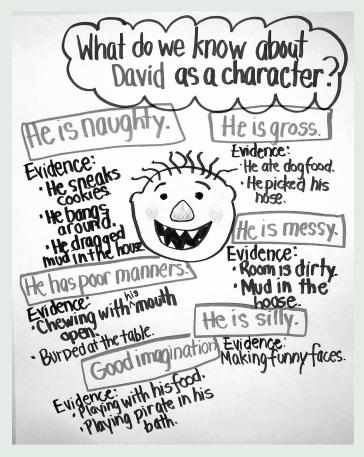
(Continued)

Figure 4.1 (Continued)

Standard (Grade)	Literary	Informational
8 (5)	(Not applicable to literature)	Explain how an author uses reasons and evidence to support particular points in a text, identifying which reasons and evidence support which point(s).
9 (K)	With prompting and support, compare and contrast the adventures and experiences of characters in familiar stories.	With prompting and support, identify basic similarities in and differences between two texts on the same topic (e.g., in illustrations, descriptions, or procedures).
9 (1)	Compare and contrast the adventures and experiences of characters in stories.	Identify basic similarities in and differences between two texts on the same topic (e.g., in illustrations, descriptions, or procedures).
9 (2)	Compare and contrast two or more versions of the same story (e.g., Cinderella stories) by different authors or from different cultures.	Compare and contrast the most important points presented by two texts on the same topic.
9 (3)	Compare and contrast the themes, settings, and plots of stories written by the same author about the same or similar characters (e.g., in books from a series).	Compare and contrast the most important points and key details presented in two texts on the same topic.
9 (4)	Compare and contrast the treatment of similar themes and topics (e.g., opposition of good and evil) and patterns of events (e.g., the quest) in stories, myths, and traditional literature from different cultures.	Integrate information from two texts on the same topic in order to write or speak about the subject knowledgeably.
9 (5)	Compare and contrast stories in the same genre (e.g., mysteries and adventure stories) on their approaches to similar themes and topics.	Integrate information from several texts on the same topic in order to write or speak about the subject knowledgeably.
10 (K)	Actively engage in group reading activities with pur	rpose and understanding.
10 (1)	With prompting and support, read prose and poetry of appropriate complexity for grade 1.	With prompting and support, read informational texts appropriately complex for grade 1.
10 (2)	By the end of the year, read and comprehend literature, including stories and poetry, in the grades 2–3 text complexity band proficiently, with scaffolding as needed at the high end of the range.	By the end of year, read and comprehend informational texts, including history/social studies, science, and technical texts, in the grades 2–3 text complexity band proficiently, with scaffolding as needed at the high end of the range.
10 (3)	By the end of the year, read and comprehend literature, including stories, dramas, and poetry, at the high end of the grades 2–3 text complexity band independently and proficiently.	By the end of the year, read and comprehend informational texts, including history/social studies, science, and technical texts, at the high end of the grades 2–3 text complexity band independently and proficiently.

Standard (Grade)	Literary	Informational
10 (4)	By the end of the year, read and comprehend literature, including stories, dramas, and poetry, in the grades 4–5 text complexity band proficiently, with scaffolding as needed at the high end of the range.	By the end of year, read and comprehend informational texts, including history/social studies, science, and technical texts, in the grades 4–5 text complexity band proficiently, with scaffolding as needed at the high end of the range.
10 (5)	By the end of the year, read and comprehend literature, including stories, dramas, and poetry, at the high end of the grades 4–5 text complexity band independently and proficiently.	By the end of the year, read and comprehend informational texts, including history/social studies, science, and technical texts, at the high end of the grades 4–5 text complexity band independently and proficiently.

Figure 4.2 Language Chart for No, David!



to learn about arrested development in humans. "My students notice right away that the main narrative is told in simple sentences, while Mila's thoughts, which are in italics, involve more complex language structures," he said. "In addition to the story, we talk about the gap between what Mila feels and what she can express in her speech. It makes for some great conversation about the meaning of the text and how we experience her inner conflict." A table displaying these targeted language standards can be found in Figure 4.3.

Speaking and Listening Standards

The standards are replete with opportunities for expanding speaking and listening skills through extended discussion, and **standards 1**, **4**, and **6** have been reviewed in previous chapters. But **standards 2** and **3** are of particular note in the context of determining text meaning. (Figure 4.4 lists the grade-specific speaking and listening standards.)

Standard 2 in speaking and listening aligns with reading **standard 7**'s emphasis on using diverse texts, media, and visual displays. To be clear, analysis of nonprint media is similar to analysis of print media (*What does the text say? How does the text work?*), but we have chosen to spotlight diverse formats in this chapter precisely because these often offer a path for further contextualizing content.

After a long winter that seemed to never end, spring finally came to the northwestern community where Jayla Lewis and her third grade students live. In preparation for the inevitable arrival of spring, Ms. Lewis video recorded adults at her school reciting the poem "After the Winter" by Claude McKay (www .poetryfoundation.org/poem/237358). On the first warm day, she played a video that included readings of the poem by the children's principal, school secretary, and custodian as well as some of their teachers and a parent. The students read the poem in print and discussed its meaning, especially in visualizing the "summer isle" the poet described, and located photographs that illustrated the poem. (We will explore this project in more detail in Chapter 5.)

Standard 3 in speaking and listening offers more direction on the role of logic and reasoning. In the same way that reading **standard 8** requires students to locate and analyze reasoning within a text, speaking and listening **standard 3** requires effective speakers and listeners to adhere to a logical progression in their discussions. While **standard 4** (discussed in previous chapters) reflects the demands on the speaker, **standard 3** asks students to use their listening skills to detect when and where these demands occur.

Hannah Johnstone's first grade science students are studying the patterns of animal parental behavior that help animal babies survive. They view a National Geographic Kids two-minute video several times. The video shows wood duck babies as they hatch and then take their first plunge into the water. The narrator describes their 15-foot jump from the nest as "the big ordeal." He then asks about the courage of baby ducks and states that if the ducks fail to jump, they will starve. Ms. Johnstone and her students list the visual and narrative information that supports the description of the big ordeal, the courageousness of the ducks, and the purpose of the mother duck's behavior.

Figure 4.3 Language Standards That Focus on What the Text Means

	onstrate nand of the and of the lard English mar and usage writing or king. Explain the function of conjunctions, prepositions, and interjections and interjections in general and their function in particular sentences. Form and use the perfect (e.g., I had walked; I had walked; I will have walked; verb tenses. Convey various times, sequences, states, and convey various times, states, and conditions. Recognize and correct inappropriate shifts in verb tense.
Grade 5	Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. a. Explain the function of conjunctions, prepositions, and interjections in general and their function in particular sentences. b. Form and use the perfect (e.g., I had walked; I had walked; I had walked; I have walked; I will have walked; I will have walked; I verb tenses. c. Use verb tense to convey various times, sequences, states, and conditions. d. Recognize and conditions. d. Recognize shifts in verb tense.
Grade 4	Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. a. Use relative pronouns (who, whose, whom, which, that) and relative adverbs (where, when, why). b. Form and use the progressive (e.g., I was walking; I will be awalliaries (e.g., can, may, must) to convey various convey various convertional patterns (e.g., a small red bag rather than a red small bag).
Grade 3	Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. a. Explain the function of nouns, pronouns, verbs, adjectives, and adverbs in particular sentences. b. Form and use regular and irregular plural nouns. c. Use abstract nouns. c. Use abstract houns e. Form and use regular and irregular verbs. e. Form and use the simple (e.g., childhood). d. Form and use regular and irregular verbs. f. Ensure subject-verb and pronoun- antecedent agreement.
Grade 2	Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. a. Use collective nouns (e.g., group). b. Form and use frequently occurring irregular plural nouns (e.g., feet, children, teeth, mice, fish). c. Use reflexive pronouns (e.g., myself, ourselves). d. Form and use the past tense of frequently occurring irregular verbs (e.g., sat, hid, told). e. Use adjectives and adverbs, and choose between them depending on what is to be modified.
Grade 1	Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. a. Print all upper- and lowercase letters. b. Use common, proper, and possessive nouns. c. Use singular and plural nouns with matching verbs in basic sentences (e.g., He hops; We hop). d. Use personal, possessive, and indefinite pronouns (e.g., I, me, my; they, them, their; anyone, everything). e. Use verbs to convey a sense of past, present, and future (e.g., Yesterday I walked home; Today I walk home; Tomorrow I will walk home).
Kindergarten	Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. a. Print many upper- and lowercase letters. b. Use frequently occurring nouns and verbs. c. Form regular plural nouns orally by adding /s/ or /es/ (e.g., dog, dogs; wish, wishes). d. Understand and use question words (interrogatives) (e.g., who, what, where, when, why, how). e. Use the most frequently occurring prepositions (e.g., to, from, in, out, on, off, in, out, on, off, in, out, on, off,
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Figure 4.3 (Continued)

Grade 5	e. Use correlative conjunctions (e.g., either/or, neither/nor).	Use knowledge of language and its conventions when writing, speaking, reading, or listening.
Grade 4	e. Form and use prepositional phrases. f. Produce complete sentences, recognizing and correcting inappropriate fragments and run-ons. g. Correctly use frequently confused words (e.g., to, too, two; there, their).	Use knowledge of language and its conventions when writing, speaking, reading, or listening.
Grade 3	g. Form and use comparative and superlative adjectives and adverbs, and choose between them depending on what is to be modified. h. Use coordinating and subordinating conjunctions. i. Produce simple, compound, and complex sentences.	Use knowledge of language and its conventions when writing, speaking, reading, or listening.
Grade 2	f. Produce, expand, and rearrange complete simple and compound sentences (e.g., The boy watched the movie; The little boy watched the action movie was watched by the little boy).	Use knowledge of language and its conventions when writing, speaking, reading, or listening.
Grade 1	f. Use frequently occurring adjectives. g. Use frequently occurring conjunctions (e.g., and, but, or, so, because). h. Use determiners (e.g., articles, demonstratives). i. Use frequently occurring prepositions (e.g., during, beyond, toward). j. Produce and expand complete simple and complete simple prompts.	(Begins in grade 2)
Kindergarten	f. Produce and expand complete sentences in shared language activities.	(Begins in grade 2)
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Grade 5	a. Expand, combine, and reduce sentences for meaning, reader/listener interest, and style. b. Compare and contrast the varieties of English (e.g., dialects, registers) used in stories, dramas, or poems.	Acquire and use accurately gradeappropriate general academic and domainspecific words and phrases, including those that signal contrast, addition, and other logical relationships (e.g., however, although, nevertheless, similarly, moreover, in addition).
Grade 4	a. Choose words and phrases to convey ideas precisely. b. Choose punctuation for effect. c. Differentiate between contexts that call for formal English (e.g., presenting ideas) and situations where informal discourse is appropriate (e.g., small-group discussion).	Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases, including those that signal precise actions, emotions, or states of being (e.g., quizzed, whined, stammered) and that are basic to a particular topic (e.g., wildlife, conservation, and endangered when discussing animal preservation).
Grade 3	a. Choose words and phrases for effect. b. Recognize and observe differences between the conventions of spoken and written standard English.	Acquire and use accurately gradeappropriate conversational, general academic, and domain specific words and phrases, including those that signal spatial and temporal relationships (e.g., After dinner that night we went looking for them).
Grade 2	a. Compare formal and informal uses of English.	Use words and phrases acquired through conversations, reading and being read to, and responding to texts, including using adjectives and adverbs to describe (e.g., When other kids are happy that makes me happy).
Grade 1		Use words and phrases acquired through conversations, reading and being read to, and responding to texts, including using frequently occurring conjunctions to signal simple relationships (e.g., because).
Kindergarten		Use words and phrases acquired through conversations, reading and being read to, and responding to texts.

Figure 4.4 Speaking and Listening Standards That Focus on What the Text Means

	Engage effectively in a range of collaborative discussions (one-one, in groups, and teacher-led) with diverse partners on grade 5 topics and texts, building on others' ideas and expressing their own clearly.	Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion.
Grade 5	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 5 topics and texts, building on others' ideas and expressing their owrdearly.	a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion. b. Follow agreed-upon rules for upon rul
Grade 4	Engage effectively in a range of collaborative discussions (one-onone, in groups, and teacher-led) with diverse partners on grade 4 topics and texts, building on others' ideas and expressing their own clearly.	a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion. b. Follow agreed-upon rules for in the stopic to explore ideas under discussion.
Grade 3	Engage effectively in a range of collaborative discussions (one-onone, in groups, and teacher-led) with diverse partners on grade 3 topics and texts, building on others' ideas and expressing their own clearly.	a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion. b. Follow agreed-upon rules for
Grade 2	Participate in collaborative conversations with diverse partners about grade 2 topics and texts with peers and adults in small and larger groups. a. Follow agreedupon rules for discussions	the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion). b. Build on others' talk in conversations by linking their comments to the remarks of others. c. Ask for clarification and further
Grade 1	Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups. a. Follow agreed-upon rules for	(e.g., listening to others with care, speaking one at a time about the topics and texts under discussion). b. Build on others' talk in conversations by responding to the comments of others through multiple exchanges. c. Ask questions to clear up
Kindergarten	Participate in collaborative conversations with diverse partners about kindergarten topics and texts with peers and adults in small and larger groups.	agreed-upon rules for discussions (e.g., listening to others and taking turns speaking about the topics and texts under discussion). b. Continue a conversation through multiple exchanges.
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	Kindergarten	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
				to others with care, speaking one at a time about the topics and texts under discussion). c. Ask questions to check understanding of information presented, stay on topic, and link their comments to the remarks of others. d. Explain their own ideas and understanding in light of the discussion.	to specific questions to clarify or follow up on information, and make comments that contribute to the discussion and link to the remarks of others. d. Review the key ideas expressed and explain their own ideas and understanding in light of the discussion.	to specific questions by making comments that contribute to the discussion and elaborate on the remarks of others. d. Review the key ideas expressed and draw conclusions in light of information and knowledge gained from the discussions.
N	Confirm understanding of a text read aloud or information presented orally or through other media by asking and answering questions about key details and requesting clarification if something is not understood.	Ask and answer questions about key details in a text read aloud or information presented orally or through other media.	Recount or describe key ideas or details from a text read aloud or information presented orally or through other media.	Determine the main ideas and supporting details of a text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.	Paraphrase portions of a text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.	Summarize a written text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.

Figure 4.4 (Continued)

Ask and answer Ask				
Ask and answer duestions about order to seek help, get and answer questions about order to seek help, get in order to clarify order to says in order to in order to clarify a speaker, offering information, or gather additional information, or derest and events and, with relevant events and, with details, expressing and expression ditional detail. Speak audibly and expression and	1	Summarize the points a speaker makes and explain how each claim is supported by reasons and evidence.	Report on a topic or text or present an opinion, sequencing ideas logically and using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.	Adapt speech to a variety of contexts and tasks, using formal English when appropriate to task and situation.
Ask and answer Ask and answer aguestions in order to seek what a speaker shelp, get shelp, get shelp, get shers to gather additional information, or clarify something something that is not understood. Describe familiar becep, places, places, things, and events and, with details, expressing prompting and express and feelings support, provide additional detail. Speak audibly Produce complete sentences when thoughts, and situation. Speak audibly Produce complete sentences when thoughts, and situation. The story or recount an events and, with details, expressing and relevant, and relevant, and relevant, and sentences when thoughts, and situation. The story or recount an events and feelings and relevant, appropriate facts and express and feelings and relevant, and relevant, and situation in order to provide requested detail or clarification.	7	Grade 4 Identify the reasons and evidence a speaker provides to support particular points.	Report on a topic or text, tell a story, or recount an experience in an organized manner, using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.	Differentiate between contexts that call for formal English (e.g., presenting ideas) and situations where informal discourse is appropriate (e.g., small-group discussion); use formal English when appropriate to task and situation.
Ask and answer duestions about order to seek help, get information, or darify something that is not clarify something that is not understood. Describe familiar becople, places, places, things, and events and, with prompting and events with relevant details, expressing prompting and express clearly. Speak audibly and express and express and express support, provide additional detail. Speak audibly sentences when thoughts, feelings, and and situation.		Ask and answer questions about information from a speaker, offering appropriate elaboration and detail.	Report on a topic or text, tell a story, or recount an experience with appropriate facts and relevant, descriptive details, speaking clearly at an understandable pace.	Speak in complete sentences when appropriate to task and situation in order to provide requested detail or clarification.
Ask and answer questions in order to seek help, get information, or clarify something that is not understood. Describe familiar people, places, things, and events and, with prompting and events and support, provide additional detail. Speak audibly and support, feelings, and ideas clearly.		Ask and answer questions about what a speaker says in order to clarify comprehension, gather additional information, or deepen understanding of a topic or issue.	Tell a story or recount an experience with appropriate facts and relevant, descriptive details, speaking audibly in coherent sentences.	Produce complete sentences when appropriate to task and situation in order to provide requested detail or clarification.
	7 - F O	Ask and answer questions about what a speaker says in order to gather additional information or clarify something that is not understood.	Describe people, places, things, and events with relevant details, expressing ideas and feelings clearly.	Produce complete sentences when appropriate to task and situation.
w 4		Kindergarten Ask and answer questions in order to seek help, get information, or clarify something that is not understood.	Describe familiar people, places, things, and events and, with prompting and support, provide additional detail.	Speak audibly and express thoughts, feelings, and ideas clearly.
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Using Text-Dependent Questions About What the Text Means

As noted in previous chapters, the text-dependent questions we develop in advance of a discussion can ensure that students' awareness of a text's meaning deepens over time. As we move beyond

questions about vocabulary and text structure and locating explicitly stated information, we transition students into a heavier reliance on inferences. They are further challenged to use evidence and reasoning in their discussions. Because of this, lessons about what the text means may take longer and will be punctuated by periods of silence as students think closely. You may discover that you're only posing a few of these questions, because it takes students longer to draw conclu-



We always view those moments when students stop talking to us and begin talking to one another as a sign of success.

sions. Our experience is that this phase of instruction results in longer student responses and more conversation across the room. We always view those moments when students stop talking to us and begin talking to one another as a sign of success.

Understanding a text more deeply allows students to make logical inferences from the text. Authors *imply* and readers *infer*. To infer, students must understand the author's purpose and how a given text relates to other texts. In the following sections, we focus on helping students figure out *what the text means* by attending to two main elements of texts:

- Author's purpose
- Intertextual connections

But inferencing doesn't end there. In Chapter 5, we focus our attention on students' use of the text to accomplish other tasks. It's in this fourth phase that logical inferences that include text evidence are realized.

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Lessons about what the text means may take longer and will be punctuated by periods of silence as students think closely.

Questions for Determining the Author's Purpose

Writers write for a host of reasons. Some of these reasons—to convey an experience, to inform or explain, and to argue a position—parallel the three major text types. When we pose text-dependent questions about the author's purpose, we don't purport to delve into the deep psychological motivations of the writer. But we do examine the text carefully for stated purposes and seek to contextualize the writing using what we know about the time and circumstances of its creation. It is helpful when the writer states, "The purpose of the study was to . . . ," because it makes the process more transparent. Statements such as this typically appear in scientific research articles but rarely appear outside of these documents. Instead, as is often the case in narrative texts, the reader usually has to dig around a bit more to glean this information. The author's purpose can often be inferred through examination of several features of the text. Below are three ways you can teach students to do this.

Consider Bias. Each writer shines a unique light on a topic, and with that comes a unique set of biases. Biases are not inherently negative; our attitudes, experiences, and perspectives are what make all of us interesting. In the case of some texts, the bias is inconsequential. For instance, an informational text explaining the lifecycle of a frog is probably not going to offer much at all in the way of bias. Alternatively, the informational text Plastic Ahoy! Investigating the Great Pacific Garbage Patch (Newman, 2014) has a strong author's bias about the damage humans are doing to the sea. The author's point of view is less important in a text like The Hunger Games (Collins, 2010), but it could influence understanding in a narrative text that is based on experiences an author has had, as is the case in Stuck in Neutral (Trueman, 2000), a text told from the perspective of an adolescent who has a significant disability and believes his father wants to kill him. In the latter case, the author notes that he wrote the book because of a lawsuit in Canada and his own experience as the parent of a child with a disability.

Identify the Format. A blog post cannot be understood solely for its content; it must also be understood through the platform, in this case, the Internet. That author's purpose is further contextualized

based on the hosting website. Does the post appear on the website of a respected organization or on one with a poor reputation? Printed text deserves the same inspection. Does it appear in a well-regarded magazine, or is it featured in a publication underwritten by a special interest group? Similarly, a poem must be analyzed in the format in which it was produced, which would differ from that of a short story or memoir.

Consider How the Author Wants the Reader to React. Every written and verbal communication contains the rhetoric of human thought. The Greek philosopher Aristotle described three modes of rhetoric as methods of persuasion:

- *Ethos* appeals to the credibility of the writer or speaker, including his or her likability, authority, and character.
- *Pathos* appeals to the emotions of the listener or reader.
- Logos appeals to formal reasoning and logic, including inductive and deductive reasoning, and the use of facts and statistics.

We do not ask elementary school students to consciously identify the use of these modes of persuasion in the texts they read. Instead, we focus on opinions: the opinions of the author and the opinions that can be drawn from the text itself. As students learn to analyze texts in this way, they begin to incorporate these modes in their own writing.

Questions for Determining the Author's Purpose in Kindergarten and First Grade

The students in Mr. Bradley's class had discussed a great deal about the text, *Winnie-the-Pooh* (Milne, 1926), but they had not discussed the purpose of the text. As students learn to read and discuss texts, they need to consider the various reasons that the text was written. Mr. Bradley wanted his students to learn that they read some texts to become informed about a topic, other texts to perform a task, and still other texts purely for enjoyment. To reinforce this, he directly asked his students why they thought authors wrote specific texts.

While reading Winnie-the-Pooh, Mr. Bradley asked his students, "Why do you suppose Mr. Milne wrote this? We didn't talk about this



A teacher checks in on groups discussing the question.

question in Chapter 1 because we wanted to get into the book a little more. Now we're ready. What was the author's purpose in writing this book? Was it to teach us something, like how to get bears out of holes? Or to help us with a task, like having company over? Or was it to entertain us?"

"It's just fun," Michael said. "It's a story for fun. But sometimes you can learn stuff from stories too."

Mr. Bradley responded, "I think you're right. There are things that we can

learn from stories. We call those life lessons, lessons that help you live a better life. Like when we read *Chrysanthemum* (Henkes, 1991) and agreed that every name for every person was wonderful. So that does happen, right? But the author's purpose for *Winnie-the-Pooh* is mainly to make us smile, to entertain us, right?"

Questions for Determining the

Author's Purpose in Second and Third Grades

The students had found evidence of tone in the character analyses of the ant and the boy in *Hey, Little Ant* (Hoose & Hoose, 1998) as they discussed author's craft, which made the transition to author's purpose seamless. *"So why would this father and daughter write this? What do they hope to accomplish?"* Ms. Perez asked them.

"That's easy," Joseph said, turning to his group. "To stop kids from killing all of the ants. I saw that on the playground. There was fifth graders smashing the ants over by the bars."

"Yeah, not to kill ants," Sabrina said. "And maybe not to hurt other animals."

Listening to the groups discuss the question, Ms. Perez realized that they had missed the deeper meaning of the text. Her students were focused on a fairly literal interpretation of the text and specifically of the author's purpose. She interrupted the groups, asking a new question.

"I wonder if the authors want their readers to take action on a grander scale. What if this isn't about ants and boys, really? What if they intended for you to learn a lesson? What lesson could that be? And make sure you discuss the evidence that leads your conclusions."

For several minutes the groups discussed the deeper meanings in the text. Slowly, they came to realize that the text was about peer pressure and bullying. As Juan said to his group, "So, now I think maybe it was about being a bully. Like, the boy could hurt the ant. But is that the right thing to do? Like we are supposed to think about is it right to hurt somebody because we're bigger than them? I think that is what Ms. Perez is thinking about."

"I think you're right," Sarah responded, "because the pictures make him look like a bully. But also, the friends want him to squish the ant. They're saying to do it. Like it says 'they all say I **should** squish you.' Like a fight when the other kids make it worse. They're just trying to make him do something that maybe he doesn't want to do."

In bringing the class back together, Ms. Perez asked, "How many of you are talking about bullying? I heard that in a lot of groups. [lots of hands go up] And what else? I heard groups talking about the friends and their role. The author had a purpose, and each page is important in our understanding. Marlon, what did your group say?"

"We kinda said that it was peer pressure, like we talked about at the assembly. You don't have to do something just because other people are doing it. Or because they tell you to do it. That's peer pressure. It can make you do something you don't really want to do."

Questions for Determining the Author's Purpose in Fourth and Fifth Grades

The students in Ms. Washington's class were very aware of the purpose for the Patrick Henry speech. They understood that the author intended to gain support for fighting with the British. They understood that the speech contained a lot of evidence to support his point and that he used a number of literary devices to convince his listeners that he was right. Now they were ready to tackle some deeper messages in the text. Ms. Washington started this deeper investigation of the text by asking them about a line that they had previously discussed.

"I'd like us to go back to a line in the text that we talked about before. It says, 'Is life so dear, or peace so weak, as to be purchased at the price of chains and slavery?' We know that he made reference to slavery earlier in the text. Why did Patrick Henry include the threat of slavery in his speech? What was the purpose, and how do you know?"

As the groups talked, they seemed to focus on the idea that slavery was feared, that the people in the room did not want to be treated like they had seen slaves being treated.

"So, maybe it's the worst thing he could think of as punishment that the British could do to the colonists. He even says that they are going to put them in chains," Marissa said.

"I totally agree," David added. "It's like he's saying, if we don't do something to try to win, then they can conquer us like they did to other people. That's what I think."

Questions for Making Intertextual Connections

Texts don't exist in isolation; they are better understood when compared and contrasted with other texts, including those that utilize other media platforms, such as audio recordings, film, and multimedia. In the case of diverse media applications, the target text may be better understood when images are used to augment description. This is often the case with texts that were written long ago and with stories that occur in unfamiliar settings. Fourth grade teacher Matt Robinson used film clips to provide his students with a visual vocabulary that supported their readings about historical events. "It's amazing how much it helps when I use a short clip from a documentary about a time in history," he said. "We're studying the Gold Rush right now, and the textbook has some great photographs for them to view. But I've discovered that a short, well-done reenactment gives them so much more," commented Mr. Robinson. "It helps them understand unique elements of the time, like the fact that most people walked or rode a horse to get from one place to another. [My students] see that people from long ago have much in common with themselves, like the need to move from one place to another, and that the rich usually have a better ride than the poor."

Intertextual connections are necessary in order for students to translate and integrate information. For instance, in social studies,

The target text may be better understood when images are used to augment description. This is often the case with texts that were written long ago and with stories that occur in unfamiliar settings.

students must discern the difference between primary and secondary source documents and recognize the benefits and drawbacks of each. The details and perspective of an eyewitness account can round out understanding of an event, such as the use of photographs from *Lincoln: A Photobiography* (Freedman, 1987). Of course, the photographs don't provide the context and details. Only a secondary source, such as their textbook or another informational piece, would be able to do so. Each is of value; both become more valuable when used together.

In science, students translate quantitative and visual data into words, and vice versa. Words and images that enable them to make these translations may be found inside of a single text, such as when a chart or diagram is used to represent a complex process. For example, an informational reading on the lifecycle of a butterfly is likely to contain a diagram that details the process. In addition, the diagram will likely indicate the names of each stage and the order in which the process occurs. The accompanying written text will contain more information about the details of the process and an explanation. The diagram and textual information are best understood in conjunction with one another, and each has its own demands. In the diagram, color features, the caption, directionality arrows, and a scale provide visual representations of information. Text-dependent questions about what the diagram means include those that ask students to interpret information and to describe the process. Questions that foster discussion about elaborative inferencing within scientific diagrams increase student comprehension in biology (Cromley et al., 2013).

A final dimension for intertextual connections involves the ways in which literary texts are performed across platforms. A common example of this exists in virtually every classroom: the practice of video viewing. Videos are widely available and provide students with visual information that is difficult to capture with words alone. In close reading, videos should be used later in the process, when students have a reasonably strong understanding of what the text says and what the text means. Other resources include audio recordings of speeches, and organizations such as the National Archives (www.archives.gov) and the Library of Congress (www.loc.gov) are invaluable for locating these and other multimedia materials.

Questions for Making Intertextual Connections in Kindergarten and First Grade

Mr. Bradley had read Chapter 2 from *Winnie-the-Pooh* to his students twice. They had a number of powerful conversations about the text that allowed them to practice their listening and thinking skills. But he also wanted them to practice comparing versions of texts, so he showed them a clip (2 minutes 32 seconds) from the movie *Mini Adventures of Winnie the Pooh* (https://www.youtube.com/watch?v=UDm3NlSSJyg). This Disney version contained the same essential plot and character elements but differed in a number of ways.

After they had finished watching the clip, Mr. Bradley said, "Let's compare the versions of this story. What was the same and what was different?"

The students started talking excitedly. Chase and Kiara, for example, focused on the beginning, saying, "Rabbit didn't pretend not to be home. He just went to visit his friend."

Michael and Hunter talked about the use of Pooh's backside. "Rabbit made a picture with his butt. Then he sneezed and it flew all over. The book said his feet was towels."

Brian and Angela noted that when Pooh got unstuck, he flew into the air and got stuck in a tree.

Bringing his students back together, Mr. Bradley said, "Let's make a chart to compare the things that were the same and the things that were different. I'll start. I noticed one thing that was the same. Winnie-the-Pooh was stuck in a hole. Who wants to share one?"

"I noticed one thing that was the same," Brittany said. "Winnie-the-Pooh was at Rabbit's house."

"I noticed one thing that was different," Christine said. "Christopher Robin did not read to him."

"I noticed one thing that was the same: Winnie-the-Pooh was eating honey," said Brian.

"I noticed one thing that was different," Zoe said. "Kangaroo came to visit."

Questions for Making Intertextual Connections in Second and Third Grades

Ms. Perez wanted her students to understand the impact of peer pressure, which was one of her primary goals in introducing her students to *Hey, Little Ant* (Hoose & Hoose, 1998). Following their discussion about the author's purpose, Ms. Perez read the text *A Bad Case of Stripes* (Shannon, 1998a). This story focuses on a girl who does not eat her lima beans, even though she loves them, because other kids at school don't like them.

Ms. Perez read the text aloud once and asked her students, "Please take turns retelling the text to your group. Try to tell the story in order." Following this short task, Ms. Perez said to her students, "Let's compare these two books. They both involve peer pressure, that's obvious. That's not my question. My question is how does each character respond to the peer pressure?"

Javier informed his group that there were big differences. "The boy in the ant book didn't respond at all. The author makes you decide. In the stripe book, the girl has to eat the beans to be normal again."

"So, it's easier to do something when you really have to, like the girl did," Sarah said. "It's harder when you have to decide for yourself."

Ms. Perez wanted to arm her students with some information about peer pressure, so the next day she invited them to read a short informational text from the Kid's HelpLine website (http://www.kidshelp.com.au/kids/information/hot-topics/peer-pressure.php). "Please take out your iPads and click on the link I saved for you. Take a few minutes to read over this text and then we'll come back together. You can also turn on the voice, if you want, and have it read aloud."

A few minutes later, she asked, "Now that you have read the article, I'd like you to talk about the type of peer pressure each of our characters experienced: spoken or unspoken?"

Listening in on her students, Ms. Perez noted that they fully grasped this information. They correctly noted that the boy experienced spoken pressure, and the girl experienced unspoken pressure. She then turned their attention to the actions of the characters, saying, "Take

a look again at the section called 'Standing up to peer pressure.' What did our characters do? And what advice could you give our characters based on this information?"

"The boy didn't really do any of these," Marlon said, "but I think he should know hisself. If you know what you believe, then it wouldn't matter if his friends wanted him to do something, like squash those ants."

"I think that the girl thought about the consequences and made a decision," Christine said, speaking up from another group. "But maybe she could also think ahead so that at lunch she could be ready if she was going to do something that wasn't so popular but was important to her."

Questions for Making Intertextual

Connections in Fourth and Fifth Grades

Ms. Washington wanted to make sure that her students understood the course of action following Patrick Henry's speech. Based on her experience teaching fifth graders about the American Revolution, she knew that a common misconception was that fighting with the British immediately took place following this historic oration.

The first source she asked her students to review was the resolution that was passed following Patrick Henry's speech (see Figure 4.5). Knowing that this text was very complex, Ms. Washington read it aloud to her students after they read it independently. She then asked, "I'm looking for the big idea here. What did the Virginia legislature decide to do?"

"I don't get the whole thing, but I think that they created an army," Mariah said. "I think militia is like the military. The words are practically the same, and they want to fight, so it makes sense."

"I agree with you," Jessie said, "because my dad says the word *militia* when he watches the news about wars in other places. And I think it was in our social studies book, when they made the army, right?"

Ms. Washington interrupted the groups, knowing that her students understood the action taken following Patrick Henry's speech. She wanted them to understand that the resolution did not have unanimous support and that it took some time before the war started

Figure 4.5 Resolutions of the Provincial Congress of Virginia; March 23, 1775

Resolved, that a well regulated militia composed of gentlemen and yeomen is the natural strength and only security of a free government; that such a militia in this colony would forever render it unnecessary for the mother country to keep among us, for the purpose of our defence, any standing army of mercenary forces, always subversive of the quiet, and dangerous to the liberties of the people, and would obviate the pretext of taxing us for their support.

That the establishment of such a militia is at this time peculiarly necessary, by the state of our laws for the protection and defence of the country some of which have already expired, and others will shortly do so; and that the known remissness of government in calling us together in a legislative capacity renders it too insecure in this time of danger and distress, to rely that opportunity will be given of renewing them in General Assembly or making any provision to secure our inestimable rights and liberties from those farther violations with which they are threatened.

Resolved therefore, that this colony be immediately put into a posture of defence: and that Patrick Henry, Richard Henry Lee, Robert Carter Nicholas, Benjamin Harrison, Lemuel Riddick, George Washington, Adam Stephen, Andrew Lewis, William Christian, Edmund Pendleton, Thomas Jefferson and Isaac Zane, Esquires, be a committee to prepare a plan for the embodying arming and disciplining such a number of men as may be sufficient for that purpose.

and even longer before the Declaration of Independence was drafted. She showed the clip (3 minutes 45 seconds) titled "Virginia's Response to Patrick Henry's Resolution" (http://classroomclips.org/video/842).

Following presentation of this second source, Ms. Washington asked her students, "How did various people respond to Patrick Henry's speech?" Her students talked with each other about the fact that not everyone supported the motion.

"I was surprised," Wendy said. "I thought that they would all vote for Patrick Henry after his speech. But there were lots of people who didn't want to fight with Britain."

"And it even said that it barely passed," Noah added. "Could you imagine if it didn't pass? It would be totally different now."

"The committee was interesting, because there were people on it that didn't agree," Kevin said. "I thought that they would only put people on the committee who voted yes. But that was probably a good idea, like it said, so that they could get more support before the war started."

Ms. Washington was pleased with her students' response and knew that they were gaining a better understanding of the context and history of the American Revolution. Before leaving this text, she said to her students, who were working in groups to learn more about an assigned colony:

Remember, this is only Virginia. There are other colonies. Only one group represents Virginia. You have to think about how the people in your colony might respond to this information. There were loyalists, free and enslaved African Americans, and patriots in each colony. And that's what we really need to think about. How is each colony going to react to this?

Before we end, I want to show you an image that Benjamin Franklin created (see Figure 4.6). Take a look at this.

This was the very first ever political cartoon, published in 1754, way before Patrick Henry gave his speech. In fact, this wasn't even about the British. It was Franklin's statement that the colonies were not united and that they couldn't reach agreement about wars with the French and Native Americans. But this image became very popular just before and during the American Revolution. Why do you think that is the case?

"Look, it's all cut up, like it can't get together," Shayne said. "That's what happened in the colonies before the American Revolution. They couldn't agree."

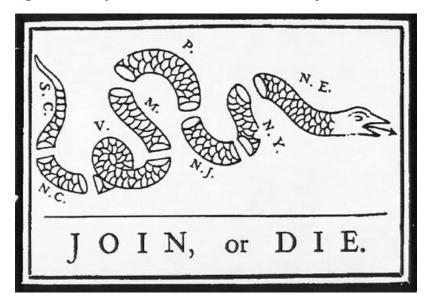


Figure 4.6 Benjamin Franklin's Political Cartoon, May 9, 1754

"I noticed that they are in order, from the north down, like on a map," Zoe added. "He drew them in the order of the colonies at that time. And Virginia has a twist, so maybe they were really confused or really important."

"I think he's saying if we don't get together, we will die," Marcus said. "If you cut up the snake like that, then it will die. That's what Patrick Henry was saying in his speech. That if they don't fight, they will become slaves to the British or that they will all be dead if they don't agree to do what the king says."

YOURSELF

This chapter has focused on questions that push students even deeper into their analysis of the text, specifically as they explore the role of inferences, author's purpose, and intertextual connections. These deep analyses of texts are possible when students know what the text says and how the text works.

Now we invite you to test yourself. In Figure 4.7 we have included an article about the 1854 London cholera epidemic that you can use to practice what you have learned in this chapter. Take a few minutes to read the text below. Then turn your attention to the questions that you can develop to encourage students to determine what the text means. Remember that this phase is focused on making inferences and specifically understanding author's purpose and intertextual connections. What is it that students should understand about this text? How might the data table on the page that follows, or the map that follows that, help them understand the text?

Before you begin, you might like to skim the italicized questions in the teachers' lessons, above. If you'd like to check yourself, the questions that Ms. Thayre developed can be found on Corwin's companion website at www.corwin.com/textdepen dentquestions. Next, apply this technique to develop questions for a short piece that you will use with your own students.

Figure 4.7 "Instances of the Communication of Cholera Through the Medium of Polluted Water in the Neighborhood of Broad Street, Golden Square" by John Snow

The most terrible outbreak of cholera which ever occurred in this kingdom, is probably that which took place in Broad Street, Golden Square, and the adjoining streets, a few weeks ago. Within two hundred and fifty yards of the spot where Cambridge Street joins Broad Street, there were upwards of five hundred fatal attacks of cholera in ten days. The mortality in this limited area probably equals any that was ever caused in this country, even by the plague; and it was much more sudden, as the greater number of cases terminated in a few hours. The mortality would undoubtedly have been much greater had it not been for the flight of the population. Persons in furnished lodgings left first, then other lodgers went away, leaving their furniture to be sent for when they could meet with a place to put it in. Many houses were closed altogether, owing to the death of the proprietors; and, in a great number of instances, the tradesmen who remained had sent away their families: so that in less than six days from the commencement of the outbreak, the most afflicted streets were deserted by more than three-quarters of their inhabitants.

There were a few cases of cholera in the neighborhood of Broad Street, Golden Square, in the latter part of August; and the so-called outbreak, which commenced in the night between the 31st August and the 1st September, was, as in all similar instances, only a violent increase of the malady. As soon as I became acquainted with the situation and extent of this irruption of cholera, I suspected some contamination of the water of the much-frequented street-pump in Broad Street, near the end of Cambridge Street; but on examining the water, on the evening of the 3rd September, I found so little impurity in it of an organic nature, that I hesitated to come to a conclusion. Further inquiry, however, showed me that there was no other circumstance or agent common to the circumscribed locality in which this sudden increase of cholera occurred, and not extending beyond it, except the water of the above mentioned pump. I found, moreover, that the water varied, during the next two days, in the amount of organic impurity, visible to the naked eye, on close inspection, in the form of small white, flocculent particles; and I concluded that, at the commencement of the outbreak, it might possibly have been still more impure. I requested permission, therefore, to take a list, at the General Register Office, of the deaths from cholera, registered during the week ending 2nd September, in the subdistricts of Golden Square, Berwick Street, and St. Ann's, Soho, which was kindly granted. Eighty-nine deaths from cholera were registered, during the week, in the three subdistricts. Of these, only six occurred in the four first days of the week; four occurred on Thursday, the 31st August; and the remaining seventy-nine on Friday and Saturday. I considered, therefore, that the outbreak

Figure 4.7 (Continued)

commenced on the Thursday; and I made inquiry, in detail, respecting the eighty-three deaths registered as having taken place during the last three days of the week.

On proceeding to the spot, I found that nearly all the deaths had taken place within a short distance of the pump. There were only ten deaths in houses situated decidedly nearer to another street pump. In five of these cases the families of the deceased persons informed me that they always sent to the pump in Broad Street, as they preferred the water to that of the pump which was nearer. In three other cases, the deceased were children who went to school near the pump in Broad Street. Two of them were known to drink the water; and the parents of the third think it probable that it did so. The other two deaths, beyond the district which this pump supplies, represent only the amount of mortality from cholera that was occurring before the irruption took place.

With regard to the deaths occurring in the locality belonging to the pump, there were sixty-one instances in which I was informed that the deceased persons used to drink the pump-water from Broad Street, either constantly, or occasionally. In six instances I could get no information, owing to the death or departure of everyone connected with the deceased individuals; and in six cases I was informed that the deceased persons did not drink the pump-water before their illness.

The result of the inquiry then was, that there had been no particular outbreak or increase of cholera, in this part of London, except among the persons who were in the habit of drinking the water of the above-mentioned pump-well.

I had an interview with the Board of Guardians of St. James's parish, on the evening of Thursday, 7th September, and represented the above circumstances to them. In consequence of what I said, the handle of the pump was removed on the following day.

Table 1 Grid Location of Deaths Due to Cholera in 1854 London, Plus Water Pumps and Brewery Locations

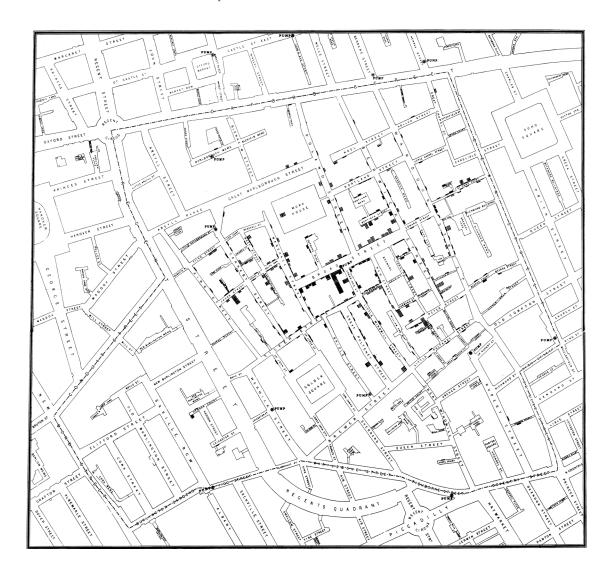
14/040						Deaths D	ue to Chol	Deaths Due to Cholera—Grid Locations	ocations			
Pump Locations	Brewery Location	#	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10
		-	L18	84	95	115	95	S14	P6	95	015	Μ8
		2	R14	P13	R11	011	T10	W14	Q14	011	W10	R11
T6	X13	ю	015	60	T14	014	P14	K15	016	N16	9 2	R11
D7	X14	4	M13	N16	P11	013	T10	R11	N13	R15	111	M15
P7	X15	2	011	67	R14	T14	Μ8	015	115	6 Z	6Μ	015
G11	Y13	9	L17	Q16	M16	U17	N16	116	017	119	X19	M17
P14	Y14	7	N16	S13	012	T18	P17	P11	M17	V17	U12	S15
Y14	Y15	œ	41M	012	L13	Z L	41N	R15	014	N13	S19	U14
116		6	R13	S14	012	41N	41N	M 1	P16	N16	R15	S13
Z18		10	41N	Q15	P13	012	M	M11	L17	L17	L18	116
120			016	022	60	T9	M8	G22	4T	19	6Μ	111
D21		12	N12	Q14	Q13	N17	K17	S13	L11	015	N13	X19
L26		13	N12	41N	41N	41M	R15	012	N13	N15	R16	M15
		14	U20	015	M12	P15	41M	015	S12	115	S12	L17
		15	014	80	M17	P8	P8	W 8	P6	Ь6	020	U20
		16	015	P17	119	M15	41N	R11	P11	015	013	L18
		17	P8	018	L17	R16	P16	M13	41N	P15	P12	022
		18	T9	R16	R14	M13	S15	K15	M16	Q12	R20	L21
		19	013	T15	014	K12	K12	P17	K15	R16	05	015
		20	023	Q13	K15	P 8	R14	R15	012	016	115	U20

(Continued)

Table 1 (Continued)

Water						Deaths D	Deaths Due to Cholera—Grid Locations	era—Grid L	ocations			
Pump Locations	Brewery Location	#	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10
		21	R15	112	R15	M17	R14	R13	012	N14	N14	016
		22	N17	L13	N16	N12	N13	N17	Ь6	6N	L17	016
		23	P11	K20	N14	41N	N12	R14	G19	U20	K14	L11
		24	M14	P11	M14	V17	015	H19	N15	N12	P23	K17
		22	P13	U20	M14	J16	W17	016	K14	K14	L18	R20
		26	L18	017	L13	L17	M15	020	N16	N12	M15	S19
		27	M 11	015	N14	015	N13	95	R15	M17	L18	80
		28	N13	N16	Q17	L13	M17	M11	111	015	8 W	M11
		29	L13	S19	8 2	M13	016	P15	F8	Ь6	F17	M13
		30	R8	9N	Q15	N16	L13	R16	R14	T21	020	
		31	P14	T21	L18	F3	W 8	R15	R11	Z 1	L18	
		32		M13	R20	80	P6	L8	T13	F-6	T13	
		33		N13	L18	T21	N23	Ь9	P11	M 1		
		34		N13	P6	6N	P13	P11	K9	U20		
		35		N13	S12	N13	M 1	013	N13			
		36		P14	P13	Z 1	M12	013	N16			
		37			F3	L11	013	P14	T21			
		38			013	021						
		39				G23						
		40				S14						
		Total	31	36	38	40	37	37	37	34	31	29

Exhibit 1 Map Showing the Location of Deaths From Cholera in Soho District of London and Location of Water Pump Sites



Source: Excerpt from On the Mode of Communication of Cholera by John Snow, MD. London: John Churchill, New Burlington Street, England, 1855 (pp. 38–55).

 $\label{prop:complex} \mbox{Available for download from } \mbox{\bf www.corwin.com/text dependent questions}$

Videos

To read a QR code, you must have a smartphone or tablet with a camera. We recommend that you download a QR code reader app that is made specifically for your phone or tablet brand.

Videos can also be accessed at

www.corwin.com/textdependentquestions



Video 4.1 Students in Lisa Forehand's kindergarten class discuss textual evidence to determine why the characters in *The Day the Crayons Quit* acted as they did.



Video 4.2 Alex Cabrera introduces his second grade class to a new example of supply and demand to relate to the text they previously read about cow farmers' milk prices.



Video 4.3 Students in Shawna Codrington's second grade class talk about the moral of *Lon Po Po* based on their annotations before comparing it to *Little Red Riding Hood*.



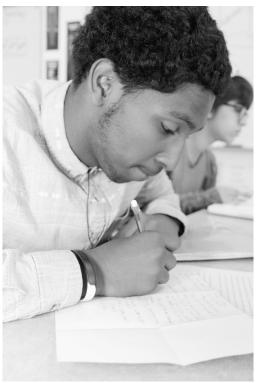
Video 4.4 Melissa Noble's fourth grade students share their opinions about character traits and textual themes by comparing two folktales.



The habit of reading closely begins with inspection of the text in order to develop a solid foundation in what it says—the literal meaning. It continues with investigation, as the reader analyzes the parts of the text to gain a sense of how the text works. But deep reading doesn't stop there. Skilled readers are able to consolidate. They see how the parts relate to the whole, and vice versa.

As humans, we interpret information in order to understand our world. We look at the sky, take note of the temperature, consider the time of year, and make a decision about whether or not we'll need an umbrella. A choreographer interprets a musical composition, giving thought to the tone and tempo, the length of the piece, and the purpose of the musical message in order to create a dance. In both cases, interpretation requires understanding the details while at the same time weighing them against the whole. Much like putting a jigsaw puzzle together, interpretation requires simultaneously looking at the pieces while imagining the whole. (Try putting a jigsaw puzzle together with the pieces turned upside down. It can be done, but it's much more difficult.)

In reading, *inferencing* is the ability to make meaning and arrive at conclusions using textual clues rather than explicitly stated information. There are several dimensions of inferencing as it applies to reading comprehension: lexical, predictive, and elaborative.



Inferences are cognitively demanding and are not automatic. In other words, they must be nurtured.

Making lexical inferences requires the reader to make an informed judgment about the meaning of an ambiguous word using grammatical, contextual, and structural cues (e.g., determining whether the word *read* is a noun or verb, and whether it is past tense or present tense). Lexical inferencing is often addressed through discussion about vocabulary, which we described in detail in the previous chapter. Additionally, a reader uses her predictive inferencing skills to form a plausible hypothesis, such as whether a character reading *Frankenstein* might have trouble sleeping later that night. A third facet, elaborative inferencing, takes place when a reader fills in unstated information to provide more detail, such as imagining the way the character looked as she read a terrifying passage in Shelley's novel.

All of these inferences are cognitively demanding and are not automatic. In other words, they must be nurtured. In the last chapter we spotlighted the analytic reading needed to understand the organizational parts of a text. In this chapter, we discuss how readers synthesize and interpret the parts while considering the whole piece. This is an essential step on the way to deeply understanding a text.

Three Types of Inferencing

- Lexical: Making an informed judgment about the meaning of an ambiguous word, using grammatical, contextual, and structural cues
- Predictive: Forming a plausible hypothesis
- Elaborative: Filling in unstated information

An Invitation to Read Closely: Inferential-Level Questions

We ask students inferential questions in order to gauge their ability to draw upon information that isn't stated explicitly in the text. The texts older students read require them to marshal a great deal of background knowledge about topics and concepts. Think of what these texts present as a kind of shorthand—the writer assumes that the reader possesses a certain level of knowledge. Take a look at the textbooks you used at the beginning of your teacher preparation program. It's likely that those texts were written with much more in the way of explanations of terms and practices, examples, and embedded definitions than a book about teaching that you would choose to read now. Even more important, the instructional routines discussed, now fully integrated into your professional practice, were introduced in novice terms. These textbooks were useful at the very beginning of your teaching career, but now that you are a seasoned teacher, they may no longer provide you enough nuanced information for refining your skills today.

Texts written for students who are acquiring new knowledge usually have a relatively high degree of text cohesion. Cohesion is the way text is held together. Easier texts have a high degree of cohesion in that they make cause and effect relationships explicit (*because it rained, Sue got wet*), and they make reference to ideas, events, or objects (*Sue got wet on her way to work in the city*). Those two phrases have a high degree of cohesion at the local level, because you know where Sue was headed (to the city), why she was headed there (to work), that she got wet, and that it happened because it was raining. But any other details may need to be inferred across a longer passage. What is Sue's work, and how does she feel about it? Did she get wet because she is careless, caught by surprise, or depressed?

Now let's make it more complex. Cohesion runs across paragraphs and passages, not just within them. Consider this paragraph from Chapter 6 of *Silent Spring* (Carson, 1962):

One of the most tragic examples of our unthinking bludgeoning of the landscape is to be seen in the sagebrush lands of the West, where a vast campaign is on to destroy the sage and to substitute grasslands. If ever an enterprise needed to be illuminated with a sense of history and meaning of the landscape, it is this. For here the natural landscape is eloquent of the interplay of forces that have created it. It is spread before us like the pages of an open book in which we can read why the land is what it is, and why we should preserve its integrity. But the pages lie unread. (p. 64)

There is less cohesion within the paragraph, especially because it refers to several concepts within a few sentences: it mentions geographical features (the West, sagebrush and grasslands), it states a claim (unthinking bludgeoning), and uses an analogy (comparing the land to the pages of a book). There is reference to we and our, but it isn't stated explicitly who that might involve. It has few connective words and phrases that would link sentence ideas together (e.g., because of, due to). In Silent Spring, the paragraph just before this one discussed vegetation as part of the web of life and named the weed killer business as having a negative impact on the environment. The paragraph following this one discusses the tectonic activity millions of years ago that resulted in the Rocky Mountain range. The writer expects the reader to be able to keep up as she shifts from one concept to another to formulate a complex thesis.

Inferencing is largely dependent on one's ability to develop a cohesive thread when the author does not explicitly furnish one. It requires the reader to use background knowledge in a measured way, without going too far astray of the text. There's a lot of mental discipline needed in order to form inferences that are useful and logical but not misleading. Not every inference is a good one.

Inferencing is largely dependent on one's ability to develop a cohesive thread when the author does not explicitly furnish one. It requires the reader to use background knowledge in a measured way, without going too far astray of the text.

Sixth grade social studies teacher Sandy Bradshaw saw this happen when her students used their background knowledge a bit too vigorously during a reading of a passage about participants in the ancient Olympic games. While the piece primarily discussed the fact that participants had to be not only athletic but also male and wealthy, her students initially wanted to focus on a single sentence that stated that females were barred as competitors and spectators. She used a number of prompts and cues to steer them back to the text, to no avail. "I noticed that we all got stuck on this idea that women couldn't participate. And that stands out to us, right, because we did all that work with Athens and Sparta, and we compared women's rights," she told them.

Ms. Bradshaw recognized that in this instance, their recently constructed background knowledge about the role of women in ancient Greece trumped their ability to make textual inferences that would help them identify the central meaning of the reading. Her continued instruction, including modeling and thinking aloud, assisted them in properly using both their background knowledge and the information in the text to make the correct inference about the roles of wealth, status, and gender as conditions for participation.

Why Students Need This Type of Questioning

A stereotype about adolescents is that they are quick to judge. As seen in the previous example, they latch on to an idea and run with it, whether it is accurate or not. In the worst cases, the trope is that adolescent judgment is superficial and lacks substance. Wander into a conversation in the restroom at school, or take a look at postings on social media, and it's easy to see why many believe that outward appearances and status are all that matter to teens. But all of us who are secondary educators know that our students are far more complex. They can be incredibly insightful and breathtakingly wise. But when we lower our expectations about their ability to contribute to meaningful dialogue, they in turn lower their expectations about themselves. When we expect them to behave as silly beings, they oblige. And then they retreat from us. We pigeonhole them at our own peril when we don't provide for them the forums they need to be profound: to experiment with ideas, to be wrong and survive the experience, to be intellectually resilient.

Text-dependent questions that require students to synthesize and interpret information communicate your expectation about their cognitive capabilities. None of us intentionally pose questions to others that we don't believe they can answer. Questions that require a higher degree of cognition signal your respect for their intellect. However, this phase of a close reading lesson serves another purpose, as it builds the habit of

This phase of a close reading lesson serves another purpose, as it builds the habit of taking the time to comprehend before making judgments or criticisms.

taking the time to comprehend before making judgments or criticisms. The tendency to skip over this step in order to make a judgment isn't confined to adolescence. We as adults indulge in this far too often. Self-help gurus remind us the "seek first to understand, then to be understood" (Covey, 2004, p. 235). In terms of reading, Adler and Van Doren (1972) call it "intellectual etiquette. . . . Do not say you agree [or] disagree . . . until you can say 'I understand'" (p. 164).

Text-dependent questions that focus on *what a text means* include those that cause readers to explore the *author's purpose* (stated or implied) and to examine them further for hidden or subversive intentions. In some cases, the writer's relationship to the topic provides insight into his or her motivation. For instance, an article written by a lobbyist for the pharmaceutical industry should be questioned if the topic is eliminating regulatory standards for prescription medications. In literary texts, the role of the narrator demands attention. Why is Holden Caulfield, the narrator of *The Catcher in the Rye* (Salinger, 1951) so cynical about the world? Is he a reliable narrator, or do we understand that his limited point of view is impinged upon by his age, experiences, tendency to lie, and confinement in a mental institution?

The meaning of a text extends to its connection to other works. The works of writers may take on an added dimension when readers

consider the writer's biographical information, such as examining both the life and the literary works of Maya Angelou to more fully understand I Know Why the Caged Bird Sings (1969). An informational piece on the construction of the Panama Canal may be more fully understood when contextualized with primary source documents from the presidential administration of Theodore Roosevelt and the malaria program headed by US Army medical director John W. Ross. Text-dependent questions that draw on mul-



tiple sources require students to utilize critical thinking skills to make inferences within and across texts, and to consolidate ideas and concepts learned in one or more of the disciplines.

Students examine multiple texts using their critical thinking skills before consolidating their ideas.

How Examining What the Text Means Addresses the STANDARDS

Reading Standards

The verbs used in reading **standard 7** say it all: *compare, contrast, evaluate, analyze*. As students solidify their understanding of *what the text says* and begin to grasp *how the text works*, they are poised to drill deeper to locate the underlying currents of the piece. Nonprint media provide an added dimension, as students are asked to apply their knowledge of multiple literacies to understand how light, sound, and motion offer nonlinguistic representational knowledge. Film studies, drama, and audio recordings provide students with a means to compare and contrast how a story is variously interpreted depending on the medium. **Standard 9** expands textual knowledge by asking students to think across texts, events, topics, themes, and time periods. A chart detailing the reading standards related to text meaning can be found in Figure 4.1.

Figure 4.1 ELA Reading Standards That Focus on What the Text Means

Standard (Grade)	Literary	Informational
7 (6)	Compare and contrast the experience of reading a story, drama, or poem to listening to or viewing an audio, video, or live version of the text, including contrasting what they "see" and "hear" when reading the text to what they perceive when they listen or watch.	Integrate information presented in different media or formats (e.g., visually, quantitatively) as well as in words to develop a coherent understanding of a topic or issue.
7 (7)	Compare and contrast a written story, drama, or poem to its audio, filmed, staged, or multimedia version, analyzing the effects of techniques unique to each medium (e.g., lighting, sound, color, or camera focus and angles in a film).	Compare and contrast a text to an audio, video, or multimedia version of the text, analyzing each medium's portrayal of the subject (e.g., how the delivery of a speech affects the impact of the words).
7 (8)	Analyze the extent to which a filmed or live production of a story or drama stays faithful to or departs from the text or script, evaluating the choices made by the director or actors.	Evaluate the advantages and disadvantages of using different mediums (e.g., print or digital text, video, multimedia) to present a particular topic or idea.
7 (9–10)	Analyze the representation of a subject or a key scene in two different artistic mediums, including what is emphasized or absent in each treatment (e.g., Auden's "Musée des Beaux Arts" and Breughel's Landscape with the Fall of Icarus).	Analyze various accounts of a subject told in different mediums (e.g., a person's life story in both print and multimedia), determining which details are emphasized in each account.
7 (11–12)	Analyze multiple interpretations of a story, drama, or poem (e.g., recorded or live production of a play or recorded novel or poetry), evaluating how each version interprets the source text. (Include at least one play by Shakespeare and one play by an American dramatist.)	Integrate and evaluate multiple sources of information presented in different media or formats (e.g., visually, quantitatively) as well as in words in order to address a question or solve a problem.

Standard (Grade)	Literary	Informational
(Grade) Literary Compare and contrast texts in different forms or genres (e.g., stories and poems; historical novels and fantasy stories) in terms of their approaches to similar themes and topics. Compare written by written by the same period as a means of understanding information.		Compare and contrast one author's presentation of events with that of another (e.g., a memoir written by and a biography on the same person).
	time, place, or character and a historical account	Analyze how two or more authors writing about the same topic shape their presentations of key information by emphasizing different evidence or advancing different interpretations of facts.
9 (8)	Analyze how a modern work of fiction draws on themes, patterns of events, or character types from myths, traditional stories, or religious works such as the Bible, including describing how the material is rendered new.	Analyze a case in which two or more texts provide conflicting information on the same topic and identify where the texts disagree on matters of fact or interpretation.
9 (9–10)	Analyze how an author draws on and transforms source material in a specific work (e.g., how Shakespeare treats a theme or topic from Ovid or the Bible or how a later author draws on a play by Shakespeare).	Analyze seminal U.S. documents of historical and literary significance (e.g., Washington's Farewell Address, the Gettysburg Address, Roosevelt's Four Freedoms speech, King's "Letter from Birmingham Jail"), including how they address related themes and concepts.
9 (11–12)	Demonstrate knowledge of eighteenth-, nineteenth- and early-twentieth-century foundational works of American literature, including how two or more texts from the same period treat similar themes or topics.	Analyze seventeenth-, eighteenth-, and nineteenth-century foundational U.S. documents of historical and literary significance (including The Declaration of Independence, the Preamble to the Constitution, the Bill of Rights, and Lincoln's Second Inaugural Address) for their themes, purposes, and rhetorical features.
10 (6)	By the end of the year, read and comprehend literature, including stories, dramas, and poems, in the grades 6–8 text complexity band proficiently, with scaffolding as needed at the high end of the range.	By the end of the year, read and comprehend literary nonfiction in the grades 6–8 text complexity band proficiently, with scaffolding as needed at the high end of the range.
10 (7)	By the end of the year, read and comprehend literature, including stories, dramas, and poems, in the grades 6–8 text complexity band proficiently, with scaffolding as needed at the high end of the range.	By the end of the year, read and comprehend literary nonfiction in the grades 6–8 text complexity band proficiently, with scaffolding as needed at the high end of the range.
10 (8)	By the end of the year, read and comprehend literature, including stories, dramas, and poems, at the high end of grades 6–8 text complexity band independently and proficiently.	By the end of the year, read and comprehend literary nonfiction at the high end of the grades 6–8 text complexity band independently and proficiently.
10 (9–10)	By the end of grade 9, read and comprehend literature, including stories, dramas, and poems, in the grades 9–10 text complexity band proficiently, with scaffolding as needed at the high end of the range.	By the end of grade 9, read and comprehend literary nonfiction in the grades 9–10 text complexity band proficiently, with scaffolding as needed at the high end of the range.

Figure 4.1 (Continued)

Standard (Grade)	Literary	Informational
	By the end of grade 10, read and comprehend literature, including stories, dramas, and poems, at the high end of the grades 9–10 text complexity band independently and proficiently.	By the end of grade 10, read and comprehend literary nonfiction at the high end of the grades 9–10 text complexity band independently and proficiently.
10 (11–12)	By the end of grade 11, read and comprehend literature, including stories, dramas, and poems, in the grades 11–CCR text complexity band proficiently, with scaffolding as needed at the high end of the range. By the end of grade 12, read and comprehend literature, including stories, dramas, and poems, at the high end of the grades 11–CCR text complexity band independently and proficiently.	By the end of grade 11, read and comprehend literary nonfiction in the grades 11–CCR text complexity band proficiently, with scaffolding as needed at the high end of the range. By the end of grade 12, read and comprehend literary nonfiction at the high end of the grades 11–CCR text complexity band independently and proficiently.

Students in Lily Antrim's ninth grade humanities class analyzed the portrayal of beauty and fitness in the media. They read articles about the practice of retouching the photographs of models and viewed Seventeen magazine's no-Photoshop pledge, as well as articles alternately in support of or criticizing the policy. "This is part of our study of the use of persuasive techniques in advertising," said Ms. Antrim. "They're looking at examples of how manipulation of visual images influences our perceptions." Her students must read and view across documents and videos in order to draw conclusions.

Literacy standard 7 performs a similar function in history, social sciences, and the technical subjects. In standard 9, regarding multiple texts, some discipline-related differences emerge. Middle school history students compare and contrast primary and secondary source texts, while in science they examine how experiments and demonstrations augment textual readings. The grade-specific standards can be found in Figure 4.2. Students compare and contrast informational displays of data to understand concepts; an example would be discussing technical diagrams and accompanying text explaining how Bernoulli's principle explains how air flows over and under an airplane wing so it can fly.

Martin Robbins, a seventh grade science teacher, used digital resources from the National Drought Mitigation Center at the University of Nebraska–Lincoln (http://drought.unl.edu) so his students could research drought conditions in regions throughout the United States. "The data visualizations are excellent," said Mr. Robbins. "They have maps to report ground water storage and climographs [monthly average temperatures and precipitation] as well as state plans for drought planning." His students used information from these and other maps to draw conclusions about the relationship between drought status and state policies. "They have to move between several data sources, and they're learning that there's a difference between being prepared for a drought and waiting for a drought to occur before there's a response," said the science teacher. "So when they read the state websites, they have to consider

Figure 4.2 History, Science, and Technical Subjects Reading Standards
That Focus on What the Text Means

Standard (Grade band)	History/Social Studies	Sciences and Technical Subjects
7 (6–8)	Integrate visual information (e.g., in charts, graphs, photographs, videos, or maps) with other information in print and digital texts.	Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table).
7 (9–10)	Integrate quantitative or technical analysis (e.g., charts, research data) with qualitative analysis in print or digital text.	Translate quantitative or technical information expressed in words in a text into visual form (e.g., a table or chart) and translate information expressed visually or mathematically (e.g., in an equation) into words.
7 (11–12)	Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, as well as in words) in order to address a question or solve a problem.	Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem.
9 (6–8)	Analyze the relationship between a primary and secondary source on the same topic.	Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic.
9 (9–10)	Compare and contrast treatments of the same topic in several primary and secondary sources.	Compare and contrast findings presented in a text to those from other sources (including their own experiments), noting when the findings support or contradict previous explanations or accounts.
9 (11–12)	Integrate information from diverse sources, both primary and secondary, into a coherent understanding of an idea or event, noting discrepancies among sources.	Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible.
10 (6–8)	By the end of grade 8, read and comprehend history/social studies texts in the grades 6–8 text complexity band independently and proficiently.	By the end of grade 8, read and comprehend science/technical texts in the grades 6–8 text complexity band independently and proficiently.
10 (9–10)	By the end of grade 10, read and comprehend history/social studies texts in the grades 9–10 text complexity band independently and proficiently.	By the end of grade 10, read and comprehend science/technical texts in the grades 9–10 text complexity band independently and proficiently.
10 (11–12)	By the end of grade 12, read and comprehend history/social studies texts in the grades 11–CCR text complexity band independently and proficiently.	By the end of grade 12, read and comprehend science/technical texts in the grades 11–CCR text complexity band independently and proficiently.

the state's drought status as well. The kids are surprised to find out that some states are showing clear signs that a drought is going on yet don't have much of a plan in place at all," said Mr. Robbins. "This is really developing their ability to recognize patterns and spot trends using scientific data."

There's quite a bit of inferencing that must occur in Mr. Robbins's class if his students are to be successful. They must engage in predictive inferencing based on the information they are collecting. For instance, given data sets that suggest a state is in the early stages of a drought, their predictive inferencing should cause them to expect that the state would have some plan developing or enacted. This kind of predictive inferencing parallels the inductive reasoning used within the scientific method, especially in gathering observational data and analyzing them in order to draw a conclusion.

Language Standards

As discussion plays such a key role in exploring what the text means, the opportunities to apply the conventions of the English language are plentiful (standard 1). In addition, discussion of the power of language should foster students' understanding of its functions in different contexts (standard 3) and its vocabulary (standard 3). The grades 11–12 expression of standard 1 is especially intriguing, as students wrestle with the application of language and its variants. In the language of historical study, it calls for an examination of the use of loaded language in political thought, and parallels the rhetorical modes of ethos and pathos by considering the writer's credibility and use of emotional terms to influence perceptions. Students in Beth Hilliard's government class confronted just such an issue in their discussion about the use of the terms freedom fighter, terrorist, and guerrilla in several news reports about a conflict. "It really ended up being a great discussion about the use of these words and how they situate the writer's viewpoint," she said. She asked her students to examine the news accounts more closely to determine why each of these words would have been selected by the writer. "They eventually agreed that who was being attacked mattered. Was it civilians or military? That was a determinant for deciding whether a group should be described as terrorists or not. But they also said that identifying the difference between freedom fighter and guerrilla was harder, as this distinction was more of an indicator of the writer's political stance," she said. A table displaying these targeted language standards can be found in Figure 4.3.

Speaking and Listening Standards

The standards are replete with opportunities for expanding speaking and listening skills through extended discussion, and **standards 1**, **4**, and **6** have been reviewed in previous chapters. But **standards 2** and **3** are of particular note in the context of determining text meaning. (Figure 4.4 on page 110 lists the grade-specific speaking and listening standards.)

Standard 2 in speaking and listening aligns with reading **standard 7**'s emphasis on using diverse texts, media, and visual displays. To be clear, analysis of nonprint media is similar to analysis of print media (*What does the text say? How does the text work?*), but we have chosen to spotlight diverse

Figure 4.3 Language Standards That Focus on What the Text Means

Grades 11–12		a. Apply the understanding that usage is a matter of convention, can change over time, and is sometimes contested. b. Resolve issues of complex or contested usage, consulting references (e.g., Merriam-Webster's Dictionary of English Usage, Garner's Modern American Usage) as needed.
Grades 9-10		a. Use parallel structure. b. Use various types of phrases (noun, verb, adjectival, adverbial, participial, prepositional, absolute) and clauses (independent, dependent; noun, relative, adverbial) to convey specific meanings and add variety and interest to writing or presentations.
Grade 8	Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.	a. Explain the Tunction of verbals (gerunds, participles, infinitives) in general and their function in particular sentences. b. Form and use verbs in the active and passive voice. c. Form and use verbs in the indicative, imperative, interrogative, conditional, and subjunctive mood. d. Recognize and correct inappropriate shifts in verb voice and mood.
Grade 7	Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.	a. Explain the Tunction of phrases and clauses in general and their function in specific sentences. b. Choose among simple, compound, complex, and compound-complex sentences to signal differing relationships among ideas. c. Place phrases and clauses within a sentence, recognizing and correcting misplaced and dangling modifiers.
Grade 6	Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.	a. Ensure that pronouns are in the proporare are in the proper case (subjective, objective, objective, possessive). b. Use intensive pronouns (e.g., myself, ourselves). c. Recognize and correct inappropriate shifts in pronoun number and person. d. Recognize and correct vague pronouns (i.e., ones with unclear or ambiguous antecedents). e. Recognize variations from standard English in their own and others' writing and speaking, and identify and use strategies to improve expression in conventional language.
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(Continued)

Figure 4.3 (Continued)

ט	Grade 6	Grade 7	Grade 8	Grades 9–10	Grades 11–12
U se cor vari	Use knowledge of language and its conventions when writing, speaking, reading, or listening. a. Vary sentence patterns for meaning, reader/listener interest, and style. b. Maintain consistency in style and tone.	Use knowledge of language and its conventions when writing, speaking, reading, or listening. a. Choose language that expresses ideas precisely and concisely, recognizing and eliminating wordiness and redundancy.	Use knowledge of language and its conventions when writing, speaking, reading, or listening. a. Use verbs in the active and passive voice and in the conditional and subjunctive mood to achieve particular effects (e.g., emphasizing the actor or the action; expressing uncertainty or describing a state contrary to fact).	Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening.	Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening.
Acc aca gat a w exp	Acquire and use accurately grade-appropriate ge academic and domain specific words and phrases gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.	Acquire and use accurately grade-appropriate general academic and domain specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.	Acquire and use accurately phrases, sufficient for readir and career readiness level; knowledge when considerin expression.	Acquire and use accurately general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.	n-specific words and ening at the college i gathering vocabulary t to comprehension or

formats in this chapter precisely because these often offer a path for further contextualizing content. Take poetry, for example. While it lives on a page, it comes alive through spoken word. We often use audio recordings of poets reciting their poems to better understand the meaning. A favorite of ours is Carl Sandburg's 1944 performance of "Grass," a poem originally written during World War I (Paschen & Mosby, 2001). In his reading, he includes Stalingrad in his list of battlefields dating back to Gettysburg. Students are initially startled as they hear him deviate from the original printed poem in their hands. The text-dependent question that follows is obvious: "Why would Sandburg add that place?" The discussion that follows moves from figuring out where Stalingrad (now Volgograd) is to understanding that each battlefield selected by the poet marked a turning point in a war, but with catastrophic loss of human life.

As the discussion deepens, students gain an understanding of the deeper meaning of Sandburg's message. The more obvious one is that we soon forget the cost of war, as battlefields are transformed into peaceful military cemeteries. The poet's addition in the spoken version adds another layer of meaning, as students gain a keener sense that Sandburg's purpose was also to comment on the inevitability of war. Their discussion moves to an analysis of Sandburg himself, who at the time of the audio recording had already won the first of three Pulitzer Prizes, thus relying on the ethos of credibility and authority as an award-winning poet.

Standard 3 in speaking and listening offers more direction on the role of logic and reasoning. In the same way that reading standard 8 requires students to locate and analyze reasoning within a text, speaking and listening standard 3 requires effective speakers and listeners to adhere to a logical progression in their discussions. These include backing claims by furnishing credible evidence and appealing to the emotions of others when it is suitable. Standard 4 (discussed in previous chapters) reflects the demands on the speaker, but standard 3 asks them to use their listening skills to detect when and where these occur.

Students in Jeff Tsei's eighth grade science class viewed several short videos demonstrating principles of wave energy. They viewed several explaining why the Tacoma Narrows Bridge (often called "Galloping Gertie") collapsed in 1940 due to design flaws that led to oscillations that caused it to bounce and twist wildly before eventually crumbling. Mr. Tsei paused after each video and then asked students to view it again, this time considering the sequence of information and the scientific rationale. Students worked together to detail the information given in each video and identify facts that might have been excluded.

"So one problem is that there's only one video that says they knew it was a problem on the day it opened," said Misael.

Another member of his group, Ellie, said, "In one of the videos, they didn't talk at all about the wind. But in another, the narrator said it was a factor. It seems to me like the wind information should be part of all the videos; they should not just be film clips of the bridge moving." In this case, these students are applying their elaborative inferencing skills to identify what information is missing.

Figure 4.4 Speaking and Listening Standards That Focus on What the Text Means

		Grade 6	Grade 7	Grade 8	Grades 9-10	Grades 11–12
, -	_	Engage effectively in a	Engage effectively in a	Engage effectively in a	Initiate and participate	Initiate and participate
		range of collaborative	range of collaborative	range of collaborative	effectively in a range of	effectively in a range of
		discussions (one-on-	discussions (one-on-	discussions (one-on-	collaborative discussions	collaborative discussions
		one, in groups, and	one, in groups, and	one, in groups, and	(one-on-one, in groups, and	(one-on-one, in groups, and
		teacher-led) with	teacher-led) with	teacher-led) with	teacher-led) with diverse	teacher-led) with diverse
		diverse partners on	diverse partners on	diverse partners on	partners on grades 9–10	partners on grades 11–12
		arade 6 topics, texts.	arade 7 topics, texts.	arade 8 topics, texts.	topics, texts, and issues.	topics, texts, and issues.
		and issues, building	and issues, building	and issues, building	building on others' ideas	building on others' ideas
		on others' ideas and	on others' ideas and	on others' ideas and	and expressing their own	and expressing their own
		expressing their own	expressing their own	expressing their own	clearly and persuasively.	clearly and persuasively.
		clearly.	clearly.	clearly.	a. Come to discussions	a. Come to discussions
		a. Come to	a. Come to	a. Come to	prepared, having	prepared, having
		discussions	discussions	discussions	read and researched	read and researched
		prepared, having	prepared,	prepared, having	material under study;	material under study;
		read or studied	having read	read or researched	explicitly draw on	explicitly draw on that
		required material;	or researched	material under	that preparation by	preparation by referring
		explicitly draw on	material under	study; explicitly	referring to evidence	to evidence from texts
		that preparation	study; explicitly	draw on that	from texts and other	and other research on
		by referring to	draw on that	preparation	research on the topic	the topic or issue to
		evidence on the	preparation	by referring to	or issue to stimulate	stimulate a thoughtful,
		topic, text, or	by referring to	evidence on the	a thoughtful, well-	well-reasoned exchange
		issue to probe	evidence on the	topic, text, or	reasoned exchange of	of ideas.
		and reflect on	topic, text, or	issue to probe and	ideas.	b. Work with peers
		ideas under	issue to probe and	reflect on ideas	b Work with pages to	to promote civil
		discussion.	reflect on ideas	under discussion.	set rules for collegial	democratic discussions
		b. Follow rules	under discussion.	b. Follow rules	discussions and	and decision-making,
		for collegial	b. Follow rules	for collegial	decision-making (e.g.,	set clear goals and
		discussions, set	for collegial	discussions and	informal consensus,	deadlines, and establish
		specific goals and	discussions, track	decision-making,	taking votes on key	individual roles as
		deadlines, and	progress toward	track progress	issues, presentation	needed.
		define individual	specific goals	toward specific	of alternate views),	c. Propel conversations by
		roles as needed.	and deadlines,	goals and	clear goals and	
		c. Pose and	and define	deadlines, and	deadlines, and	to questions that
		respond to	individual roles	detine individual	individual roles as	probe reasoning and
		specific questions	as needed.	roles as needed.	needed.	evidence; ensure a

	Grade 6	Grade 7	Grade 8	Grades 9–10	Grades 11–12
	with elaboration and detail by making comments that contribute to the topic, text, or issue under discussion. d. Review the key ideas expressed and demonstrate understanding of multiple perspectives through reflection and paraphrasing.	c. Pose questions that elicit elaboration and respond to others' questions and comments with relevant observations and ideas that bring the discussion back on topic as needed. d. Acknowledge new information expressed by others and, when warranted, modify their own views.	c. Pose questions that connect the ideas of several speakers and respond to others' questions and comments with relevant evidence, observations, and ideas. d. Acknowledge new information expressed by others, and, when warranted, qualify or justify their own views in light of the evidence presented.	c. Propel conversations by posing and responding to questions that relate the current discussion to broader themes or larger ideas; actively incorporate others into the discussion; and clarify, verify, or challenge ideas and conclusions. d. Respond thoughtfully to diverse perspectives, summarize points of agreement and disagreement, and, when warranted, qualify or justify their own views and understanding and make new connections in light of the evidence and reasoning presented.	hearing for a full range of positions on a topic or issue; clarify, verify, or challenge ideas and conclusions; and promote divergent and creative perspectives. d. Respond thoughtfully to diverse perspectives; synthesize comments, claims, and evidence made on all sides of an issue; resolve contradictions when possible; and determine what additional information or research is required to deepen the investigation or complete the task.
N	Interpret information presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how it contributes to a topic, text, or issue under study.	Analyze the main ideas and supporting details presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how the ideas clarify a topic, text, or issue under study.	Analyze the purpose of information presented in diverse media and formats (e.g., visually, quantitatively, orally) and evaluate the motives (e.g., social, commercial, political) behind its presentation.	Integrate multiple sources of information presented in diverse media or formats (e.g., visually, quantitatively, orally), evaluating the credibility and accuracy of each source.	Integrate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, orally) in order to make informed decisions and solve problems, evaluating the credibility and accuracy of each source and noting any discrepancies among the data.

(Continued)

Figure 4.4 (Continued)

	Grade 6	Grade 7	Grade 8	Grades 9-10	Grades 11–12
м	Delineate a speaker's argument and specific claims, distinguishing claims that are supported by reasons and evidence from claims that are not.	Delineate a speaker's argument and specific claims, evaluating the soundness of the reasoning and the relevance and sufficiency of the evidence.	Delineate a speaker's argument and specific claims, evaluating the soundness of the reasoning and relevance and sufficiency of the evidence and identifying when irrelevant evidence is introduced.	Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric, identifying any fallacious reasoning or exaggerated or distorted evidence.	Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric, assessing the stance, premises, links among ideas, word choice, points of emphasis, and tone used.
4	Present claims and findings, sequencing ideas logically and using pertinent descriptions, facts, and details to accentuate main ideas or themes; use appropriate eye contact, adequate volume, and clear pronunciation.	Present claims and findings, emphasizing salient points in a focused, coherent manner with pertinent descriptions, facts, details, and examples; use appropriate eye contact, adequate volume, and clear pronunciation.	Present claims and findings, emphasizing salient points in a focused, coherent manner with relevant evidence, sound valid reasoning, and well-chosen details; use appropriate eye contact, adequate volume, and clear pronunciation.	Present information, findings, and supporting evidence clearly, concisely, and logically such that listeners can follow the line of reasoning and the organization, development, substance, and style are appropriate to purpose, audience, and task.	Present information, findings, and supporting evidence, conveying a clear and distinct perspective, such that listeners can follow the line of reasoning, alternative or opposing perspectives are addressed, and the organization, development, substance, and style are appropriate to purpose, audience, and a range of formal and informal tasks.
9	Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate.	y of contexts and tasks, d of formal English when	Adapt speech to a variety of contexts a English when indicated or appropriate.	Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate.	rating command of formal

Using Text-Dependent Questions About What the Text Means

As noted in previous chapters, the text-dependent questions we develop in advance of a discussion can ensure that students' awareness of a text's meaning deepens over time. As we move beyond questions about vocabulary and text structure and locating explicitly stated information, we transition students into a heavier reliance on inferences. They are further challenged to use evidence and reasoning in their discussions. Because of this, lessons about what the text means may take longer and will be punctuated by periods of silence as students think closely. You may discover that you're only posing a few of these questions, because it takes students longer to draw conclusions. Our experience is that this phase of instruction results in more extended, longer student responses and more conversation across the room. We always view those moments when students stop talking to us and begin talking to one another as a sign of success.

Understanding a text more deeply allows students to make logical inferences from the text. Authors *imply* and readers *infer*. To infer, students must understand the author's purpose and how a given text relates to other texts. In the following sections, we focus on helping students figure out *what the text means* by attending to two main elements of texts:

- Author's purpose
- Intertextual connections

But inferencing doesn't end there. In Chapter 5, we focus our attention on students' use of the text to accomplish other tasks. It's in this fourth phase that logical inferences that include text evidence are realized.

Questions for Determining the Author's Purpose

Writers write for a host of reasons, some of which parallel the purposes of the three major text types: to convey an experience, to inform or explain, and to argue a position. When we pose text-dependent questions about the author's purpose, we don't purport to delve into the deep psychological motivations of the writer. But we do examine the text carefully for stated purposes and seek to contextualize the writing using what we know about the time and circumstances of its creation. It is helpful when the writer states, "The purpose of the study was to . . . ," because it makes the process more transparent. Statements such as this typically appear in scientific research articles but rarely appear outside of these documents. Instead, as is often the case in narrative texts, the reader usually has to dig around a bit more to glean this information.

Lessons about what the text means may take longer and will be punctuated by periods of silence as students think closely.

The author's purpose can often be inferred through examination of several features of the text. Below are three ways you can teach students to do this.

Consider Point of View. Each writer shines a unique light on a topic, and with that comes a unique set of biases. Biases are not inherently negative; our attitudes, experiences, and perspectives are what make all of us interesting. In the case of some texts, the bias is inconsequential. For instance, an informational text explaining the process of cell division is probably not going to offer much at all in the way of bias. But an explanation of cell division within a position paper on when life begins can include an examination of whether the information presented is accurate and complete. The author's point of view is less important in a text like The Hunger Games (Collins, 2010), but it could influence understanding in a narrative text that is based on experiences an author has had, as is the case in Stuck in Neutral (Trueman, 2000), a text told from the perspective of an adolescent who has a significant disability and believes his father wants to kill him. In the latter case, the author notes that he wrote the book because of a lawsuit in Canada and his own experience as the parent of child with a disability.

Identify the Format. A blog post cannot be understood solely for its content; it must also be understood through the platform, in this case, the Internet. That author's purpose is further contextualized based on the hosting website. Does it appear on the website of a respected organization or on one with a poor reputation? Printed text deserves the same inspection. Does it appear in a well-regarded magazine, or is it featured in a publication underwritten by a special interest group? Similarly, a poem must be analyzed in its format, which would differ from a short story or memoir.

Consider How the Author Wants the Reader to React. Every written and verbal communication contains the rhetoric of human thought. The Greek philosopher Aristotle described three modes of rhetoric as methods of persuasion:

- *Ethos* appeals to the credibility of the writer or speaker, including his or her likability, authority, and character.
- *Pathos* appeals to the emotions of the listener or reader.
- *Logos* appeals to formal reasoning and logic, including inductive and deductive reasoning, and the use of facts and statistics.

We challenge middle and high school students to consciously seek the use of these modes of persuasion in the texts they read, as they influence our thoughts about a subject. As students learn to analyze texts for their modes of persuasion, they begin to incorporate these moves in their own writing. In English, students look at persuasive techniques in advertising, while in history they may analyze editorial cartoons. But these modes of rhetoric run through all texts, and skilled writers utilize the most effective proportions of each to develop a compelling case.

Look again at the passage from *Silent Spring* (Carson, 1962) on page 99. This paragraph primarily uses pathos as the form of persuasion, with statements such as "tragic examples of our unthinking bludgeoning of the landscape" and further personifying it by stating that the landscape is *eloquent* and possessing *integrity* (p. 64). How does Carson want us to react? She wants us to see the land as noble and pure, and to evoke in us a sense of stewardship to protect an ecosystem. Her use of pathos works well in forwarding her claims. Carson could have written a very different book, relying on fact and statistics alone. Her purpose wasn't only to inform; it was to act. Her use of pathos throughout the book was meant to move us to action. By analyzing the arguments and modes of persuasion, we can glean the author's purpose.

Questions for Determining the Author's Purpose in Middle School English

The students in Mr. Corbrera's seventh grade English class had discussed a great deal about the text, *The People Could Fly* (Hamilton, 1993), but they had not talked about the metaphor of flying to freedom and what it meant for the people who could not fly. He asked students to consider why the author of this folktale would give the power to fly only to some people.

"Then people might believe it more," Carlos responded. "Because in a folktale, it's supposed to explain why things are the way they are. So, if there were people who were still slaves, then everyone couldn't fly away. Because then the people who were still there wouldn't tell the story anymore because they would think that it was totally wrong."

"Folktales usually have magic," Liana added, "but I agree with Carlos that everyone couldn't have the magic, because then all of the people would have flown away and there wouldn't be slaves."

Mr. Corbrera responded to the conversations the groups had. "What I hear you all saying is that the author made a choice about what to include and that having everyone fly wouldn't really work. As you were talking, I was thinking

about the details that the author includes that guide our emotional responses. What emotions do you believe that the author intended us to experience and why?"

"It's depressing and sad. The people are getting hit with the whip all the time, and they have to work all day until it's dark," Caitlin responded.

"Yeah, I agree," Noah added. "The baby is just crying because it's hungry and then they whip it."

Victor commented, "But I also think that there is hope, because a lot of the people get away. I think that this is supposed to help people get through the bad things that are happening to them as slaves."

Mr. Corbrera interrupted the group conversation. "As you have all said, there's a lot of emotion going on in this text. Make sure that you update your annotations so that you have your thoughts recorded. That will help you a lot when you want to quote from the text or review your ideas."

He paused to provide them time to do so, and then said, "There's this one line that has me thinking. It says, 'They must wait for a chance to run' (Hamilton, 1993, p. 171). What do you think the author's intent is with that line? What does it mean and what can you infer from that line?"

"Toby stayed until all the people who could fly had gone," Mauricio said. "The people who were left had to escape themselves. So, I think that this is the hope part. I think it's telling people that there are others waiting for them and that they have to wait for a chance to run away."

Questions for Determining the Author's Purpose in High School English

The students had found evidence of irony in "The Open Window" as they discussed author's craft, which made the transition to author's purpose seamless. "So why would Saki write this? How does his use of irony give us a clue about his purpose?" Nancy asked them.

The question was difficult for them, and in seeing this she realized they needed more time to process. "Start with conversation at your tables first. Why would Saki write this?"

Chris was the first to float an idea with his group. "Irony can be a way to make fun of something," he said, to which Kealin added, "Or somebody, but who's he making fun of?"

For several minutes the group discussed whether he was making fun of any of the characters, but they were unsatisfied with these possibilities. The subsequent large group discussion unfolded, and the class was soon echoing a similar sentiment—yes, the author was using irony to poke fun, but at whom?

Nancy posed another question to guide their thinking. "I'd like you to look at the date of publication and the setting of the story. Keep in mind that irony is always situated in a certain context and time."

This appeared to spark some understanding, as the students reconsidered the audience. "It's the turn of the century, and the people in the story are kinda fancy," said Amal. "You know, with the letter of introduction and the French window and everything."

Alexis nodded in agreement. "They'd be the people he's making fun of, like he's sort of irritated with them."

Now Ernesto joined in. "But I don't really think he's irritated, but more like they're just a little full of themselves, and he's telling them that they can be easily tricked by a little girl."

The class resumed its discussion, as Nancy monitored their understanding. They were moving closer to understanding that Saki is making fun of 19th century manners of the middle class, but she realized that they would need more information to get there. She anticipated that when they watched a short video of the story, they'd grasp this concept more firmly.

Questions for Determining the Author's Purpose in Middle School Social Studies

Following their discussion of the question, "How does Frederick Douglass's use of language create a convincing picture of slavery's horrors?' the students in Ms. Robinson's history class were ready to tackle the unstated messages in the narrative. She started this deeper investigation of the text by asking them about a line that they had previously discussed.

"I'd like us to go back to a line in the text that we talked about before. It says, 'I envied my fellow slaves for their stupidity.' We know that he was learning to read and that the prediction that he would become discontented had come true. But what do you think is the purpose of that statement? In other words, why did Frederick Douglass say that he envied people who could not read?"

As the groups talked, they seemed to focus on the idea that reading made him realize how bad his life really was. As Andrew said, "So, it's like reading made him understand that it was really, really bad. So, he makes the point that it was easier to be stupid and not know how bad your life really is, but before that it says, 'In moments of agony,' so I don't think he means it full-on. He's telling us readers that there were times that he thought it would be easier to not know all that he did know, but then it's what got him free and why he was invited to give the speech and then write the book."

"I totally agree," Paulina added. "I think he really is trying to say that it made his life harder, but that he still thinks it was important. Before that line he says, 'At times I feel that learning to read had been a curse rather than a blessing.' So, like Andrew said, it's not all of the time. He does this for effect, to let us know how bad he was being treated, not that he wished that he couldn't read again. That's what I think."

Questions for Determining the Author's Purpose in High School Social Studies

Mr. Vaca knew that his students understand the purpose of FDR's Inaugural Address, at least at the basic level. He decided to ask them anyway, saying "We've been discussing the speech that FDR gave as he assumed the presidency. What's the purpose of the speech again? Let's look at his arguments and how he persuaded people to accept his plan."

Zach turned to his group and said, "I think it's to let people know about the problems and what they can do about them."

Brianna and Russell agreed. "I agree with you, because he directly tells people what the problems are and then what the government and the people are supposed to do about it," Brianna said.

Mr. Vaca then turned their attention to the opening of the next-to-thelast paragraph and asked, "Why would FDR, toward the end of the speech, say 'If I read the temper of our people correctly'? What do you think is the intent of that line and why?"

"I'm not sure," Andrea said. "Temper is how people are feeling, like emotionally, right? So is he saying that he checked in with different people? You know, like he took their temperature?" The class laughed. "Not really took their temperature, but you know what I mean."

Josiah responded, "I think it's a little different. I think that he's saying that he knows what the people are thinking and their emotional place. It kinda makes me think that the purpose was to show people that he understood them. It's like he was saying, I know how you're feeling, and this is what you're thinking. It's that ethos appeal. You know, like 'you can believe me because I'm just like you.'"

"Yeah, good point," Andrea added. "He was a rich guy, and he'd want to make sure they knew he thought like the common man. It's like one of those conditional statements. He says if I have this part right, then the rest must be right. So, if I understand the people's thinking, then we need to get together and help each other and 'sacrifice for the good of a common discipline,' and I think that he wants to do

that anyway, but if he gets people to think that it's because of their mood, then they might be more willing."

Next Mr. Vaca turned their attention to the final paragraph and said, "Let's take a look at the final sentence of the first part of his speech. He starts by saying that he has taken a pledge, which he would have done before the speech. We've seen presidents take the oath of office, so we know what that was like. But then he says 'I assume unhesitatingly the leadership of this great army of our people.' What's the purpose of that last sentence?"

Luis said to his group, "So, I've changed my mind. I thought the purpose of the speech was to talk about the problems and what the country could do about them. But I think it's more. It's about him being the right person to be the leader. He needs the support of the people to get the work done. I think he's showing them, through the logic in his speech, that they should trust him as the leader, because he understands the issues and the people."

"I think you're right," Ashlee said. "I think it's more about persuasion and not so much about information, like I thought when we first started reading this speech. He has to persuade people, Democrats and Republicans, to do what he says so that things can get done."

Questions for Determining the

Author's Purpose in Middle School Science

Ms. Choi's students understood the author's purpose for the geology text. As Jeff said, "This is supposed to provide information."

"I agree with you, because it's from the science encyclopedia, so people would use this if they needed to find some information," Monica said.

"Yeah, that's pretty easy," Fernando commented. "And I think he had to know a lot to write this. Maybe it's also to show people that he knows a lot."

"Yeah, like he's the authority or that he is an expert or something," Monica added.

The students had already studied water and erosion, so Ms. Choi decided to ask them to make some inferences based on what they knew about the text and their previous learning, saying, "Would a geologist be interested in glaciers?"

"It's doesn't say that in the text, but I think they would be, because they are interested in mountains and that's where the glaciers are," Angela said.

"I agree with you, because glaciers can change the surface of the earth, and it does say that geologists are interested in that, so they probably would be," Julian commented.

Stephanie added, "I think that the physical geologists could be interested, because it says that they are 'concerned with the processes occurring on or below the surface,' and that is what a glacier does, it can change the surface of the earth."

"I also think that the historical geologists would be interested in glaciers, because they are 'concerned with the chronology of events,'" Mark suggested, "and that means that things that happen in time are interesting to them. And glaciers are really slow, so that would be interesting to people who study history."

Ms. Choi, having listened to several groups discuss the question, thought that her students were able to make inferences from the text and apply what they understood to other fields. To check this, she decided to ask another question, "Would geologists be interested in space junk? Remember the beginning of the year when we studied all of the materials that were floating around in outer space? Would a geologist be interested in that?"

"I don't think so, because that really isn't about the surface of the earth and what happens on the earth," Eric said.

Paulina, agreeing, said, "Right. There are other people who study that, not the geologists."

With a smile, Omar added, "Well, yeah, but if that space junk came down to earth and created big holes or something, then I bet they'd be interested."

Questions for Determining the Author's Purpose in High School Science

The students in Mr. Nielsen's class anticipated the questions about the author's purpose. Given their experience with close reading and the ways in which questions guided their thinking, they often asked each other questions about the text. In his group, Neil asked, "Does Darwin's audience know about natural selection already?"

Pablo was the first to answer. "There are all kinds of text clues that say that people knew about it already. Like for example, he says that he calls it natural selection, which I think means that other people might call it something else."

Ivette disagreed. "I think that his audience doesn't really know much, because he talks directly to them. He asks them questions at the beginning, and I don't think you do that if people already know the answer,"

"But then he acts like he's reminding readers of things they already know. Like it says right here, 'Variations useful to man have undoubtedly occurred.' So, I think that the people reading this had experience, but maybe they didn't think it was because of natural selection," Neil said.

Mr. Nielsen asked another group a question: "Darwin refers to domestication to explain how genes have been manipulated by humans—why does he do this? Does he have an argument embedded in his explanations?"

Randy responded, "I think that he does this to show that we have experienced this and that we already understand it. Basically, he says that he is going to remind people of what they already know, but he says it like this: 'Let it be borne in mind.' That means remember this. And then he says that domestication has created a lot of variations, just like nature."

Anna took over at that point. "I think he does this to make a point—that there are variations even when humans are involved in domestication and that some of the traits that we want in domestication get more favor so that the species with that trait gets to reproduce more, and then we have more of that trait in the population. So, if people can do that through domestication, then he makes the argument that nature can also do that.

Picking up where Anna left off, Jonathan said, "Yeah, and that's kinda cool. He tries to explain things, but there is also an argument in there. He really is making a case and backing it up with evidence, but it's a good way to do that. It's like you don't even notice that you're part of the argument, because it just seems like an explanation. So, even though he has it as a question, he has made his case. As he says right here, 'Individuals having any advantage, however slight, over others, would have the best chance of surviving,' and that's the whole argument in this text."

As the groups finished their conversations, Mr. Nielsen asked another question: "How does the tone of the text reveal the author's relationship to the topic?"

This question was easy for the students in this biology class. They understood that tone is shaped by words and by the way that the author engages a reader. As Marco said, "It's all about him being an authority. His attitude toward the subject is that he understands it and that he makes his case in a formal way."

"I think he's serious; that's the general tone, and maybe academic and formal," Dalasia added. "I think that this is really important to him, because he uses questions to get the reader to think, and then he basically tries to remind the reader of information that's already known so that he can make his case. It just seems that this is really important to him, and he wants to make sure that the other people understand it."



Students listen to a dramatic reenactment of a complex text they've read.

Questions for Making Intertextual Connections

Texts don't exist in isolation; they are better understood when compared and contrasted with other texts, including those that utilize other media platforms, such as audio recordings, film, and multimedia. In the case of diverse media applications, the target text may be better understood when images are used to augment description. This is often the case with texts that were written long ago and with stories that occur in unfamiliar settings. Seventh grade

social studies teacher Elian Cortez used film clips to provide his students with a visual vocabulary that supported their readings about historical events. "It's amazing how much it helps when I use a short clip from a documentary about a time in ancient history," he said. "We're studying ancient China right now, and the textbook has some great photographs for them to view. But I've discovered that a short, well-done reenactment gives them so much more," commented Mr. Cortez. "They get to see people talking, going to market, whatever. It helps them understand unique elements of the time, like the fact that most people walked or rode a horse to get from one place to another. But the wealthy, and the military officers, they would have wagons and oxen. [My students] see that people from long ago have much in common with themselves, like the need to move from one place to another, and that the rich usually have a better ride than the poor."

Intertextual connections are necessary in order for students to translate and integrate information. For instance, in history class, students must discern the difference between primary and secondary source documents and recognize the benefits and drawbacks of each. The details and perspective of an eyewitness account can round out understanding of an event, such as the use of Pliny the Younger's description of the eruption of Mount Vesuvius, recounted in the previous chapter. Of course, his description does not note that the discovery of the well-preserved human and architectural remains in 1748 would advance our contemporary understanding of ancient Roman life. Only a secondary source, such as their textbook or other informational piece, would be able to do so. Each is of value; both become more valuable when used together.

In science, students translate quantitative and visual data into words, and vice versa. Words and images that enable them to make these translations

may be found inside of a single text, such as when a chart or diagram is used to represent a complex process. For example, an informational reading on the electromagnetic spectrum is likely to contain a diagram that details the inverse relationship between wavelength and frequency. In addition, the diagram will indicate where gamma rays, x-rays, and ultraviolet, visible, infrared, microwave, and radio waves occur in relation to one another on the spectrum. The accompanying written text will contain more information about measurement units (nanometers) and the transfer of energy. The diagram and textual information are best understood in conjunction with one another, and each has its own demands. In the diagram, color features, the caption, directionality arrows, and a scale provide visual representations of information. Text-based questions about what the diagram means include those that ask students to interpret why the intensity of colors changes (to reflect intensity of wavelengths and frequency), and to comment on the relatively narrow spectrum of visible light. Questions that foster discussion about elaborative inferencing within scientific diagrams increase student comprehension in high school biology (Cromley et al., 2013).

A final dimension for intertextual connections involves the ways in which literary texts are performed across platforms. A common example of this exists in virtually every high school English classroom: the practice of viewing the performance of a Shakespearean play. The reasoning is obvious, as dramas are written to be performed, and students gain a tremendous amount of knowledge from such experiences. Other resources include audio recordings of speeches, and organizations such as the National Archives (www.archives.gov) and the Library of Congress (www.loc.gov) are invaluable for locating these and other multimedia materials.

Eighth grade English teacher Tina Ellsworth used Gwendolyn Brooks's rendition of her poem "We Real Cool" (1960) so that her students could further understand the poet's use of enjambments (line breaks that interrupt a line of text) to emphasize the uncertainty of its otherwise boastful narrators.

"Brooks wants you to read the word 'we' more softly and hesitantly," said the teacher after they listened to the recording several times. "Why is that a key to understanding this poem?" asked Ms. Ellsworth.

As the discussed progressed, she shifted their focus to comparing the print version of the 24-word poem with its performance. Several students, including Hamze, heard the cadence in the spoken version of the poem. "It's like a march," he said. "I can see these tough guys taking up all the room on the sidewalk."

In the case of diverse media applications, the target text may be better understood when images are used to augment description. This is often the case with texts that were written long ago and with stories that occur in unfamiliar settings.

"When I read it, I thought they were just tough guys," Arlissa added, "but when I hear [Brooks] say it, it's like they're tough but they're a little scared, too. Maybe they are scaring themselves."

Hamze finished her sentence. "We die soon," he said, repeating the last line of the poem.

Questions for Making Intertextual Connections in Middle School English

"Remember the last text we read by Virginia Hamilton (1993), "Carrying the Running-Aways?" asked Mr. Corbrera. "Please take out those pages, and let's look at the similarities and differences between the two tales. Let's start by comparing Toby and the man who rows across the river."

"So, it's kinda obvious but they both help other people," Arif said.

Cara agreed. "Yeah, and they both risk themselves to help."

"If Toby could fly, and the man has the boat, they could both be free way earlier. But they don't go. They stay to help other people," Elizabeth added. "That's an important message, I think, that there were people who helped the slaves."

"Yeah, because it would be good for the people to hear that so that more of them would be willing to help, even if they almost got caught and could get whipped or killed," Arif agreed.

In another group, the students focused on the differences. Marlin and Brandon were talking about the differences in the texts themselves. As Marlin said, "This one is true [Marlin points to his copy of "Carrying the Running-Aways"] because it says that it is a true story and that his name was Arnold Gragston. This one [Marlin points to his copy of *The People Could Fly*] doesn't say that it's true, so we don't know if Toby was real or not."

After several minutes, Mr. Corbrera asked his students to turn their attention to the lessons that both texts could teach people, then and now. As he said, "We're reading a lot of narratives. Some of these are true and others are folktales. I'd like you to think across all of these texts we've been reading. What's the lesson they're all trying to teach?"

Brandon said it well. "I think that there are a lot of lessons. For one, people can do really bad things to other people. And for two, when that happens, some people will take a risk to help people. But I think that the main message for me is that people have to write things down so that we can learn from it later. If they didn't write these down, then we wouldn't know about the bad things or the people who made a difference."

Questions for Making Intertextual Connections in High School English

Nancy's students were moving closer to understanding why Saki, the author of "The Open Window," used irony in the piece. She showed them a nine-minute video performance of the short story, choosing one that was a nearly verbatim rendition of the written version. The costumes, demeanor, and setting became clearer because of the visual information students gained.

When the video was over, Nancy invited them to continue the discussion. "You were saying that irony can be used to poke fun at someone or something, but you weren't quite sure what. Has that changed for you, now that you've seen the story being performed?"

The students turned to their table partners, this time more confident. "I could see that they weren't really rich, like they didn't have servants or anything," said Amal.

"They were more regular, like middle class."

"I think he's making fun of all us regular people, 'cause we like to gossip and tell stories about each other just for the fun of it," Alexis remarked.

Nancy listened in on this and several other similar small group conversations. Now satisfied that they had arrived at a new understanding, she reminded them to add the information to their annotations. "Be sure to mark out your evidence of irony as a literary device," she said.

"Now let's turn our attention back to that last line, where it says, 'Romance at short notice was her specialty.' How is romance being used here?" she said.

Several students confirmed that they were now certain that it wasn't about romantic love, and Chris took special note of the actress's smirk at the end. Nancy said, "So go back into the text, everyone. Chris, you're on it. Where can you find evidence to support that claim?"

Nancy listed the examples they provided in response: "a very self-possessed young lady" who tells him, "You must try and put up with me."

Kealin noticed for the first time that the phrase "self-possessed young lady" is mentioned a second time when Vera realizes that Nuttel would believe anything she told him, because he didn't know anyone locally.

"There's a third time!" said Amal. "Saki says, 'The child's voice lost its self-possessed note and became falteringly human.'"

"OK, bring it home," Nancy said. "Vera is good at what?"

Many of the students were now willing to answer. Lies, tall tales, fibs, they replied.

"That's what romance means in this piece!" said Alexis, now relieved. "She can tell a big ol' whopper of a lie on the spur of the moment. And she did it again to her family when Mr. Nuttel ran out the door!"

Nancy felt the momentum as students gained new insight. "Back to our previous question," she said. "Who is Saki criticizing in a lighthearted way?"

This time Ernesto answered. "He's telling all of us that we make up stuff about other people for the sake of gossiping, and we're way too willing to believe others just because they've told us a story."

Questions for Making Intertextual

Connections in Middle School Social Studies

Ms. Robinson shared the two-page text about Frederick Douglass from 50 American Heroes Every Kid Should Meet (Denenberg & Roscoe, 2001) with her students, in part to demonstrate to her students how much they knew about the text and in part to emphasize why reading primary source documents is critical in history. She asked them to read the first two paragraphs of the text:

Right now, you're doing what for Frederick Douglass was an illegal activity that enabled him to become a free man. You are reading.

It was against the law to teach a slave to read and write. If a slave could read, the slave might start to think about ideas like freedom, justice, and fairness. That sounded like trouble to slave owners. But Mrs. Auld didn't know the law when eight-year-old Frederick was given to her family. (p. 40)

Ms. Robinson asked her students to compare the differences in the two texts, saying, "Remember that we can compare primary and secondary sources to determine if they corroborate, to tell the same story. We can also compare author's perspectives and what each author left out. Talk about the differences you see in these texts."

Julia started the conversation in her group. "There really is no comparison. It's like they just skipped over a big important thing. It's true that he wasn't supposed to learn to read and that Mrs. Auld started to teach him. But there's so much more. He struggled once he learned and wondered if it was a good idea himself."

"Yeah, right. And he even says that maybe his 'master' was right, that learning to read wasn't a good thing," Tyler added.

"That's true," Luke commented. "But I don't think that was his real purpose. He really wanted to read so that he could get his freedom.

I think it's more about being frustrated that you can read, but then you can't do anything about it."

Julia, having read more of the secondary source, added, "We know he became free, but it says on this page that he ran away when he was 20. I bet there's more to that part of the story. They had to leave out a lot about his life when he was little, so there is probably a lot more to learn about when he was 20 and when he finally ran away."

"Yeah, and I bet that is interesting too. I wonder if he doubted himself when he was free, like he did when he learned to read. It's like, maybe it would be easier again, like when he couldn't read," Luke said.

"I wish we could find out," Julia responded. "I think it probably is true, because he really has to figure out who he is as a person. He was free, but then where did he live and where did he get money to live? Maybe he had some thoughts that there were times when it was easier to be a slave, at least in some parts of your life. But then, he didn't want to go back. Like he didn't stop learning to read, even though he sometimes wished he was like the others who couldn't read."

At that point, Ms. Robinson interrupted the groups. "I appreciate all of your conversations about the differences between the two texts. Reading primary and secondary sources helps us understand history from a number of perspectives and contexts. But I am interested in the quote that is on page 41. Can you read that to yourself and explain to each other what you think it means, based on your understanding of the two texts we've read?" The students read the following quote from Frederick Douglass:

No man can put a chain about the ankle of his fellow man without at last finding the other end fastened about his own neck. (Douglass, 1845/1995, p. 41)

"Well, I think that he's saying that if you try to hold someone down, you end up holding yourself down," Maya said.

"So, I'm thinking that he is saying that humans are all connected and that if you chain up somebody else, you end up being in the chain," Andrew added.

Paulina interrupted. "Yeah, I get it. He's saying that. If you try to control someone by putting a chain on their ankle, you end up trying to control that person and you end up trapped, like having a chain around your own neck. I don't think he means that literal. I think it's more, what do you call it, figurative. It's like he's saying that you'll be weighted down, or trapped, when you try to do that to others."

Questions for Making Intertextual Connections in High School Social Studies

The students in Mr. Vaca's US History class had completed their reading of FDR's inaugural address up to the point where he notes the pledge was taken and he assumes leadership. Mr. Vaca then shared an excerpt from later in the speech with his students. He projected the following two paragraphs for them to read:

I am prepared under my constitutional duty to recommend the measures that a stricken nation in the midst of a stricken world may require. These measures, or such other measures as the Congress may build out of its experience and wisdom, I shall seek, within my constitutional authority, to bring to speedy adoption.

But in the event that the Congress shall fail to take one of these two courses, and in the event that the national emergency is still critical, I shall not evade the clear course of duty that will then confront me. I shall ask the Congress for the one remaining instrument to meet the crisis—broad Executive power to wage a war against the emergency, as great as the power that would be given to me if we were in fact invaded by a foreign foe. (in Rosenman, 1938)

"What is the purpose of this information being included in the speech that FDR gave as he assumed the presidency?" Mr. Vaca asked.

William started the conversation in his group. "It sounds like he's going to do what he wants, with support from Congress or not."

"This makes me think about him being a leader," Melissa added. "He doesn't seem like a leader; he's more like a dictator."

"I don't really think he's acting like a dictator," William responded. "I think he's saying that he's going to get the work done and if the Congress can't act, he would like more executive power. It would be interesting to know if he got that extra power. I bet we'll read about that in this unit."

Questions for Making Intertextual Connections in Middle School Science

Ms. Choi showed her students an excerpt from the Annenberg video *Earth Revealed* (www.learner.org/resources/series78.html?pop=yes&pid=312) and asked them to discuss the difference between the text and the video. In the video, students are introduced to the idea that nearly everything that they use (other than solar energy) comes from the earth and that geologists are key in helping people obtain things from the earth as safely as possible. Following their discussion about the differences,

Ms. Choi asks her students "to identify places in the video in which physical geology is featured and places in which historical geology is featured."

The students correctly identify several instances of each, and Ms. Choi moves their conversation to focus on the different topics addressed in the video and the text, saying "Which of the words in our text did you see or hear in the video? Did you see any visuals that would help you understand the text?"

"Can we watch that one more time to be sure?" asked Mariam, raising her hand.

Following another viewing of the video, the students discuss the terms that they heard and saw in the video.

"They talked about rocks and minerals and showed a lot of different pictures," Marc said. "But I didn't know that geologists helped to find oil. They said that they had geophones that could listen to the movement, kinda like a seismologist does to predict earthquakes."

Ms. Choi knew that her students got more out of the video as a result of their careful and close reading of the encyclopedic entry.

Questions for Making Intertextual Connections in High School Science

Several students in Mr. Nielsen's class assumed that Darwin's audience already knew a lot of the information contained in the text. As Aden said, "Isn't this obvious? Darwin says, 'Many more individuals are born than can possibly survive,' so those with the strongest systems or the best advantage would be the ones to live."

Mr. Nielsen wanted his students to understand that the ideas had been around for some time, along with the controversies and social unrest that the text caused. To begin this conversation with his students, Mr. Nielsen said, "In 1789, 70 years before *On the Origin of Species* was written, Thomas Robert Malthus wrote (the following was projected from the document camera):

It does not... by any means seem impossible that by an attention to breed, a certain degree of improvement, similar to that among animals, might take place among men. Whether intellect could be communicated may be a matter of doubt; but size, strength, beauty, complexion, and perhaps longevity are in a degree transmissible.... As the human race, however, could not be improved in this way without condemning all the bad specimens to celibacy, it is not probable that an attention to breed should ever become general. (Malthus, 1798)

"Where do you see influence from Malthus's work on Darwin's theory of natural selection?" Mr. Nielsen asked.

"See, they already knew a lot of this," Aden said. "Darwin was building on this guy. Like Malthus, Darwin says there can be variations that will cause an improvement."

"Yeah, I see that connection," Jeremy added. "Darwin is definitely building on the idea that some things, like size and strength, could be improved with attention, or as Darwin calls it, *natural selection*, but there's something even bigger in this text. It says that humans really couldn't be improved unless some people didn't get to have kids."

Sebastian interrupted. "And that's what Hitler was trying to do, right? Like he was trying to make sure that people he thought were bad specimens didn't get to reproduce. But the guy who wrote way back in 1798 says that it's shouldn't become general, but it did during World War II."

Later in the class period, Mr. Nielsen asked students to read a different piece of text. As he said, "Consider the following excerpt from the article *10 Examples of Natural Selection* by Diana Bocco (projected for the class to read):

Many times a species is forced to make changes as a direct result of human progress. Such is the case with the peppered moth (*Biston betularia*). Up until the Industrial Revolution, these moths were typically whitish in color with black spots, although they were found in a variety of shades. As the Industrial Revolution reached its peak, the air in London became full of soot, and the once-white trees and buildings that moths used for camouflage became stained black. The birds began to eat more of the lighter-colored moths because they were more easily spotted than the darker ones. Over the course of a few months, dark moths started appearing in the area and lighter moths became scarce. Once the Industrial Revolution peak passed, lighter moths made a comeback. (www.discovery.com/tv-shows/curiosity/topics/10-examples-natural-selection.htm)

"So class, what specific aspect of natural selection does this illustrate?" asked Mr. Nielsen.

"I think it's differential reproductive success, because only the dark moths were producing more baby moths," Leo said.

"Yeah, I think that's part of it, but I think that there's something that happens before," Dakota added. "I think that it's the predator one,

because the birds are eating them and that's why they aren't there. It's not a change that lasts, because remember that the lighter ones came back once the environment changed."

"That's probably right, because it did start with the birds being able to see the moths to eat. That's why there were less of them to reproduce," agreed Leo.

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This chapter has focused on questions that push students even deeper into their analysis of the text, specifically as they explore the role of inferences, author's purpose, and intertextual connections. These deep analyses of texts are possible when students know what the text says and how it works.

Now we invite you to try this yourself. In Figure 4.5 we show an article about the 1854 London cholera epidemic that you can use to practice what you have learned in this chapter. Take a few minutes to read the text below. Then turn your attention to the questions that you can develop to encourage students to determine what the text means. Remember that this phase is focused on making *inferences* and specifically understanding author's *purpose* and *intertextual connections*. What is it that students should understand about this text? How might the data table that follows, or the map that follows that, help them understand the text?

Before you begin, you might like to skim the italicized questions in the teachers' lessons in this chapter. If you'd like to check yourself, the questions that Ms. Thayre developed can be found on Corwin's companion website at www.corwin.com/textdependentquestions. Next, apply this technique to develop questions for a short piece that you will use with your own students.

Figure 4.5 "Instances of the Communication of Cholera Through the Medium of Polluted Water in the Neighborhood of Broad Street, Golden Square" by John Snow

The most terrible outbreak of cholera which ever occurred in this kingdom, is probably that which took place in Broad Street, Golden Square, and the adjoining streets, a few weeks ago. Within two hundred and fifty yards of the spot where Cambridge Street joins Broad Street, there were upwards of five hundred fatal attacks of cholera in ten days. The mortality in this limited area probably equals any that was ever caused in this country, even by the plague; and it was much more sudden, as the greater number of cases terminated in a few hours. The mortality would undoubtedly have been much greater had it not been for the flight of the population. Persons in furnished lodgings left first, then other lodgers went away, leaving their furniture to be sent for when they could meet with a place to put it in. Many houses were closed altogether, owing to the death of the proprietors; and, in a great number of instances, the tradesmen

(Continued)

(Continued)

who remained had sent away their families: so that in less than six days from the commencement of the outbreak, the most afflicted streets were deserted by more than three-quarters of their inhabitants.

There were a few cases of cholera in the neighborhood of Broad Street, Golden Square, in the latter part of August; and the so-called outbreak, which commenced in the night between the 31st August and the 1st September, was, as in all similar instances, only a violent increase of the malady. As soon as I became acquainted with the situation and extent of this irruption of cholera, I suspected some contamination of the water of the much-frequented street-pump in Broad Street, near the end of Cambridge Street; but on examining the water, on the evening of the 3rd September, I found so little impurity in it of an organic nature, that I hesitated to come to a conclusion. Further inquiry, however, showed me that there was no other circumstance or agent common to the circumscribed locality in which this sudden increase of cholera occurred, and not extending beyond it, except the water of the above mentioned pump. I found, moreover, that the water varied, during the next two days, in the amount of organic impurity, visible to the naked eye, on close inspection, in the form of small white, flocculent particles; and I concluded that, at the commencement of the outbreak, it might possibly have been still more impure. I requested permission, therefore, to take a list, at the General Register Office, of the deaths from cholera, registered during the week ending 2nd September, in the subdistricts of Golden Square, Berwick Street, and St. Ann's, Soho, which was kindly granted. Eighty-nine deaths from cholera were registered, during the week, in the three subdistricts. Of these, only six occurred in the four first days of the week; four occurred on Thursday, the 31st August; and the remaining seventy-nine on Friday and Saturday. I considered, therefore, that the outbreak commenced on the Thursday; and I made inquiry, in detail, respecting the eighty-three deaths registered as having taken place during the last three days of the week.

On proceeding to the spot, I found that nearly all the deaths had taken place within a short distance of the pump. There were only ten deaths in houses situated decidedly nearer to another street pump. In five of these cases the families of the deceased persons informed me that they always sent to the pump in Broad Street, as they preferred the water to that of the pump which was nearer. In three other cases, the deceased were children who went to school near the pump in Broad Street. Two of them were known to drink the water; and the parents of the third think it probable that it did so. The other two deaths, beyond the district which this pump supplies, represent only the amount of mortality from cholera that was occurring before the irruption took place.

With regard to the deaths occurring in the locality belonging to the pump, there were sixty-one instances in which I was informed that the deceased persons used to drink the pump-water from Broad Street, either constantly, or occasionally. In six instances I could get no information, owing to the death or departure of everyone connected with the deceased individuals; and in six cases I was informed that the deceased persons did not drink the pump-water before their illness.

The result of the inquiry then was, that there had been no particular outbreak or increase of cholera, in this part of London, except among the persons who were in the habit of drinking the water of the above-mentioned pump-well.

I had an interview with the Board of Guardians of St. James's parish, on the evening of Thursday, 7th September, and represented the above circumstances to them. In consequence of what I said, the handle of the pump was removed on the following day.

Table 1 Grid Location of Deaths Due to Cholera in 1854 London, Plus Water Pumps and Brewery Locations

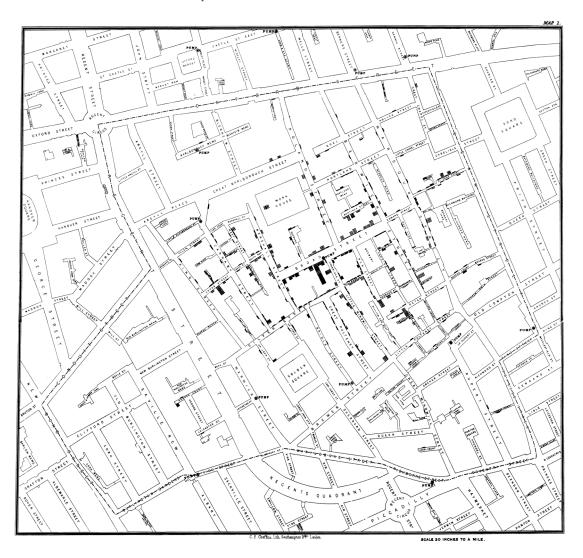
	Day 10	Μ8	R11	R11	M15	015	M17	S15	N14	S13	116	L11	X19	M15	L17	U20	L18	022	L21	015
	Day 9	Q15	W10	9Z	111	6W	X19	U12	S19	R15	L18	6W	N13	R16	S12	020	013	P12	R20	05
	Day 8	95	011	N16	R15	6N	119	N17	N13	N16	L17	T9	015	N15	115	Ь6	015	P15	012	R16
ocations.	Day 7	P6	Q14	016	N13	115	017	M17	014	P16	L17	T9	L11	N13	S12	P6	P11	4 4	M16	K15
era—Grid L	Day 6	S14	W14	K15	R11	015	116	P11	R15	M 11	M11	G22	S13	012	015	8 8	R11	M13	K15	P17
Deaths Due to Cholera—Grid Locations	Day 5	95	T10	P14	T10	8 8	N16	P17	V14	41N	M11	8	K17	R15	41M	P8	41N	P16	S15	K12
Deaths D	Day 4	115	011	014	013	T14	U17	T18	Z 11	A17	012	41	N17	41M	P15	P.8	M15	R16	M13	K12
	Day 3	95	R11	T14	P11	R14	M16	Q12	L13	012	P13	60	Q13	N14	M12	M17	119	L17	R14	014
	Day 2	84	P13	60	N16	67	016	513	012	S14	Q15	022	Q14	N14	015	80	P17	018	R16	T15
	Day 1	L18	R14	015	M13	011	L17	N16	M14	R13	41N	016	N12	N12	U20	014	Q15	P8	41	013
	#	~	7	ო	4	Ŋ	9	7	∞	6	10	1	12	13	14	15	16	17	200	19
	Brewery Location			X13	X14	X15	Y13	Y14	Y15											
Water	Pump Locations			T6	D7	P7	G11	P14	Y14	116	Z18	120	D21	L26						

(Continued)

Table 1 (Continued)

Water						Deaths Di	Deaths Due to Cholera—Grid Locations	era—Grid L	ocations			
Pump Locations	Brewery Location	#	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10
		20	023	Q13	K15	P8	R14	R15	012	Q16	115	U20
		21	R15	112	R15	M17	R14	R13	012	N14	N14	016
		22	N17	L13	N16	N12	N13	N17	Ь6	6 2	L17	016
		23	P11	K20	41N	4 4	N12	R14	G19	U20	K14	L11
		24	M14	P11	M14	V17	015	H19	N15	N12	P23	K17
		25	P13	U20	M14	116	W17	Q16	K14	K14	L18	R20
		26	L18	017	L13	L17	M15	020	N16	N12	M15	S19
		27	M 11	015	41N	Q15	N13	95	R15	M17	L18	80
		28	N13	N16	Q17	L13	M17	M11	111	015	8 W	M11
		29	L13	S19	8 Z	M13	016	P15	8 ₁	Ь6	F17	M13
		30	R8	90	015	N16	L13	R16	R14	T21	U20	
		31	P14	T21	L18	F)	M8	R15	R11	N 11	L18	
		32		M13	R20	80	P6	F8	T13	67	T13	
		33		N13	L18	T21	N23	Ь9	P11	M 11		
		34		N13	P6	6 N	P13	P11	К9	U20		
		35		N 13	S12	N13	M11	013	N13			
		36		P14	P13	N 11	M12	013	N16			
		37			F6	L11	013	P14	T21			
		38			013	021						
		39				G23						
		40				S14						
		Total	31	36	88	40	37	37	37	34	31	53

Exhibit 1 Map Showing the Location of Deaths From Cholera in Soho District of London and Location of Water Pump Sites



Source: Excerpt from On the Mode of Communication of Cholera by John Snow, M.D. London: John Churchill, New Burlington Street, England, 1855 (pp. 38–55).

Available for download from www.corwin.com/textdependentquestions

Videos

To read a QR code, you must have a smartphone or tablet with a camera. We recommend that you download a QR code reader app that is made specifically for your phone or tablet brand.

Videos can also be accessed at

www.corwin.com/textdependentquestions



Video 4.1 Oscar Corrigan calls attention to the word "migration," prompting his seventh grade social studies students to discuss its influence and usage in *Things Fall Apart*.



Video 4.2 After reading an article on ulcers, students in Will Mellman's seventh grade science class talk about whether the authors know what cause ulcers, using textual evidence to defend their opinions.



Video 4.3 Students in Javier Vaca's eleventh grade U.S. history class discuss Eisenhower's state of mind before the D-Day invasion, using textual evidence and a comparison of "Message to the Troops" and "In Case of Failure."



Video 4.4 A tenth grade English class, led by Heather Anderson, imagines what Maya Angelou might say to them based on their analysis of her poem "Phenomenal Woman."



Video 4.5 Marisol Thayre's eleventh grade English class discusses Susan Bordo's purpose for writing a piece on body image.



Video 4.6 Students in Kim Elliot's tenth grade biology class discuss whether scientists agree about what causes cancer to determine the author's purpose for writing "Untangling the Roots of Cancer."