

Chapter 2

Laying the Foundation for Deeper Learning with Literacy

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OVERVIEW

A Foundation for Deeper Learning

Literacy is the bedrock of learning. Strong literacy skills determine academic success and, often, success beyond school. When students can manipulate information and ideas both accurately and fluently, and when they read not only for knowledge, but also for joy and wonder, their capacity to learn and express themselves rests on a stable foundation unlikely to crumble even in a seismic educational or life event.

For many students, no matter their background or first language, learning to read complex text and write in academic formats can create new choices and pathways for the future. When a person can tease apart the vocabulary, esoteric references, and data of a scientific journal article, for example, she is better prepared to judge the validity of its content and to understand how it supports or fails to support her own choices as a citizen, patient, or policy leader. Furthermore, when a student seeks camaraderie, inspiration, or solace in poems or literature, she has a friend for life—and a doorway into the universal cultural expression of humankind: storytelling.

Nevertheless, enabling students to become confident speakers, readers, and writers in the language of professionals, scholars, wordsmiths, and the marketplace is a challenge for teachers everywhere. Teaching literacy raises enduring questions:

- How do we motivate “shallow” or nonreaders?
- How do we get students to read for detail rather than general ideas?
- How do we teach students to incorporate what they read into what they write?
- How do we fortify the reading students choose with texts that have a higher vocabulary “vitamin and mineral” count?
- How do we address the needs of readers and writers with a variety of interests, readiness, and styles?

And beyond the challenges of teaching literacy, the goal of deeper learning for all students is a next-level challenge for even the most seasoned of teachers. This demands that students know not just *what* they are reading or writing about, but also *why* they are reading and writing. Deeper instruction shows students that communication—reading, writing, and speaking—is a purposeful and powerful tool.

The examples and illustrations in this chapter show teachers in schools across the country at work making the bedrock of literacy through deeper instruction. These teachers provide students with both pick axe and shovel—the strategies to read and write precisely, with variety, and in volume. They also show that through studious apprenticeship, all teachers—not just English language arts (ELA) teachers—can learn to plan and teach lessons that invite and encourage students to become dexterous and determined wordsmiths. Braced with the skills to analyze difficult text, apply their understanding to new contexts, and effectively create their own texts, students have what they need to adapt to any challenge. They are resilient learners. They are innovative learners. They are fearless learners. And like deeper learners everywhere, they want to know more about the intricate connections between what’s “out there” and the inner workings of their own experience.

Deeper instructional practices in literacy begin with purposeful lesson planning and curriculum choices that sift standards-based topics of study through relevant, compelling literature and informational text so that students are challenged with work that goes beyond standards. Leading with worthy texts, teachers help students connect what they’re reading to real-world ideas and problems. They give students the tools to do the hard work of close reading and authentic, high-quality writing. They develop lessons that address ascending levels of Bloom’s Taxonomy (see Figure 1.1) and boost students up the ladder of complexity into a difficult text. They model and critique real-world writing formats, while steering students toward audiences of informed and eager readers.

The deeper instructional practices in this chapter teach students that reading, writing, listening, and speaking are powerful levers. The point of literacy is communication—understanding and being understood—and it is the work of all teachers, not just ELA teachers. Every teacher has a role in helping students believe “What I know matters, and what I say—out loud and in writing—counts in the marketplace of ideas.”

Why These Practices Matter

Because reading, writing, and speaking are the gateway to learning, instruction that challenges, engages, and empowers students to walk confidently into the arena of language matters from the earliest years right up through adulthood. Deeper instruction in literacy prepares students for college and beyond. This matters for a number of reasons.

The Right Kind of Challenge Builds Students' Literacy Muscles

As the foundation for deeper learning, literacy instruction that is appropriately challenging for students, and that is coherent and connected across multiple lessons and multiple disciplines, is especially critical. Teachers must take care to select complex and compelling texts that build students' reading muscles and academic vocabulary banks and help them see reading as a way to learn about the world. They must help students use evidence from their reading in their writing and see the value in writing for an authentic audience that wants to hear what they have to say. Moreover, to produce work of high quality, and to do so with integrity, students need to sort ideas that hold up to scrutiny from ones that don't. They need to engage in decision making and problem solving by comparing notes, questioning sources, and referring back to specific examples, facts, and research.

Deeper instructional practices in literacy entice students out of their comfort zone and into deeper levels of challenge, where grappling with words, texts, and ideas is worthy and exciting work. Helping students establish a growth mindset about these challenges will ensure that their literacy foundation is strong and sturdy and something they can keep building on throughout their lives.

Purposeful Reading, Writing, Thinking, and Speaking Fuels Engagement

Deeper literacy instruction cultivates the fruitful exchange of ideas in response to worthy questions raised in classes across the curriculum. Reading for and writing with evidence are essential ways to discover and articulate answers to questions. In conversation with each other and their teachers, students explore new perspectives, discuss fresh research, and develop a more nuanced understanding of a topic. Deeper learners understand how their reading, writing, and speaking in class connects to what they have learned before and to what they are learning across the curriculum. Further, worthy questions take students beyond the classroom, where they apply their literacy skills and understanding in real work for the benefit of their communities. For this reason, literacy feels purposeful and that purpose fuels engagement and quality work.

Deeper Literacy Instruction Empowers Students to Be Self-Directed Learners

Instructional strategies that boost all students into challenging texts that engage them in active, collaborative, and interesting ways of digging for meaning are not a quick fix. However, they are surely part of empowering students as learners, capable of defining their own destiny. For Edward Brown, a graduate of the Springfield Renaissance School, who went on to Brown University to study literary arts, the experience of dissecting literature paragraph by paragraph and of having his own arguments critiqued over and over again made it possible for him to “level up” to a great volume of reading in college.

“At college, I may have to read thirty or forty pages a night for a class, but I always know what I’m looking for in my reading. At Renaissance we read things that were just as hard, even though they weren’t as long. We read the Constitution, the Declaration of Independence, *The Great Gatsby*, and a lot of informational articles. They were dense, and they gave me a grasp of how much harder it would be in college, but I also learned strategies for taking a text apart and analyzing it and understanding it.” When Brown went to college, he says, he knew two things that assured him that he could meet the demands of Brown University. “I knew how to manage my time. And I knew how to pinpoint what I wasn’t so good at and design a plan for improving on it. That’s what I’m still doing here at Brown.”

Challenging, engaging, and empowering students as readers, writers, speakers, and thinkers so that they carry their skills up to the next grade level or the next stage in life is the focus of this chapter. In the Getting Started section that follows, we see how two second-grade teachers deliver a rich and rigorous science unit that coherently connects reading, writing, speaking, and listening.

GETTING STARTED

Learning That Makes a Difference

At Centennial School for Expeditionary Learning in Denver, Colorado, the playground wood chips were recently replaced with a poured rubber surface. The new surface allows students in the school’s multi-intensive severe needs program, including many who use wheelchairs, to join their friends from the regular education program at recess. Second-grade writers made that happen.

Inspired by their study of simple machines, the students put their learning into action. After reading about friction and wheels and experimenting with how wheels rolled on their existing playground surface, they discussed how unfair it seemed that none of the playground equipment was accessible to some of their friends who used wheelchairs. So they wrote and presented their opinions, loaded with evidence from their studies, to district officials. “Never in my thirty years of working in education have I seen students advocate for other students the way you have done today,” John Liberatore, director of Denver Public Schools’ Student Services Department, told the students.

Six months later, as the playground is getting an upgrade, second-grade teachers Ali Bernstein and Fran Taffer see how the experience of making a difference through writing changed their students. “Our students got an intrinsic desire to do fabulous work and push themselves further than they thought they could go because they discovered that school is a place where there is purpose. When we read and write, there should be a reason for it that leads to action. Students just got a \$90,000 playground. That’s powerful.” Taffer’s and Bernstein’s commitment to deeper instruction invited students to apply their learning about persuasive writing to a real-world problem and a real audience. It was just the beginning. “Now we are wondering what these students will do next. They’ve got the writing bug now, and they are unstoppable!” says Taffer.

Using the Four Ts—Topic, Text, Target, Task—to Challenge, Engage, and Empower Students

Getting started with deeper literacy instruction begins as professional preparation—excavating the terrain of what students want and need to learn, driven by standards, curricular requirements, and student interests and abilities. In this chapter and elsewhere we propose that the Four Ts (see Figure 2.1)—topic, text, target, task—can help teachers craft learning experiences for students that are challenging, engaging, and empowering, no matter if they are creating curriculum from scratch or seeking merely to amend or enhance existing curriculum.

For example, in preparing the unit that would lead their second graders to write the persuasive letters that would get district leaders’ attention, Bernstein and Taffer “crossed their ‘Ts’” in the following way. They chose the **topic** of simple machines because it matched second graders’ eagerness to get into the gears and

Figure 2.1 The Four Ts: Topic, Text, Target, Task

Topic: The topic “ties together” a unit of study.

The topic brings coherence to the unit of study. It is the “what” students are learning about, often connected to specific content knowledge. While students may be able to meet the standards without it, a compelling, relevant topic helps students to develop their skills more deeply as readers and writers. The best topics teach the standards through real world issues, original research, primary source documents, and the opportunity to engage with the community. They lend themselves to the creation of authentic tasks and products.

Text: The complex texts (books/articles) that students will read closely, and additional texts that ensure students experience a “volume of reading” at their independent reading level.

The text is the primary vehicle through which the topic is taught. Carefully selected texts at the text complexity band for a given grade level give students access to the topic and content targets through close and careful reading. Choose text judiciously to ensure it is “worthy” in terms of the knowledge it will help students build about the world and the opportunities it presents for students to master specific literacy standards.

Target: The learning targets derived from literacy and content standards.

The learning targets name what students need to know and be able to do. They are derived from the standards and informed by analysis of the assessment of the standard. Learning targets are contextualized to the topic, prepare students for and guide the task, and ensure proper, deep analysis of the text. Texts can be chosen for their ability to master particular standards/targets.

Task: The culminating assignment—a product or performance task.

The culminating task gives students the opportunity to read for and write with specific textual evidence and to meaningfully apply the standards (targets). This is different from just writing “about” what one has read. The best tasks give students the opportunity to address authentic need and an authentic audience related to the topic.

figure out how things work. This topic also addressed Colorado’s standards for physical science, so they knew it would help them address the learning **targets** their students were expected to meet. Weaving the science content standards together with their literacy standards helped them determine the right **task** for their students. Writing persuasive letters in response to a real-world problem involving simple machines would give students an authentic purpose for reading for and writing with evidence. Therefore, the **texts** they would need would be ones that helped students solve that problem. In other words, they needed texts that would inspire and empower students to be informed readers and speakers in their own community. View the accompanying video to see how this same framework can be used to create curriculum.



Thinking intentionally through the lens of the Four Ts as part of the planning process helps teachers assess whether their instruction will be deep and effective for all learners. By asking “Is my topic relevant and compelling?” “Are my texts challenging and engaging?” “Do these targets unpack required standards?” “Are my tasks purposeful and complex?” teachers can identify the blind alleys and wild goose chases that often derail the best instructional intentions.

Bringing Text to Life through Compelling TOPICS

Every teacher has the student who protests as soon as the book is brought out, “Why do we have to read this? How will I ever use this in my life?” Whether working with second graders or high school students, we should be able to answer that question, not only by explaining how the skills of analyzing and arguing are the skill set of successful professionals and citizens, but also by connecting challenging, canonical, or esoteric texts to students’ real lives. This means first of all taking our students seriously as people with interests, viewpoints, and a stake in their own communities. When teaching a literacy unit, it means asking the questions “What matters to my students? What texts will bring this topic to life for them and give them the opportunity to build their reading muscles?”

The Strategy Close Up that follows demonstrates the strategy of partnering fiction from another time and place with contemporary informational texts about a compelling topic. The literature introduces students to authors and themes that build their understanding of the genre and craft of fiction. The informational text enables them to apply the same themes—and vocabulary—to a broader context and to see relevance to their own lives. This strategy is especially useful when seeking opportunities to deepen instruction within an existing curriculum.

STRATEGY CLOSE UP: Connecting Classic Literature to Contemporary Issues

Valencia Clay, a middle school literacy teacher at Southwest Baltimore Charter School, regularly uses African American literary classics—the poetry of Langston Hughes, Lorraine Hansbury’s *A Raisin in the Sun*, Ralph Ellison’s *Invisible Man*—to capture the

attention of her students, many of whom are African American. But in eighth grade, her standards dictate that her students study literature from the Holocaust. Her students are participating in book clubs on *The Diary of Anne Frank*, *The Book Thief*, and Elie Weisel's *Night*. To help students relate to issues that might seem like ancient history from another continent and culture, she partnered the literary reading with a nonfiction study of articles on police profiling of black men.

Students were soon immersed in discussions of how the Nazis used propaganda and policy to manipulate the perceptions of mainstream Germans and in a parallel discussion of media bias and stereotyping in the contemporary American context. Looking at these issues side by side gave students a better understanding of how stereotyping—anywhere, anytime—works to undercut an accurate and complex picture of a diverse society. Many of Clay's students have themselves been the victims of racial stereotyping, and this connection made reading and writing purposeful in her classroom. "Students began to ask deep questions about media bias and whether the media is fair," she says. "They wanted to know more about the points of view of everyone involved, including the police." Students read news accounts, tweets from the protest line, and photos that one student had brought back from Ferguson, Missouri.

Then, based on the multiple perspectives gained from their nonfiction and fiction reading, students wrote point-of-view stories of their own: from the perspective of the bullet that killed Michael Brown, the perspective of a police siren during a riot, and the perspectives of perpetrators, victims, resisters, and bystanders in response to racial conflict. Discussing and writing from multiple perspectives about current events helped students understand the complexity of relationships in Nazi Germany too, says Clay. And getting the perspective right mattered to them because it connected to their real lives.

Deepening Literacy Instruction in the Content Areas

Some of the most compelling topics for students are embedded in current scientific controversies and contemporary social issues. This means that content-area classes are a ripe opportunity for deeper literacy instruction. Indeed, because gaining knowledge, vocabulary, and critical reading strategies are interdependent, and because evidence from multiple studies (EL Education, Liben, & Liben, 2015) vigorously points out that deeper learning results from infusing literacy acquisition into knowledge building, content-area reading is often the best place to teach literacy. Yet teachers of social studies and science often feel it is not their job to teach literacy skills in their classes. They feel that this is not what they were hired or trained to do; they are *history teachers* or *chemistry teachers*, not *reading and writing teachers*. At the same time, when asked how satisfied they are with their students' ability to read and write about historical or scientific content, almost all

are frustrated. This lack of content-specific literacy diminishes clarity and quality in almost all assignments but is rarely addressed proactively.

This is not just stubbornness on the part of content-area teachers. They are aware that the specific vocabulary and conventions of their fields are unlikely to be examined in English classes, and that students need help in this area. But they don't feel prepared to teach literacy, and they have so much content to cover that they can't imagine where they could find the time to do so.

The strategies and stories from content-area teachers who have overcome the same challenges in this chapter and Chapter 3: *Creating Scientists and Historians*, provide tools for science and history teachers to also become literacy teachers. We believe that when all teachers focus with their students on making sense of the texts they are reading and analyze what good writing looks like in their discipline, everyone wins. The students become more self-reliant and skilled, and the teachers are more gratified and successful.

Perhaps most important, the students become more capable and confident as young scientists and historians. Science teacher Peter Hill, getting ready to dive into reading a scientific article with his students, explains: "I was talking with a scientist and he said that 'My job is 10 percent experimenting, 40 percent writing, and 50 percent reading.' So I wanted my students to have a middle school experience of that in the classroom."

Specifically, new, more rigorous standards for literacy in the content areas and the demands of science and social science professions require that students not only read for literal understanding but also read for implications, biases, and context. In order to achieve deep understanding of disciplinary concepts, students need to act like historical or scientific detectives, examining and evaluating the evidence with accuracy and precision. Historians, for example, must be aware of changes in the meaning of vocabulary over time, and must read for how words are contextualized in the period or culture represented by a given text. Scientists read scientific diagrams, symbols, and data as closely as they do words, and at multiple levels of meaning. A chemist who has never actually seen a molecule nevertheless can visualize the three dimensional dynamics of one from its two dimensional representation on paper (Shanahan & Shanahan, 2008). The case study that follows, from a ninth-grade biology classroom, demonstrates the power of teaching students to read in the content areas.



CASE STUDY

Close Reading Scientific Journal Articles in Ninth-Grade Biology

The structure and function of DNA is a foundational concept in the discipline of biology, one many teachers replicate with a toothpick and marshmallows lab. Boston's Codman Academy biology teacher Jianan Shi wanted his students to understand the structure of DNA more deeply—by building the molecule guided only by the paradigm-shifting scientific journal article, “Molecular Structure of Nucleic Acids: A Structure for Deoxyribose Nucleic Acid,” published by James Watson and Francis Crick in 1953 in the journal *Nature*. His students were mostly below grade level in reading, and the article was loaded with challenging vocabulary, so enabling students to do the reading, thinking, and learning required analyzing the article in pieces, and then reconstructing it—much as the original scientists did with DNA. See Figure 2.2 for an excerpt of this very challenging text.

“I framed it as a challenge and kept reiterating how much I believed in them,” says Shi, emphasizing the importance of a growth mindset for building literacy skills. Students spent two weeks on ten paragraphs, close reading one paragraph each day, with a graphic organizer for each paragraph that guided them to identify, talk about, and write about new vocabulary, explain the process described by Watson and Crick, and build models of DNA. See the graphic organizer in Figure 2.3.

“Biology has so much vocabulary,” says Shi. “It’s a language unto itself and that can be a gatekeeper for many students.” Shi used to assign textbook reading as homework, but for this complex text he realized “students needed the mental workout in the classroom. They needed my support and the support of talking to their peers in order to answer challenging text-dependent questions.”

For further guidance on close reading primary sources, see Appendix C: Primary Source Close Reading Guide.

Providing Tools to Support Students

For some students—English language learners and students with individualized education programs (IEPs), primarily—Shi differentiated his instruction by providing them with a pre-annotated text, with the “gist” written in the margin or some words defined. This helped students who otherwise may have given up get a handle on a word or sentence that could turn the key to discovering the meaning of the whole paragraph.

For all students, Shi provided colored paper, markers, and K’NEX building blocks so that they could literally manipulate the ideas with their hands—building DNA as they read about it. Students really had to grapple with each word in the text and reproduce it through models one chunk at a time. “I kept telling them that engineers don’t just follow their supervisor’s directions. They have to read and figure out a working structure from mechanical manuals. They have to see the whole picture from its parts.”

No. 4356 April 25, 1953 NATURE 737

equipment, and to Dr. G. E. R. Deacon and the captain and officers of R.R.S. *Discovery II* for their part in making the observations.

¹ Young, F. B., Gerrard, H., and Jevons, W., *Phil. Mag.*, **40**, 149 (1920).

² Longuet-Higgins, M. S., *Mon. Not. Roy. Astro. Soc., Geophys. Supp.*, **5**, 255 (1949).

³ Von ARX, W. S., Woods Hole Papers in Phys. Oceanog. Meteor., **11** (3) (1950).

⁴ Ekman, V. W., *Arkiv. Mat. Astron. Fysik. (Stockholm)*, **2** (11) (1905).

MOLECULAR STRUCTURE OF NUCLEIC ACIDS

A Structure for Deoxyribose Nucleic Acid

WE wish to suggest a structure for the salt of deoxyribose nucleic acid (D.N.A.). This structure has novel features which are of considerable biological interest.

A structure for nucleic acid has already been proposed by Pauling and Corey¹. They kindly made their manuscript available to us in advance of publication. Their model consists of three intertwined chains, with the phosphates near the fibre axis, and the bases on the outside. In our opinion, this structure is unsatisfactory for two reasons: (1) We believe that the material which gives the X-ray diagrams is the salt, not the free acid. Without the acidic hydrogen atoms it is not clear what forces would hold the structure together, especially as the negatively charged phosphates near the axis will repel each other. (2) Some of the van der Waals distances appear to be too small.

Another three-chain structure has also been suggested by Fraser (in the press). In his model the phosphates are on the outside and the bases on the inside, linked together by hydrogen bonds. This structure as described is rather ill-defined, and for this reason we shall not comment on it.

We wish to put forward a radically different structure for the salt of deoxyribose nucleic acid. This structure has two helical chains each coiled round the same axis (see diagram). We have made the usual chemical assumptions, namely, that each chain consists of phosphate diester groups joining β -D-deoxy-ribofuranose residues with 3',5' linkages. The two chains (but not their bases) are related by a dyad perpendicular to the fibre axis. Both chains follow right-handed helices, but owing to the dyad the sequences of the atoms in the two chains run in opposite directions. Each chain loosely resembles Furberg's² model No. 1; that is, the bases are on the inside of the helix and the phosphates on the outside. The configuration of the sugar and the atoms near it is close to Furberg's 'standard configuration', the sugar being roughly perpendicular to the attached base. There

is a residue on each chain every 3.4 Å. in the z-direction. We have assumed an angle of 36° between adjacent residues in the same chain, so that the structure repeats after 10 residues on each chain, that is, after 34 Å. The distance of a phosphorus atom from the fibre axis is 10 Å. As the phosphates are on the outside, cations have easy access to them.

The structure is an open one, and its water content is rather high. At lower water contents we would expect the bases to tilt so that the structure could become more compact.

The novel feature of the structure is the manner in which the two chains are held together by the purine and pyrimidine bases. The planes of the bases are perpendicular to the fibre axis. They are joined together in pairs, a single base from one chain being hydrogen-bonded to a single base from the other chain, so that the two lie side by side with identical z-co-ordinates. One of the pair must be a purine and the other a pyrimidine for bonding to occur. The hydrogen bonds are made as follows: purine position 1 to pyrimidine position 1; purine position 6 to pyrimidine position 6.

If it is assumed that the bases only occur in the structure in the most plausible tautomeric forms (that is, with the keto rather than the enol configurations) it is found that only specific pairs of bases can bond together. These pairs are: adenine (purine) with thymine (pyrimidine), and guanine (purine) with cytosine (pyrimidine).

In other words, if an adenine forms one member of a pair, on either chain, then on these assumptions the other member must be thymine; similarly for guanine and cytosine. The sequence of bases on a single chain does not appear to be restricted in any way. However, if only specific pairs of bases can be formed, it follows that if the sequence of bases on one chain is given, then the sequence on the other chain is automatically determined.

It has been found experimentally^{3,4} that the ratio of the amounts of adenine to thymine, and the ratio of guanine to cytosine, are always very close to unity for deoxyribose nucleic acid.

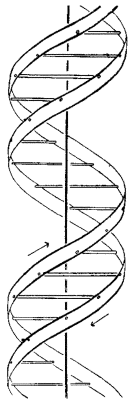
It is probably impossible to build this structure with a ribose sugar in place of the deoxyribose, as the extra oxygen atom would make too close a van der Waals contact.

The previously published X-ray data^{5,6} on deoxyribose nucleic acid are insufficient for a rigorous test of our structure. So far as we can tell, it is roughly compatible with the experimental data, but it must be regarded as unproved until it has been checked against more exact results. Some of these are given in the following communications. We were not aware of the details of the results presented there when we devised our structure, which rests mainly though not entirely on published experimental data and stereochemical arguments.

It has not escaped our notice that the specific pairing we have postulated immediately suggests a possible copying mechanism for the genetic material.

Full details of the structure, including the conditions assumed in building it, together with a set of co-ordinates for the atoms, will be published elsewhere.

We are much indebted to Dr. Jerry Donohue for constant advice and criticism, especially on interatomic distances. We have also been stimulated by a knowledge of the general nature of the unpublished experimental results and ideas of Dr. M. H. F. Wilkins, Dr. R. E. Franklin and their co-workers at



This figure is purely diagrammatic. The two ribbons symbolize the two phosphate-sugar chains, and the horizontal rods the pairs of bases holding the chains together. The vertical line marks the fibre axis.

Source: Watson, J. D., & Crick, F.H.C. (1953). Molecular Structure of Nucleic Acids: A Structure for Deoxyribose Nucleic Acid. *Nature*, **171**, 737-738.

Figure 2.3 Graphic Organizer: Paragraph 3 and 4 Recording Form

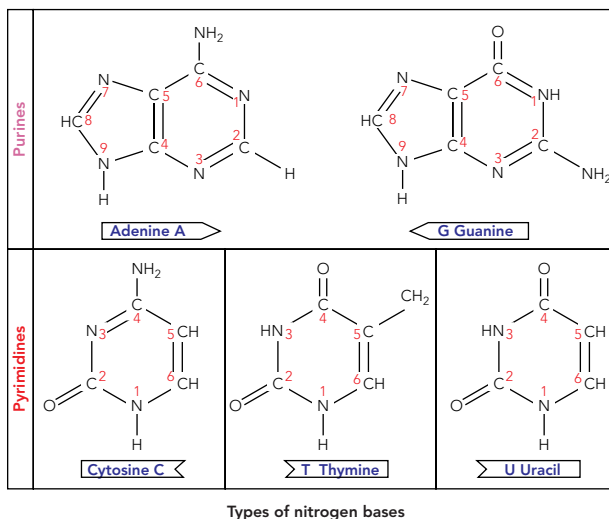
Do Now (Questions 1–3): Use the reading and diagram to answer the following questions:

A nitrogenous base is a nitrogen-containing molecule. They are particularly important since they make up the building blocks of DNA and RNA.

1) What is a nitrogenous base?

2) What are the five different nitrogenous bases?

3) What are two main types of nitrogenous bases?



At the end of the DNA reading unit, Shi’s students were tired but proud. “I realized,” said Shi, “that just covering my standards is an excuse not to teach things well. My students can break down any text using this method and get a lot more out of it because they did the thinking themselves. They mastered it, and then we celebrated big time.”

To see a similar lesson sequence involving close reading in a middle school science classroom, view the accompanying two-part video.

WATCH



Video 7: Reading and Thinking Like Scientists—Day 1: Strategies for Making Meaning from Complex Scientific Text

Video 8: Reading and Thinking Like Scientists—Day 2: Deepening Conceptual Understanding through Text-Based Tasks

Choosing Engaging TEXTS

Texts that lead students to deeper learning serve as a second teacher in the literacy classroom. They are not just any texts. They are ones that push students to understand more and differently than the teacher’s voice alone can do. Indeed,

the 2006 ACT report “Reading between the Lines” showed that students who succeed in college must do more than be able to apply reading strategies like inferring and questioning. They must be able to apply those strategies to dig meaning out of *complex* text. “What students could read, in terms of its complexity, was at least as important as what they could do with what they read” (National Governors Association Center for Best Practices, Council of Chief State School Officers, Appendix A, 2010, p. 2).

Choose Outside-the-Box Texts

Previously we explored how English teacher Valencia Clay paired literature with informational text about a compelling topic. Content-area teachers, similarly, can make reading more compelling and challenging for students by supplementing or replacing textbooks with trade books and primary sources. Letters, historical photographs, documents, data sets, and artifacts are compelling and often challenging reads for students. Primary sources push students to inquire about the context of language: who’s speaking, when, and for what purpose—that mediates the meaning of any text. As such, primary sources demand that students shift from a shallow regurgitation of textbook facts and platitudes, to a deep investigation of the vocabulary, structure, and style of a text written by and for someone engaged in an original transaction of meaning. See Table 2.1 for a variety of types of informational texts that can be used in the classroom. Also see the accompanying video of tenth-grade humanities students in New York City evaluating and curating sets of primary source documents to best tell the story of the holocaust.



WATCH Video 9: Prioritizing Evidence to Address a Document-Based Question

Balance Rigor and Relevance

What if you have a compelling topic, but no textbook? A quick Google search may yield a long list of Web pages, but no clue about the rigor, relevance, or appropriateness for your students. Furthermore, if the text is not compelling for you as a teacher and adult reader—if it is not fascinating in content and ideas or beautiful or intriguing in structure and style—students will likely not find it compelling either. Whatever the content match and complexity level of the text, if it is not a

Table 2.1 Types of Informational Text

Expository	Argumentative	Instructional	Literary Nonfiction
Text books	Opinion/Editorial pieces	Training manuals	(Auto)Biographies
Reports	Speeches	Contracts	Histories
Tourism guides	Advertisement	User guides/manuals	Correspondence
Product specifications	Political propaganda	Legal documents	Curriculum vitae
Product/Service descriptions	Journal articles	Recipes	Memoirs
Magazine articles	Government documents	Product/Service descriptions	News articles
Company profiles	Legal documents		Essays
Legal documents	Tourism guides		Interviews
Agendas	Correspondence		
Correspondence	Essays		
Essays	Reviews		
Interviews	Memoirs		
Government documents			
News articles			

Source: New York State Education Department (EngageNY) (n.d.). Passage selection guidelines for assessing CCSS ELA. Retrieved from <https://www.engageny.org/resource/new-york-state-passage-selection-resources-for-grade-3-8-assessments>

worthy text—one that is provocative to read once and rewarding to read again—it will not motivate students to read.

So what are the factors to consider in the search to find a worthy text that is compelling, complex, and relevant to students?

Analyze complexity

A text that will give students a leg up the ladder of complexity is both rigorous and engaging for students. It is a text that enables students to discover both new information and needed information. And it is a text that engages students in thinking deeply about text structure, vocabulary, and style. In short, it is a text that is meaty enough for students to come back to multiple times and to leave each reading feeling full and satisfied. Analyze possible text candidates for quantitative

complexity, qualitative complexity, and for a match with the needs of individual readers and tasks.

Quantitative complexity, based on word and sentence length, as well as syntax, is easily determined by computers that yield Lexile text measures or Flesch-Kincaid grade levels. Consider whether the complexity of the text based on these measures matches readers' ability to comprehend complex words and sentences.

Qualitative complexity is best measured by teachers employing their professional judgment, experience, and knowledge of their students and subject. It refers to more subjective criteria, including:

- *Background knowledge*. The experience that readers must bring to the text helps them understand its content and language. Sometimes, teachers can provide this background knowledge through initial lessons prior to introducing the text.
- *Language*. Is the vocabulary academic or discipline specific? Does the text rely extensively on figurative language or unconventional syntax? Shakespearean plays, poetry, and scientific journals are good examples of text with language complexity.
- *Meaning*. Are there multiple levels of meaning or purpose in the text? Ironic or satirical literature and children's books with multiple allusions that only adults will "get" (the Pixar film *Shrek* is a great example) are texts with multiple levels of meaning.
- *Structure*. Are the organization, genre, and text features conventional, compelling, or innovative? Scientific diagrams, creative nonfiction, and magical realism are just a few examples of texts with complex structures.

The needs and motivations of readers may dictate that teachers begin with a less complex text that meets students where they are, and then build on that success with something more complex. It is critical that teachers identify sections of the text that students can access independently by "having a go" on their own and sections of the text that, if not understood, will steer students in the wrong direction. These excerpts will guide lesson scaffolding, from lessons that invite students to grapple on their own to lessons that are launched with a teacher directed mini-lesson.

For further guidance on factors to consider when selecting text, see Appendix D.

Engage with relevance

A worthy text must be one that students have a purpose for reading. They want to read it because it answers questions they have. They want to read it because it is visually exciting or written in words and phrases that humor or inspire them. Or, they want to read it because it helps them understand how to write in the genre or format of an upcoming assignment. Choosing text that not only informs or engages students about a topic but also models for them how to structure their own writing is generally a wise choice. In the accompanying video see how a teacher's wise choice of a timely and highly relevant text—the Investigation of the Ferguson Police Department by the Department of Justice—deepens her students' understanding of the successes, challenges, and possibilities of policing in America.



WATCH Video 10: Policing in America: Using Powerful Topics and Texts to Challenge, Engage, and Empower Students

If you can't find the right text, consider writing it yourself

In developing their simple machines unit for second graders, Bernstein and Taffer considered their young readers and their diverse interests and readiness. They knew they had some nonreaders and also that students could get a great deal of information from examining pictures. They decided to kick off their learning expedition by inviting students to view and ask questions about *pictures* of machines. They also read aloud an informational science book for emerging readers. This shallow dive into the topic, with visuals and teachers' voices doing most of the work of creating meaning, gave students a chance to get excited about the topic and begin to grapple with the guiding questions of the entire unit: "How do simple machines make our lives less work?" "How can I use my knowledge of simple machines to serve my community?"

Then, once students were hooked on the topic, Taffer and Bernstein asked students to use their reading muscles to dig deeper into text with no pictures. In order to balance rigor and relevance in text that would stretch students and also engage them, Taffer and Bernstein took a novel approach: they wrote their own texts (see Exhibit 2.1). The series of short passages they used for close reading lessons were crafted to include key vocabulary words and to model the writing strategies—introducing a topic with a question, supporting a statement with details—they wanted students to eventually use in their own writing.

Exhibit 2.1 What Is Work?

As second graders you work all the time! At school and at home you have work to do. But when scientists use the word *work* they don't mean the opposite of play. For scientists, work means moving something. Anytime you push or pull something to move it you have done work. You can move something a few inches like a pencil on your desk or you move something many miles if you take it with you on a long walk. Pushing a friend on the swing is work. But pushing against the wall of our classroom is not work because no matter how hard you push you can't move it. If I ask you to put your chair on your desk is it work? What about if I ask you to stand still and hold heavy books? Since simple machines make work easier, we know that simple machines make it easier for us to move things.

Crafting Challenging Learning Targets

In addition to choosing worthy texts, an important first step toward deeper literacy instruction is crafting learning targets that ask students to grapple with the complexity and nuances of text. Deeper learning requires that students do more than simply decode and restate what a text says. They must also describe what a text does (its purpose and how it achieves its purpose) and what a text means (to its particular audience). They must use the strategies of inference and questioning to ask why an author has chosen a particular diction and structure. They must infer bias, tone, and perspective, and analyze how the language and organization of a text impacts an audience. They must consider the implications and context of the information or argument. In short, they must read, think, talk, and write critically. Crafting learning targets for individual reading and writing lessons begins by teasing apart the discreet skills and concepts that critical readers employ.

Identify What You Want Students to Learn

Learning targets that highlight enduring and transferable literacy and cognitive skills empower students to be successful self-directed learners across contexts. Four developmentally appropriate learning targets from the simple machines literacy unit illustrate this precept.

1. *I can use my whole body to show a speaker I am listening to them.* This target addresses the Common Core Speaking and Listening Standard SL.2.1: "Participate in collaborative conversations with diverse partners about grade 2 topics and texts." The language of the target is student friendly, but it also articulates

that using your whole body—making eye contact, sitting knee to knee, holding your hands quiet and still—is how one listens deeply.

2. *I can learn new facts about simple machines by listening and asking questions.* This target addresses Common Core Speaking and Listening standard SL.2.3: “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.” It connects learning new facts with the habit of asking questions, which underscores why students should engage in discussion and also how one learns about any topic.
3. *I can find important vocabulary in a text.* This target addresses Common Core Reading Standard RI.2.4: “Determine the meaning of words and phrases in a text.” It invites students to identify words that are important because they illuminate the meaning of the text. These are words experienced readers hang onto and return to—the domain-specific and academic vocabulary that bolster reading for a lifetime.
4. *I can find the most important facts in a text.* This target addresses Common Core Reading Standard RI.2.6: “Identify the main purpose of a text, including what the author wants to answer, explain, or describe.” Implicitly this target asks students to use evidence in the text, synthesize, compare, and select facts from the text to justify how some support the main idea better than others.

Develop Text-Dependent Questions in Advance

Text-dependent questions—questions that require students to read for evidence and use the facts, quotes, and graphic information in a text to support their answers—require that students wrestle with the words on the page in order to determine the meaning of a text. Text-dependent questions serve as a scaffold to understanding—when developed thoughtfully, with learning targets in mind, they can enhance comprehension, not just assess it. The questions “can literally lift students up to challenging text, enabling them to understand more about a text than if they are left on their own” (Dobbertin, 2013, p. 55).

Planning these questions in advance, so that they strategically engage, stretch, and build students’ reading muscles, is a critical component of deeper instruction in literacy. Without preplanning, it is easy to fall back on low-level questions—used to highlight or remind students of facts from the text, rather than crystallize or push conceptual understanding.

Every time we ask students, “What was the name of the town in which the characters in this story lived?” we leave less time for questions like “Why do you think the characters never left home?”

—*Alfie Kohn, “Who’s Asking?”*

Educational Leadership September 2015

Developing an overarching “focus question” that reflects students’ purpose for reading creates an umbrella for the series of text-dependent questions that will guide students through a text (see Exhibit 2.2). Beneath this umbrella, one effective way to generate text-dependent questions is by addressing all four quadrants of qualitative complexity: background knowl-

edge, language, meaning, and structure. Questions that help students understand these four layers of a text will lead students to the big ideas of the text.

Exhibit 2.2: Text-Dependent Questions Related to Simple Machines

Focus Question: How do simple machines make our lives less work?

Background knowledge

Why is the scientific definition of “work” different from our everyday definition?

Language

What is the scientific definition of work?

Meaning

Why is holding heavy books not “work?”

Structure

Why does the author ask the reader so many questions in this writing?

Beneath the umbrella of the focus question, organize text-dependent questions to build students’ confidence and capacity as readers. Start with small “right there” questions, ones that students can find answers to directly in the text. Build up to questions that require students to infer from text clues, synthesize supporting details, or evaluate quotes or logic. Create a logical sequence of questions so that the answers to early questions accumulate evidence needed to answer later questions. Another way to make questions deeper and more complex is to start

with small bites of text—words and sentences—and move to larger chunks of text or to multiple texts that students must consider as a pair or set.

Gwyneth Hagan, lead curriculum writer for EL Education’s Grades 3–8 ELA Curriculum, advises teachers who are designing their own literacy-rich units to

“write a ton of text-dependent questions that scaffold from concrete to abstract. Begin with questions that get at the gist of the reading. Then ask yourself what will make this text hard for readers—vocabulary or structure or theme? Winnow your pool down to the questions with the highest leverage points for serving your purpose in reading this text. Then keep the others in your back pocket—for when you need to slow things down or support students who feel challenged by the text.”

Sequence Lessons So That Students Need to Know What’s in the Text

In addition to creating questions that require students to reference evidence from the text, deeper instruction invites active participation. The interplay between kinesthetic, visual, and verbal activities increases engagement and reawakens students’ enthusiasm for reading. Sketching, acting out, sorting, debating, and doing experiments are all ways of not only *applying* what’s learned from text, but also *deepening* learning from the text.

Hands-on learning experiences deepened the learning for Bernstein’s and Taffer’s students



While planning their simple machines unit, Bernstein and Taffer intentionally linked lessons that had students mostly reading, to lessons that had students mostly doing—applying what they had read to real-world contexts. According to Taffer, “Doing hands-on experiments filled out students’ background knowledge, because they saw firsthand what they had read about in the texts. Toy cars roll smoothly down an inclined plane, but not so much over wood chips on the playground.” Running the experiments gave students a reason to use the vocabulary and concepts they had read about. It also drove them back to the text to find out more information that would help them explain the results of their experiments. Like students working a jigsaw puzzle, the more they learned about their topic, the more “pieces” they could fit into the puzzle, and the more they used the knowledge they gained.

Doing Worthy Work: The Task

Just as Bernstein and Taffer gave students many opportunities to *read to understand*, they also gave students regular opportunities to apply their learning through tasks that showed their understanding. For example, students wrote using the evidence from both their reading and their experiments. After close reading a text called “How Wheels Were Invented,” students tried to solve the problem laid out in the text with their own inclined planes and wheels. By infusing and sequencing their lessons to address all of the literacy skills—reading, thinking, talking, and writing—and adding *doing*, Bernstein and Taffer actively engaged their second-graders. They gave students with varied processing styles equal access and motivation to read challenging text.

Bernstein’s and Taffer’s tasks were carefully planned and scaffolded to support the execution of high-quality work. They included short tasks, like writing thank-you letters to guest speakers that give students a chance to practice discreet writing skills. They sequenced lessons in writing topic sentences, using evidence, writing introductions and conclusions, incorporating questions into their paragraphs, the difference between revision and editing, and oral presentation. These lessons, which took place over many weeks, allowed students time to learn and focus on new skills. Each lesson directed students back to the text or to their own science experiments to grapple with evidence to support their talking and writing. Consequently, students learned to value evidence as the litmus test for any claim. They

also learned implicitly that reading and writing (the text and the task) are intricately connected and that more and better evidence will make a more convincing argument—one that can move important people to action. See Appendix E: From Assignment to Assessment, for a process to support high-quality work.

Use Models to Understand the Criteria for Excellence

For both teachers and students, the learning experiences in these lessons were guided by a vision of effective persuasive letters. Taffer and Bernstein employed a high-leverage move for motivating students to create quality work: a critique lesson. In a critique lesson, students and teachers together examine high-quality (and sometimes anonymous low-quality) samples of the kind of writing students will be doing in order to collaboratively generate a list of the criteria that define high-quality writing in the genre that students are expected to produce. Such a lesson is designed to support the learning of all students, not primarily to improve the work of one. (Ideally the models a teacher uses are of student writing, but they could also be professional or teacher-created writing that exemplifies specific criteria students can describe in their own words.¹)

To launch their simple machines unit, Bernstein and Taffer each completed the assignment they would soon give their students and then analyzed their model letters with students. In Bernstein's model (see Exhibit 2.3), she has identified the elements of a good persuasive letter that she wants students to include in their own letters.

These elements (i.e., criteria for success) were helpful to students as they began planning and writing their own letters. This process also helped the teachers better anticipate the challenges students would encounter when they began writing, which helped them craft the lessons they taught to scaffold student success.

Exhibit 2.3: Model Letter Used for Analysis

February 9, 2014

Dear Board of Education:

I am a second-grade student at Centennial, a School for Expeditionary Learning. There are many students at our school who use wheelchairs. Yet, our playground is not wheelchair accessible. [*problem*] We need your help to make our playground an inclusive place where all students can play. [*something I want my reader to do*]

Play is a right that all children should have! [*exclamation*] Play helps children stay healthy. Children need to race, yell, roll, hide, and make big messes. When children play

(continued)

together, they learn to work together. Unfortunately, my friends who use a wheelchair don't get to play because our playground's surface is covered in wood chips. *[strong fact]*

If we change our playground surface to poured rubber, everyone would be able to play together. We have been studying simple machines. We found out that wheels need a low friction surface to roll well. Many people are realizing that wood chips are not accessible for wheelchairs. One judge even ruled that a school district in California had to change their playgrounds' surfaces. By just changing our playground surface, we could make our playground accessible to all children. *[restate main idea]*

I am truly sad about the fact that in 2014 children with disabilities are still excluded from the playgrounds in Denver Public Schools. *[big feeling]* Being excluded feels awful. My friends in wheelchairs are just like me. They want to play too. I want to make sure that playgrounds are a place where all children feel included. *[what I want]*

I would love to find a time to meet and discuss these important changes that we need to make. *[something I want my reader to do]* Don't you think it's time to make sure that all students have the right to play? *[question]*

Sincerely, Alison Bernstein

Motivate Students with an Authentic Audience

After analyzing models, engaging in specific writing craft lessons, practicing, and receiving feedback from both peers and teachers, students completed their letters and sent them to district officials. Students also presented excerpts from the letters out loud in the form of an informational and persuasive simple machines readers' theater. The performance blended sentences from the letters with voices that included the students with special needs who sparked the motivation for this project, many of whom were nonreaders and nonwriters. For one student with a serious behavior challenge, says Taffer, "This was a defining moment where he found his voice. Now he has become a helper in the special needs classroom and has earned the reward of assisting those students at a Special Olympics event. The presentation allowed him to find empathy and learn how to use his voice to make a difference." See Exhibit 2.4 for this student's letter.

Exhibit 2.4: Sample Student Letter

March 7, 2014

Dear Ms. Laura, Ms. Brinkman, and Mr. Liberatore,

Kids in wheelchairs can't play on the playground. We don't have enough ramps. Kids in wheelchairs can't go through the wood chips. Kids in wheelchairs can't get to the swings. I feel disappointed and depressed because kids in wheelchairs can't access our playground.

Just with a few changes to the Centennial playground, kids in wheelchairs can play so it is fair to them. We can add some more ramps to the Centennial playground. Instead of the wood chips we can have turf or poured rubber. I would feel happy and excited if we did these things to our playground so kids in wheelchairs may access our playground.

We need your help with the Centennial playground! Can the school district help us pay for this? Whose permission should we need to make this happen? Can you help us do this to our playground? This is a good idea for the Centennial playground.

Sincerely, Derek

Writing for an audience inspires, motivates, and empowers students to do their best work. Knowing that they would be presenting their persuasive letters to people with the authority to upgrade their playground motivated Taffer's and Bernstein's second-grade students to write expert paragraphs and to revise them with care. "Students came up with powerful sentences like, 'Woodchips may be my friends, but they're wheelchairs' enemies,' because it really mattered to them to have an impact on the readers. They also stayed engaged through the revision process when older students helped them peer edit. They were motivated to get the words and punctuation right."

Empower Students to Reflect on Transferable Skills

As we saw in Chapter 1, debriefing "how we learned" as well as "what we learned" enables students to name the new skills they have gained in a lesson or unit that will be helpful to them again in the future. Ali Bernstein looped with the second graders featured here into a third-grade classroom. Working with the same students who did the simple machines unit, she testifies to how the lessons they learned the previous year about a different skill—reading for and writing with evidence—transferred to their approach to reading this year. "Last year," she says, "we used T-charts to record our main ideas and evidence as we read. We had to model that over and over and it was hard for students. This year, right away a student suggested that strategy when we started reading a difficult text. This has allowed me to increase the rigor for everyone, and has been especially helpful for students who struggle. They know that if they persevere, partner up with a stronger reader, and use this tool, they will be able to get through it and understand the text. Our work has lifted everyone up. There is no opt out. We can all reach the target and we know what that looks like."

As this simple machines unit shows, determining a powerful lesson sequence and using the Four Ts to get the most out of any curriculum lays a solid foundation for deeper instruction. In the In Practice section that follows we build on that foundation to unpack specific instructional strategies, including the teaching of writing, that strengthen students' literacy skills.

IN PRACTICE

For the Love of Literacy

Ironically, because reading and writing are the daily bread of every grade level and every subject area, both teachers and students can take their value for granted. For students to appreciate how literacy sustains lifelong learning, they need to see reading, writing, speaking, and listening as powerful tools for improving their own lives. In this section, we focus on 12th-grade ELA and history classrooms at Capital City Public Charter School in Washington, D.C, where students who could be the most indifferent to reading in school are getting energized by one last booster shot of deeper literacy instruction before they graduate.

Launching the Text with Wonder

Capital City history teacher Kavitha Kasargod begins a yearlong progression of strengthening students' capacity for argument—a skill colleges frequently flag as weak—with a complex text about writing proficiency in urban high schools. In the same spirit of wonder with which the Centennial second graders began their learning about friction, Kasargod introduces Peg Tyre's groundbreaking article, "The Writing Revolution," first published in the *Atlantic* (2012) to her students. The content of Tyre's article is packed with data on what typical high school students *can't* do as writers. Provocative articles like Tyre's can be great hooks.

The article invokes students' wonder because they relate to the story of other students for whom writing an essay initially seems like an impossible task. The students in the article, who never learned the strategic calculus of stringing sentences together, learn to convey their ideas and prepare for college through persistence and incremental practice. But the article provides more than an access point for these high school readers. The structure and language of Tyre's article also provides a strong professional model of how a writer builds an argument, like a careful stonemason, by layering, fitting, and joining pieces of evidence

together in defense of a claim. “I am not preparing you to leave here in June,” Kasargod tells her students after they’ve discussed the Tyre article, “I’m preparing you to be ready for your first day of college. A big part of that is being able to independently think and access resources. We live in a world where you can Google anything. But you also need to know how to read—really read—and respond to what’s on your screen.” The logic of this revolution is evident to students. They know from this first lesson that they are going to have to step up and work in order to succeed.

Grappling with Meaning

Deeper instruction that challenges students provides them with enough background knowledge to feel anchored, enough scaffolding to feel supported, and enough time and intellectual freedom to wrestle with complex ideas and problems that stimulate their thinking. *Grappling* with ideas means that students are putting the building blocks together themselves. As the author of *The Having of Wonderful Ideas*, Eleanor Duckworth, has said, “You have to put them [students] in a situation where they develop that understanding—it’s not going to happen from your telling them. . . . They have to put the idea together themselves, or they don’t have it at all. Otherwise, it’s just words” (1991, p. 30). But what does that “putting together” actually look like?

Insist That Students Do the Thinking

Kasargod begins a close reading of the Peg Tyre article by asking students first to discuss the “gist” of the opening paragraph. She points out to students that real-world reporting and scholarship, the kind they will read frequently in college and even in serious mainstream newspapers and journals from the *New York Times* to *Rolling Stone*, often don’t have an obvious topic sentence or explicit thesis statement. Students’ next challenge is to identify main ideas and supporting details, codifying these in a graphic organizer. Although students have read and annotated arguments in English class, transferring this skill to an authentic text in history class raises the real possibility that students won’t be able to make sense of it, that in their first attempt they will “fail” as readers. Work worth doing, work that grows our stamina, our perseverance, and our understanding always contains this possibility.

In order for students to practice making meaning on their own, they need many opportunities to grapple with complex ideas—before, during, and after reading.

In a reading lesson that uses the Workshop 2.0 lesson structure (see Chapter 1 for more on Workshop 2.0), the first opportunity occurs five minutes into the lesson, when students read their first chunk of text independently, often with a broad question to guide their thinking. It's important that this does not happen *after* the teacher has read part of the text while “thinking aloud” or taught specific and explicit reading strategies that can be used to pry open the text. Instead, the teacher simply provides a short section of text for students to grapple with on their own, to see how they can make sense of it first without assistance.

The possibility of failure often scares teachers, who, understandably, want their students to succeed. We know from the literature on academic mindsets, however, that failure is in fact a prerequisite of success; we learn much more from failure than we do from easy wins. We stated the following in Chapter 1, but it's worth repeating here:

“A well-designed opportunity for students to grapple with problems, texts, ideas, or concepts is where the rich brew of deeper instruction is most powerful. This is where asking the right questions, as opposed to giving the right answers, can give students a challenge that they can sink their teeth into. Allowing them to grapple with that question collaboratively engages them in co-constructing knowledge and empowers them as they learn that they can discover the “answers” with their own ingenuity.”

Table 2.2 contains a few strategies to enable those students who refuse to try or give up easily to accept the risk of failure.

Table 2.2 Encouraging Students to Grapple with Challenges

If you're concerned that . . .	Try this . . .
Students will give up when the text feels too hard	Encourage students to re-read. Give them more time than a single read requires.
Students give up when they encounter hard or unfamiliar vocabulary	Pre-teach select vocabulary words and demonstrate strategies for determining meanings in context.
Students don't know enough about the topic to care about reading the text	Introduce the topic with photographs, a read-aloud, or artifacts that spark students' curiosity.
Students will give up because the text is long or overly dense	Break the text up into smaller chunks. Build students' reading muscles by praising effort rather than achievement.

Constructing Understanding

Once students are engaged in a challenging text, reading it again and talking and writing about it with peers allows them to take “core samples” of meaning from different layers of the text and to sift these understandings through conversation with other readers.

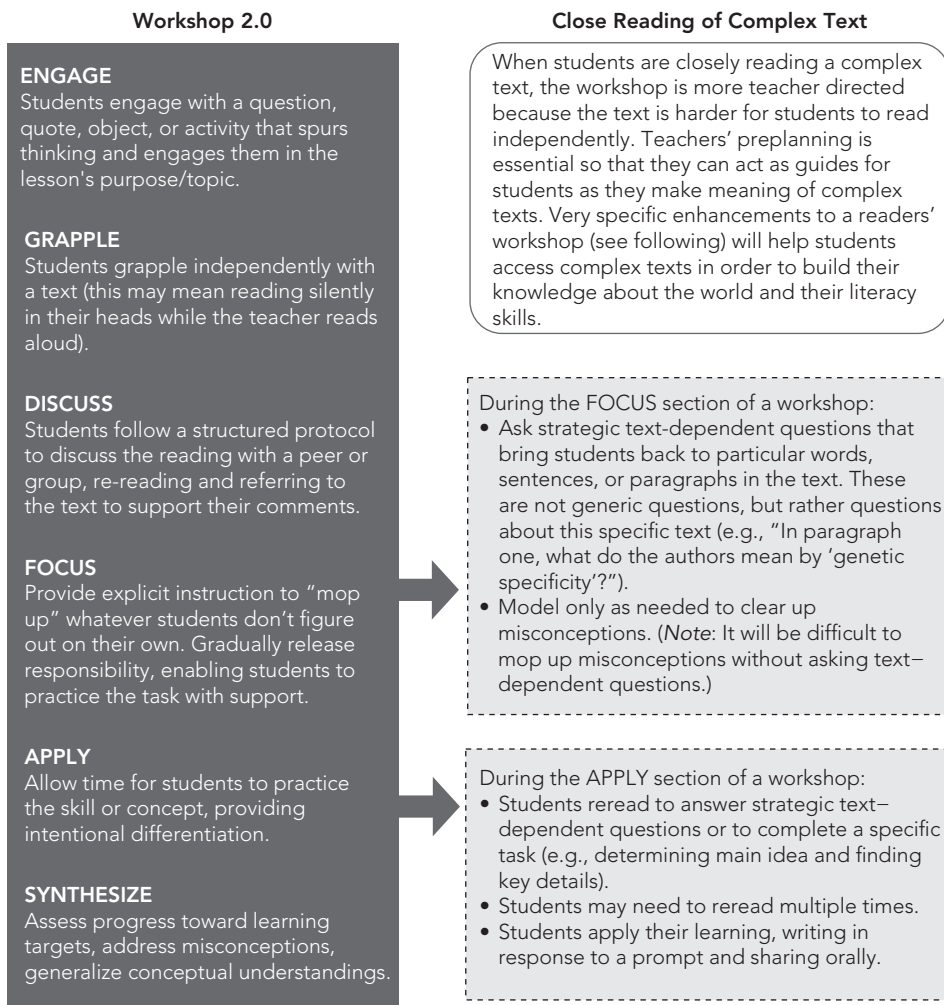
Give Students Ownership through Annotation

One important way that readers take ownership of a text is by literally writing all over it—annotating it with comments, questions, highlights, and other annotations. Students at Capital City get so much practice annotating text, says English teacher Justin Sybenga, that several have returned from college to show him how they’ve annotated college reading assignments. These students have remarked that many of their peers struggle with college reading precisely because they aren’t in the habit of annotating what they read.

Kasargod requires her students to come to a discussion with their text annotated with a surprise, a connection, a comment, and a question. For students who are anxious about participating, the minimal writing they do before the discussion gives them something to say and allows them to choose their moment for chiming in. In other words, annotation becomes a vehicle for rich discussion and argument.

Kasargod’s students annotated the Peg Tyre article by underlining main ideas and numbering pieces of evidence that support those ideas. Then, over multiple lessons, they teased apart the paragraphs to identify and discuss Tyre’s strategic and sophisticated use of quotations from her interviews, how she explains data from scientific research, how she creates setting and plot for this real-life story with lively description, and how she attributes subclaims to experts in order to establish credibility for her argument. As the semester proceeds, students transfer those skills to primary sources they are reading about the formation of government—including the Constitution. “We close read the search and seizure amendment and break it down. We make a word wall of difficult vocabulary words. We paraphrase it side-by-side with the text. Then, we unpack its meaning in the context of what happens in students’ own lives today,” says Kasargod. This time-consuming but productive peeling-of-the-onion approach to text enables students to analyze at a deep level. It is also how they master academic vocabulary that unlocks the door to the next complex text. Figure 2.4 describes how teachers can augment a Workshop 2.0 lesson for the close reading of complex text.

Figure 2.4 Augmenting Readers' Workshop 2.0 for Close Reading of Complex Text



Ask Questions Worthy of Discussion and Written Response

Launching a text with “What do you wonder?” invites students to be curious. Asking students “How do you know?” or “Why does the author think that?” brings rigor to students' process of exploring their curiosities. Text-dependent *how* and *why* questions redirect students' attention to the text itself, to the facts, quotes, argument, and explanation offered there. It pushes them to support and

justify an answer to their initial question. It may also help them understand that the best questions have multiple answers. The evidence one student lifts up may be different from the evidence another student brings forward from the same text. When students talk with each other about the discrepancy, collaboratively constructing a mutual understanding, their job is to determine which evidence is most important or how the evidence works together to support a bigger concept.

Socratic Seminars allow students to lead their own learning as they engage deeply with texts and each other



Kasargod develops these analytical skills by intentionally asking strategic text-dependent questions. In one example, she has students read an essay on native communities in Chesapeake Bay, and then she leads a Socratic Seminar with a series of questions that stair-step up Bloom's Taxonomy. Her questions include the following:

- *Remember.* Who were the Native Americans in the Chesapeake region prior to European arrival?
- *Understand.* Describe the structure of the communities in which they lived? How did Native Americans assimilate into European life?

- *Apply.* The text says, “Many of the difficulties experienced by the Chesapeake Natives were mirrored over the centuries by other Native Americans as settlers moved across the continent.” What does this mean? Provide examples from other time periods.
- *Analyze.* The text states, “Oral tradition was critical for preserving cultural knowledge; when elders died, it was like having entire libraries burn down.” What does this mean and are there contemporary examples of this?
- *Evaluate.* Did the signing of treaties between Native Americans and the English colonists lead to a positive or negative outcome? Explain in your own words.

In the Strategy Close Up that follows we see the value of another tool—technology—for supporting students to have engaging and purposeful conversations about texts or other academic subjects.

STRATEGY CLOSE UP: Digital Discussion Motivates Students to Think and Write

In schools with reliable and accessible Internet technology, interactive discussion tools like blogs, threaded discussions, and synchronous chat applications provide a compelling way for students to talk productively to each other on the digital page. According to Marielle Palombo, an education consultant who specializes in using Web 2.0 media and other technologies to support learning, thanks to texting, many students are already experts in interacting through writing. “Students often recognize right away that online exchanges allow everyone to speak and be heard at the same time, which differs from face-to-face discussions. They appreciate the opportunity to argue in writing about ideas with real people—their peers—rather than just complying with the demand to show what they know to the teacher, which is frequently the form that traditional classroom writing exercises take.” Palombo explains that these tools can meet both students’ need to be social and teachers’ need to get students discussing substantive ideas in accountable ways, using academic rhetoric.

“Written conversations online are qualitatively different from classroom talk because you have time to compose your own thoughts and process other peoples’ thoughts, and because multiple people can be communicating at the same time, and especially because the conversation is captured for students and teachers to revisit. With appropriate norms and discussion protocols established, the platform can encourage a diversity of responses, inclusive participation, and a safe space for intellectual interchange. Being heard in this way makes a differ-

ence for students and can increase their investment in communicating clearly and effectively.”

Palombo recommends that teachers identify the specific purposes they want digital discussions to serve and choose applications accordingly. Some require more training or preparation up front than others, and some are designed with privacy and sharing features customized for educators and students. If you want students to have some breathing room and reflection time, you might try using a threaded discussion, and ensure that your prompts push students to think, use evidence, and engage with each other. If you want students to brainstorm collaboratively or participate in small-group conversations, a chat tool might work best. If you want students to draft essays that others can critique, a blog might be the best fit.

Whatever the purpose, teachers should start small with an application that is manageable, given their resources and prior knowledge. “Teachers need to see examples of using these tools that are not focused solely on the bells and whistles of what is technically possible. They need to see how specifically these tools meet the needs of students and teachers as writers, readers, and speakers.” If digital communication media such as chats, blogs, and online discussions can motivate students to join academic conversations in purposeful ways, then they can become valuable tools for the classroom.²

Teach Conversation Norms

Students in engaging literacy classrooms become accustomed to the interplay of reading, thinking, talking, writing, and doing. They see (and feel) that they learn best when they participate, and it’s more fun because the text and the talk answer their questions and give them a chance to share their own ideas. However, in order for this interplay to become the norm in a classroom, teacher and students must establish a culture of conversation that is respectful and inclusive, one in which students who speak up feel both safe and valued. This takes time and intention.

The first step is creating and holding space for classroom norms that “make it absolutely clear to everybody that the smallest comment is valid and interesting to other people” (Duckworth, 1991, p. 31). Explicit discussion norms—share the air, take turns, listen twice as much as you speak—and discussion protocols that guide students in having focused, productive and respectful conversations about text support students in learning how to participate in respectful and focused discussion.

If you want students to really engage in complex discussion, you have to make it safe to really argue. You have to have a culture that says, you come to this with your own deep context and we assume it is of value in helping us all understand things more deeply. We don't want your lip service; we want your real thinking. You are truly welcome here.

—Sarah Boddy, school designer, *EL Education*

Use Protocols to Structure Productive Conversation

We discussed protocols at length in Chapter 1. Here we focus on the Socratic Seminar (see Appendix A), which Kavitha Kasargod uses frequently to engage her students in collaborative discussion. Once students had practiced preparing evidence to support their arguments about the cultural history of the Chesapeake Bay, Kasargod expected students to apply their learning by leading a Socratic Seminar about a different text. In preparation for an investigation of their own community's history, students worked in pairs to

facilitate discussion and debate about *The Urban Odyssey: Multicultural History of Washington, D.C.*

A protocol like the Socratic Seminar is an excellent example of the relatively simple instructional choices teachers can make to foster deeper learning. The act of turning desks into a circle and having students lead a text-based discussion based on thoughtful questions is a high-leverage daily instructional move that challenges, engages, and empowers students, and it's one any teacher can make.

What follows are some common questions that students or teachers might ask during a Socratic Seminar:

Sample Key Questions to Help Interpret the Text

- What is the main idea or underlying value in the text?
- What is the author's purpose or perspective?
- What does (a particular phrase) mean?

- What might be a good title for the text?
- What is the most important word/sentence/paragraph?

Sample Questions to Move the Discussion Along

- Who has a different perspective?
- Who has not yet had a chance to speak?
- Where do you find evidence for that in the text?
- Can you clarify what you mean by that?
- How does that relate to what (someone else) said?
- Is there something in the text that is unclear to you?
- Has anyone changed their mind?

Sample Questions to Relate the Text to Students' Lives

- How do the ideas in the text relate to our lives? What do they mean for us personally?
- Why is this material important?
- Is it right that . . . ? Do you agree with the author?

Sample Debriefing Questions

- Do you feel like you understand the text at a deeper level?
- How was the process for us?
- Did we adhere to our norms?
- Did you achieve your goals to participate?
- What was one thing you noticed about the seminar?

Kasargod invites her students to reflect on their participation in the seminar by measuring themselves against the yardstick of specific criteria that they've developed together. Here's the rating scale students complete at the end of each Socratic Seminar:

Circle 1 for “not yet meeting” and 4 for “exceeding”

Responding thoughtfully to questions multiple times	1	2	3	4
Using evidence to support a position or presenting factual information	1	2	3	4
Drawing another person into the discussion	1	2	3	4
Asking a clarifying question or moving the discussion along	1	2	3	4
Highlighting and marking the text with questions/commentary	1	2	3	4

Socratic Seminars are an excellent way to structure respectful, evidence-based discussion and debate. But they aren't the only way. Two previously referenced videos, “Thinking and Speaking Like Scientists through a Science Talk” from Chapter 1 and “Policing in America” from earlier in this chapter are also excellent examples. Also see twelfth-grade biology students from New York City deeply engaged with scientific texts as they prepare for a bioethical debate on TALEN gene therapy in the accompanying two-part video. Note that in each of these videos, the students' text-based preparation and established norms for conversation empower them to have rich and purposeful academic conversations.

WATCH



Video 11: Preparing for an Academic Conversation, Day 1: Analyzing a Scientific Document

Video 12: Preparing for an Academic Conversation, Day 2: Constructing Arguments Using Science Notebooks

Ask Students to Paraphrase, Summarize, and Defend Their Arguments with Evidence

Once students have mastered a protocol, a skillful discussion facilitator gives students additional opportunities to grapple by asking them to reread for additional evidence that fine tunes or bolsters their arguments. Particularly when the text-dependent questions that students are talking or writing about demand higher-order thinking skills like analyzing or evaluating, spirited debate about what the text means in the context of the author's purpose invites students to defend their arguments with evidence.

English teacher Justin Sybenga describes a lesson, for example, in which he asked students to decide whether Zora Neale Hurston was “poking fun” at

small-town residents in her book *Their Eyes Were Watching God* or representing them fairly. Students gathered as many quotes from the book as they could find to support their position, then posted them on the wall. Peers from the opposing side then critiqued the evidence by challenging the interpretation, context, or weight of the evidence. “Students really had to defend their claims,” says Sybenga, “and along the way, some students changed their minds and switched sides.”

Teach Students to Say, “You’re Right”

Evaluation is near the top of the ladder of complexity in Bloom’s Taxonomy. To engage in scholarly debate, students must be able to analyze the credibility of the text based on sources, context, and the weight of the evidence. They must be able not only to defend their own arguments with evidence, but also to concede an argument when others have more—or more credible—evidence. This give and take is an intellectual habit that forms with much practice over time. The accompanying video features middle school students in Syracuse, New York, engaged in a protocol in which they take a stand on an issue and, most important, often change their minds based on the reasoning of their peers.



WATCH Video 13: Take a Stand

The ability to discuss evidence productively and without prejudice, and the willingness to *change one’s mind* according to the evidence presented are the fundamental aptitude and attitude for academic and career success. In an interview with the *New York Times*’s Thomas Friedman, Laszlo Bock, senior vice president at Google, describes the dispositions that are most important if you want a job at Google. These include “the ability to pull together disparate bits of information,” to problem solve with a sense of ownership and shared leadership, and most important, intellectual humility. “What we’ve seen is that the people who are the most successful here, who we want to hire, will have a fierce position. They’ll argue like hell. They’ll be zealots about their point of view. But then you say, ‘Here’s a new fact,’ and they’ll go, ‘Oh, well, that changes things; you’re right.’”

Similarly, Edward Brown, the Brown University student who graduated from the Springfield Renaissance School, puts it this way:

“When I first went to Renaissance, I wasn’t that vocal in class, but teachers always used cold call. I knew I would get called on and that I could speak and they would listen. At first it was just giving my opinion, but as I got more comfortable, I realized that I could ask probing questions too and I had to give evidence for my opinions and be ready for other people to dissect my answers. That’s what’s prepared me for the level of college discussions, as well as the leadership positions I have in the Black Student Union and other organizations. I understand that my opinion and my arguments are valuable and important to others as long as I can defend them and also listen to other people. I learned that at Renaissance, and I rely on it every day here at Brown.”

Writing with Purpose

Writing is fundamentally an act of communication. Different modes of writing serve different purposes. Narrative writing tells a story, joining the threads of personal experience, imagination, or history. Informational writing informs or explains a topic to the reader, reformulating an understanding gained from reading, thinking, talking, and doing, and delivering that understanding in a new package to new readers. Persuasive and argument writing attempts to influence the reader through analysis and synthesis of multiple perspectives, which the writer distills into a claim supported by evidence gleaned from texts or original research.

The purpose of all of these modes of writing is to evoke a dialogue with real readers who care enough about the writing to speak back—to tell their own stories, add their ideas, or launch a counterargument. Good writing—whether it be literary criticism, a newsletter, policy brief, technical manual, sales pitch, dissertation, museum signage, a novel, or a brochure—is an invitation to conversation. It’s not simply “the task students do at the end of the unit,” but also the beginning of a lifelong habit of expressing ideas and opinions and sharing knowledge.

The essential questions for writers are “Who is my audience?” “What do I hope they will learn and feel from reading my work?” “How can I engage my readers and make my work effective and memorable?” Grappling with these questions, individually and with others, is the force that shapes quality writing. Ironically, for almost all the writing students do in schools, these questions are almost irrelevant.

There is no real audience for most student work, and students are understandably more concerned with pleasing the teacher and getting a decent grade (the teacher is often the only audience for the writing) than evoking feelings in actual readers or imparting important knowledge. The intrinsic drive for quality—the reason to care—is absent for many students. The excitement of refining written work to reach real readers, the engine of quality revision, is missing. When we are discouraged as teachers that our students are not motivated to revise and improve their writing, to strive toward an ambitious vision of quality, we need to ask ourselves, “Is there a purpose for this writing that would inspire students to work toward quality?”

Deeper instruction that leads to high-quality writing helps students understand *why* they invested time in reading, analyzing, and talking about a variety of text, and *how* they can use their new understanding to tell a story, convey information, or launch a powerful argument to a real audience. Connecting reading and writing in this way involves two types of writing assignments: short on-demand tasks that build and assess students’ understanding, and related authentic tasks that are drafted, revised, and polished for an audience beyond the teacher. Authentic tasks, such as researching and writing a report to present to city officials, are often the final product of a unit. Short tasks along the way—assessed formatively or summatively—can also be rigorous and provide important scaffolding for students learning to improve their craft. In other words, the short tasks allow both students and teachers to measure their progress along the way as they build the skills for the significant writing project that follows.

At Capital City seniors take an on-demand document-based, argument writing assessment in English class. They also write a lengthy research paper. In Kasargod’s history class, they regularly complete short writing assignments in which they synthesize information and use evidence to support claims. These short tasks support the culminating project, in which, as ethnographers in their own neighborhoods, they gather the demographic data and histories of their neighbors and communities to explain the cultural and political significance of place to their families and communities.

One of the short tasks Kasargod assigned was to interview a neighborhood resident. She provided a model from National Public Radio’s *Story Corps* that students listened to and analyzed together. Their critique focused on the kinds of questions interviewers ask and the subtleties of communication that make

So many of our kids are first-generation Americans. They are trying to negotiate what it means for them to be living in the shadow of the American government. They are trying to respect and love their parents, but also figure out how to be themselves. This project helps them discover their own neighborhoods, which are really different from what most people know of Washington, D.C. The students are at the forefront of how their place is changing, so telling their own neighborhood story is powerful for them.

—*Kavitha Kasargod, teacher, Capital City Public Charter School*

the interviewee feel comfortable, safe, and deeply listened to. Next students formulated questions and interviewed each other, practicing the skills they had learned from the model. Just as the task of conducting and writing up an interview of one neighborhood resident would scaffold the larger ethnography project, the low-stakes interviews of their peers scaffolded students' success toward high-quality interviews of their neighbors. Short tasks, then, nest successively to build a strong structure for more complex culminating tasks.

Kasargod's culminating assignment takes students weeks to complete and demands complex, critical thinking—analysis, evaluation, and creation of a product that interprets and presents a place they've lived in all their lives.

What follows are specific writing strategies Kasargod and Capital City English teacher Justin Sybenga taught, and which any teacher can employ, to support students in doing quality work on this challenging task.

Analyzing Evidence

Before they are ready to write, students must gather and analyze demographic, economic, and housing data from local agencies and exhibits at local museums. They have to graph trends in this data, for the neighborhood they are profiling, over four decades. Many students struggle with this task, stumbling over how to interpret percentages, or how to represent numbers accurately in graphs. “We talk a lot about types of evidence,” says Sybenga. “Students are drawn to anecdote because it's familiar and easy, but they struggle to be critical about statistics and numbers. It's hard for them to select which numbers are most significant or to identify when statistics are being manipulated to deliver nonsense.”

To help students address this challenge, Sybenga teaches lessons on the credibility of “experts.” Students rank the evidence from least to most credible. “One thing students take away from those lessons is that you have to have academic training and/or work experience in something to be an expert, unless you’re just talking about your own life. This counters what students’ initially offer as evidence, which was all numbers and statements from popular sites they found on the Internet.”

Learning the Language and Structure of Argument

Reviewing the results of the schoolwide writing assessment, teachers at Capital City noticed that although students were spirited debaters who brought passion and reason to Socratic Seminars and oral discussion, those skills didn’t always translate to paper. To be successful in writing the argumentative essay component of their neighborhood project, they would need to dig into the details of how to construct an argument.

To facilitate that, Sybenga gave students a Google.doc template in outline format with places for claim, evidence, and analysis. The template mirrored graphic organizers students had used earlier to analyze arguments written by historians. In both English and history class, students shared a common language for the criteria of a strong argument:

- Is the claim supported by evidence and analysis?
- Is the evidence valid, sufficient, and persuasive?
- Does the reasoning weigh the strengths and weaknesses of the evidence and draw logical conclusions?

As they began to fill in the outline, students were also required to supplement their book knowledge with firsthand evidence. Working in teams, they toured their own neighborhoods on foot and identified places that people who live in the neighborhood would count as significant—not tourist destinations, but, for example, the 7-Eleven where day laborers hang out waiting to be offered jobs. They also attended and reported on neighborhood commission meetings. Then they formulated their claims, which, as the steps that follow demonstrate, is a rigorous cognitive process:

Forming an evidence-based claim

Step 1. Find important details.

- Students read a text and look for details that are important. They take notes, annotate the text, or record the details on a graphic organizer.
- From these details, students begin to develop questions (or the teacher may provide the questions) that inquire into the gaps or relationship between the details.

Step 2. Connect the details (trace the argument).

- Students think, talk, and write about how the details connect to one another:
 - Do all the details point to the same main idea?
 - What answers to the question(s) bubble up from the details?
 - What answers are missing from the details?
 - What new questions arise from the gaps or disconnects?

Step 3. Evaluate the details.

- Students think, talk, and write about whether the details are valid, relevant, and sufficient.
 - Is the source reliable and credible? Is the source biased?
 - Are the details accurate?
 - Do all of the details clearly support the specific claim?
 - Is there enough data to hold up the claim consistently and convincingly?

Step 4. Make a claim (induction from the evidence)

- Students draw inferences from the text based on the details.
- Students formulate a new claim (first orally, then in writing) that answers a focusing question.

Step 5: Build an argument.

- Students identify which textual details provide good evidence for their claims.

- Students determine how to organize the evidence to support an original argument.
- Students invite critique of or dialogue about their arguments. This conversation mirrors steps 2 and 3 and is essentially a collaborative evaluation of their own arguments, referencing back to the textual evidence they have brought forward in support of the claim.
- Students re-read, reevaluate, and revise their “case” based on critique and new evidence or new interpretations.

In many American schools, the challenge of teaching writing is magnified by the fact that so many students come from non-English-speaking households. This poses an especially daunting challenge when teaching something as complex as analysis and argument. The Strategy Close Up that follows offers a concrete strategy for unveiling the mystery of scholarly writing for English language learners at a Spanish-English immersion school in Oakland, California.

STRATEGY CLOSE UP: Teaching English Language Learners the Structure of Academic Writing

English language learners often know the vocabulary of nouns and verbs, but they often fail to see how analytical writing relates ideas to each other by strategically employing prepositions and conjunctions. Mark Zucker, a fifth-grade teacher at Manzanita SEED Elementary School in Oakland, California, addresses this confusion head on with a combination of writing lessons at the sentence level and reading lessons on gathering evidence from text.

The topic of recent student writing is a planet report that answers this prompt: “We want to know if life can exist on other planets like on Earth. Therefore, we will have to learn what conditions exist on Earth that have allowed life to evolve here and compare other planets with Earth. How would the conditions on the planet you are describing make life possible or impossible there?”

Zucker’s sequence of writing lessons let students into a secret: “The little words writers use signal the relationship between factoids. They are a key to good writing.”

(continued)

Cause-Effect (e.g. as a result, consequently, hence, due to, in order to)

_____, so _____.

_____, because _____.

_____, thus _____.

_____, therefore _____.

Because _____, _____.

Compare-Contrast (e.g., unlike, different, contrast, similar, same, both, more, -er, than)

_____, but _____.

_____, however _____.

_____, whereas _____.

_____, while _____.

Students practice using these language structures in poems, grammar exercises, and oral presentations first with information that is familiar—likes and dislikes, friends, pets. They get to practice the language structure and the thinking skill without having to learn new content.

When students get back to studying the planets, using evidence from their reading and shaping that evidence into sentences that use the language structures they've learned, the results are much more complex and well-crafted pieces of informational writing. For one student, this was the result:

Venus is a beautiful light green planet, so people long ago named her after the Greek god of beauty. It is similar to Earth in some ways, so it has been called Earth's "sister" planet. For example, Venus is 7,000 miles across, which is just a little bit smaller than Earth, but much smaller than any of the outer planets. Also, they are the second and third planets from the sun, and we can even see Venus from Earth. However, life could not exist there like it does on Earth, and here are reasons why. First of all, because Venus is closer to the Sun than Earth, Venus is hotter than the Earth. In fact, while Earth never gets above 120 degrees, Venus is 800 degrees! This is so hot that all water would be just steam, whereas on Earth, water can be a liquid or even solid. Since life began in liquid water and there is no liquid water on Venus, life could not exist there. Also, living things need oxygen to survive, but the atmosphere on Venus is mostly carbon dioxide, so we couldn't breathe there. It's the carbon dioxide that makes it so hot on Venus, because it traps in the heat like the windows on a greenhouse. Venus is like the Earth except with way more carbon dioxide in the atmosphere, but humans keep putting more and more carbon dioxide in the atmosphere on Earth from running factories and cars, so guess what? Is it possible that Earth could become like Venus someday, and life won't be able to exist anymore on Earth? Is it possible life used to exist on Venus before it got too hot? Maybe Venus used to be like the Earth. Venus is beautiful, but life cannot exist there now because of its carbon dioxide.

Refining Quality

It's one thing to assign a complex writing task and, as many teachers know, another to get students to complete the task with quality. Once students have a purpose for writing, they need a clear vision of what defines high-quality writing for a specific assignment. That vision is nested within our broad definition of high-quality work, which we describe as follows:

High-Quality Work Is Complex

- Complex work is rigorous: it aligns with or exceeds the expectations defined by grade-level standards and includes higher-order thinking by challenging students to apply, analyze, evaluate, and create during daily instruction and throughout longer projects.
- Complex work often connects to the big concepts that undergird or unite disciplines.
- Complex work prioritizes transfer of understanding to new contexts.
- Complex work prioritizes consideration of multiple perspectives.
- Complex work may incorporate students' application of higher-order literacy skills through the use of complex text and evidence-based writing and speaking.

High-Quality Work Is Authentic

- Authentic work demonstrates the original thinking of students—authentic personal voice and ideas—rather than simply showing that students can follow directions or fill in the blanks.
- Authentic work often uses real work formats and standards from the professional world rather than artificial school formats (e.g., students create a book review for a local newspaper instead of a book report for the teacher).
- Authentic work often connects academic standards with real-world issues, controversies, and local people and places.
- Authenticity gives purpose to work; the work matters to students and ideally to a larger community as well. When possible, it is created for and shared with an audience beyond the classroom.

High-Quality Work Demonstrates Craftsmanship

- Well-crafted work is done with care and precision. Craftsmanship requires attention to accuracy, detail, and beauty.
- In every discipline and domain, well-crafted work should be beautiful work in conception and execution. In short tasks or early drafts of work, craftsmanship may be present primarily in thoughtful ideas, but not in polished presentation; for long-term projects, craftsmanship requires perseverance to refine work in conception, conventions, and presentation, typically through multiple drafts or rehearsals with critique from others.

Quality writing with some or all of these attributes responds to the needs and motivations of its audience. It is eloquent, fresh, and intelligent. It brings new evidence into the discourse of writer and reader and makes the work that students do in school meaningful beyond the schoolhouse doors and into the future.

In the Getting Started section of this chapter we saw second-grade students develop a shared understanding of the criteria for quality by critiquing a model of a persuasive letter. Older students also benefit from models that show with eloquence and grace the features of the specific type of writing they are expected to produce. Then, after they have conceived and drafted a piece, writers still need individual feedback on the particulars of organization, the relationship among ideas, style, sentence fluency, and conventions.

Effective feedback aligns with the literacy learning targets set forth for the assignment. That is, it reinforces specific strategies that have been taught and ones that will be assessed when the writing piece is turned in. Many secondary school teachers find that commenting on student papers through a shared online platform (like Google.docs) allows them to provide timely feedback that is specific, user-friendly, and actionable. An electronic dialogue also teaches students how to engage in the kind of professional exchange they will undoubtedly use in college and the workplace.

Quality feedback from the teacher or peers is an empowering way to bolster students' capacity for reflection and skill transfer. A carefully implemented protocol for providing students with specific feedback pauses the classroom action and opens a space for reflection. In that space, we ask each student to stop, look at what she's written, inquire whether it says what she meant, and dialogue with another person about how to more effectively craft the writing so that it communicates her

ideas. In the accompanying video, view a unique and efficient protocol for peer feedback.



WATCH Video 14: Using a Speed Dating Protocol to Think Critically about Writing

Providing a list of questions to guide the dialogue between peers can also support their efforts to provide specific and helpful feedback. For example, the questions that follow can support older students to help their peers improve specific aspects of their writing:

- Ideas: What is the writer's claim? What evidence does the writer provide to support the claim?
- Organization: Do the transitions between paragraphs enhance the flow of the argument as a whole?
- Voice: What words does the writer use to convey a tone appropriate to the audience's educational and vocational background?
- Style: Does the writer use a variety of sentence lengths and structures?

In the accompanying video we see how a teacher in Portland, Maine, uses a rubric to provide highly focused and descriptive feedback to each student. On the rubric she has highlighted particular areas the students need to address along with detailed written comments. Students are then invited to meet with her in mini-lessons related to each part of the rubric.



WATCH Video 15: Descriptive Feedback Helps All Students Meet Proficiency

Giving Students a Chance to Present

A writing task that challenges students to muster their intellectual courage and work to create a polished product for a real audience also yields a deeper payoff. When Kasargod's students were working on their final presentations of the neighborhood project, she says, "They were engaging with each other and you almost didn't know that I was there. It could continue without me, because students were so passionate.

They were using multiple sources to answer questions that really mattered to them, even outside of school. And they were producing quality work that goes beyond answering cursory questions.” Because students knew they would be presenting their work to their families and community members, including people they had interviewed, they had a real stake in doing a good job. Just as the Centennial second graders were invested in convincing school district officials to resurface their playground, these seniors cared about impressing the audience with their knowledge, scholarship, professionalism, and investment in their own neighborhoods.

Reflecting and Assessing

At Capital City, as we’ve seen, students achieve a deep understanding of how to break down and make arguments through practice and reflection. “The sheer repetition of these skills is what makes a difference,” says Sybenga. For the past few years, all Capital City teachers have participated in norming and grading a school-wide writing assessment that calls for an evidence-based argument. This structure has also developed teachers’ common understanding of what good writing is. “Now students use the same organizers and language, and rubrics in all of our classes. We assess those skills as freshmen, then students reflect and set goals, and then we practice more, and then we assess them again.” The result, according to Sybenga, is that students themselves can articulate the habits of scholarship that bolster effective reading and writing. “They come back to us from college and tell us their peers have never written a research paper. They put their annotations on Facebook! Our students have confidence and skills, because they’ve done this in high school.”

What’s more, students leave high school with the ability to apply what they’ve learned in the real world. “I want them to learn the content of my social studies standards, and they do,” notes Kasargod. “But this project isn’t just history out of a textbook. It’s economics, political science, sociology, anthropology, ethnography. Students come to realize that reading, debating, writing, and presenting are what professionals in all of these fields do, so the skills they learn are ones they can actually use after graduation.”

The Critical Moves of Deeper Literacy Instruction

Deeper learning happens when students get beneath the surface of a topic, when they recognize that speaking, listening, reading, and writing are the bedrock of the precious skills they can carry with them into the future. The instructional moves that facilitate this kind of learning engage students in topics and cognitive work

that matters. As shown in Table 2.3, deeper instruction challenges students to read, think, talk, and write as members of a learning community. And it empowers students with a toolkit that opens the door to lifelong learning.

Table 2.3 The Who, What, and Why of Deeper Literacy Instruction

What Do Teachers Do?	What Do Students Do?	What's the Result?
Establish a culture of growth in which everyone is expected to work hard, learn from mistakes, and persevere.	Take academic risks, re-read multiple times, learn from mistakes, and celebrate the efforts of peers.	Students learn that hard work pays off over time and that becoming a strong reader and writer takes practice.
Use the Four Ts: Topic, Text, Target, Task to challenge, engage, and empower students.	Read as writers and write as readers in order to dive deeply into a topic and share it with others. They build knowledge and vocabulary, which accelerates their ability to read harder texts.	Students meet or exceed standards <i>and</i> they come to see reading and writing as ways to learn about the world and research their own questions and passions.
Teach literacy in all content areas, with an intentional focus on discipline-specific vocabulary and genres.	Use reading as a way to learn about science and history. They add to their toolkit for accessing difficult and discipline-specific knowledge.	Students are stronger scholars when they can synthesize concepts and skills across all subject areas.
Curate complex and compelling texts, with attention to qualitative and quantitative complexity, as well as students' needs and interests.	Build their reading muscles with new vocabulary, language structures, and themes. They want to read because texts are relevant and compelling.	Students improve their reading breadth and depth. They are exposed to a wide variety and complexity of reading that prepares them for college and careers.
Develop engaging and challenging lessons that invite students to read, think, talk, and write about texts.	Participate in rich conversation that enables them to construct and communicate meaning from their reading.	Students develop important transferable skills such as collaboration, conversation, and summarizing.
Insist on grappling. Frequently ask students to "have a go" at a text before direct strategy instruction or thinking aloud.	Persevere to make meaning from text without the teacher's instruction. They develop confidence in tackling difficult text.	Students become independent readers who can apply close reading strategies to any text.
Teach students to value evidence by using protocols for discussion and developing text-dependent questions in advance.	Value evidence as the standard for truth and credibility, return to the text to seek support for their ideas, and use evidence to support their own claims in writing and speaking.	Students are better prepared for college and careers when they use evidence to support their own claims and to analyze the claims of others.

(continued)

Table 2.3 Continued

What Do Teachers Do?	What Do Students Do?	What's the Result?
Develop engaging and challenging writing tasks in real-world formats.	Learn a variety of real-world formats to convey their ideas to authentic audiences. They are motivated to write because they have real readers.	Students connect with real readers and listeners and feel the power their own voices have to make a difference in the world. They write with purpose.
Provide models for writing. Teach students to critique and revise based on specific criteria for quality.	Use models to guide drafts and revisions. They give and receive kind, helpful, and specific feedback.	Students expand their ability to describe and produce quality writing in multiple genres.
Debrief transferable literacy skills and concepts. Help students reflect on the skills and concepts they can use in different and future contexts.	Reflect on how they've learned as well as what they've learned. They articulate the skills and concepts that can help them learn in new contexts.	When students can name the skills and processes that help them learn, they are empowered to lead their own learning.

SCHOOLWIDE IMPLEMENTATION

Supporting Literacy Instruction in Every Classroom

When it comes to literacy, the leader's most important job is to continually reinforce that every teacher—from English to science to special education—is a teacher of literacy. Providing a collaborative planning schedule and professional learning opportunities that include and involve all teachers in literacy instruction will go a long way toward sending this message. But leaders must go further to create the systems and ongoing support that teachers who have not been trained as reading and writing teachers will need to do this work. Content-area teachers in particular may need additional support and ongoing coaching to learn how to integrate reading and writing instruction into their subject areas. All teachers, including English language arts teachers, will likely need professional development in teaching informational texts, argument, and reading and writing grounded in evidence. Building trust and collaborative practices between teachers is critical.

Key Leadership Actions

Lay the Groundwork

- Provide adequate planning time and support for attending to the Four Ts: Topic, Text, Target, Task.

- Schedule ongoing collaborative planning time that allows content-area teachers and ELA teachers to coordinate their effort.
- Budget for continual acquisition of compelling, relevant, and complex texts (instead of or in addition to textbooks).
- Help teachers find compelling complex texts for their students and appropriate sets of magazines, journals, and primary sources. Appendices F and G contain online resources for finding primary sources, including photographs.
- Involve and support teachers from all departments in selecting text based on the criteria for complexity.
- Help teachers develop relationships with community partners who can serve as authentic audiences for student writing and oral presentations.

Build Teachers' Capacity

- Provide professional development and coaching on literacy instruction to content-area teachers. One good way to begin this work is a “cross-walk,” or comparison, of content-area texts and tasks and standards.
- Provide professional development specifically on teaching nonfiction and reading for and writing with evidence. Our 2014 book *Transformational Literacy: Making the Common Core Shift with Work That Matters* is a good resource for helping teachers understand and address these instructional shifts.

Support Teachers to Deepen Their Practice

- When conducting observations or learning walks, pay attention to why, what, and how texts are being used to challenge and engage students in deeper learning. Are students grappling with text on their own before direct instruction? Are students using protocols to think, write, and talk about text? Are students annotating text, taking notes, and synthesizing their ideas in writing? Are teachers asking higher order questions and text-dependent questions? (See Table 1.5).
- Make time for faculty to analyze student writing samples and discuss the assignments and rubrics behind them. Develop a bank of quality assignments and rubrics that can serve as models for new teachers and teachers new to writing instruction.

- Develop a bank of quality student writing models in different writing formats. A strong set of models and resources can be found in *Models of Excellence: The Center for High-Quality Student Work* (<http://modelsforexcellence.ededucation.org/>)
- Document critique lessons and peer feedback protocols through video and other means to help foster the ongoing use and refinement of these practices.

COMMON CHALLENGES

Settling for Text That Is Not Worthy

A worthy text is compelling, complex, and often relevant to students' real lives. It's a text worth reading multiple times and coming back to for additional evidence, reference, or the deliciousness of its structure, language, or graphics. When teachers settle for the first thing they find on the bookshelf or on the Internet, they often shortchange students' learning. Making time to research and curate text resources is a critical part of planning. Criteria for a good text cannot be limited to the topic of the text. Worthy texts must also be beautifully written for that genre.

Failing to Align Topic, Text, Target, and Task

The alignment of what students are studying, the texts they use to learn about the topic, how they demonstrate their learning, and what you want them to know and be able to do in the end is crucial for student success. And it requires deep planning. When time is short (and it usually is), teachers can be tempted to choose a fun topic they don't have adequate texts for or one that doesn't leverage their standards. Or they might plan for an activity that students enjoy but that doesn't challenge them to apply new learning or use evidence from text to demonstrate their knowledge. Although it requires an investment of planning on the front end, it pays off in rich and coherent literacy units that push students to learn deeply and discover the joy of reading and writing.

Failing to Scaffold Close Reading Skills

Close reading is a challenging skill that requires practice over time. Insisting from the get-go that all students grapple independently with complex text can be a recipe for frustration and failure. Instead, teachers must be mindful of students'

individual needs, interests, and readiness. Differentiation strategies like chunking text and previewing vocabulary, and careful scaffolding of the duration and depth of close reading, will help all students to succeed with complex text.

Teaching Literacy Only in English Class

All teachers are literacy teachers. Because reading and writing are foundational skills for all subject areas and a predictor of academic success generally, it's important that all teachers grow their understanding and practice of literacy instruction. By incorporating reading, thinking, talking, and writing about texts into every subject area, teachers send the message that strong readers and writers can unlock the door to any content area. Literacy-rich content-area instruction reflects conclusive research that shows that as students gain knowledge and vocabulary through reading their capacity to gain further understanding of the topic accelerates.

Teachers Doing More Work Than Students

To develop the skills they need for college and careers, students must practice, practice, practice. Students themselves must do the work of summarizing, synthesizing, evaluating, and making meaning from difficult texts. This means that teachers should structure the work—for example, using protocols, graphic organizers, and anchor charts—but still expect all students to grapple independently with text and engage actively in thinking, talking, and writing about text. Both the text itself and other students are important “teachers” in the classroom. Structures for collaboration teach students that reading and writing are acts of communication and shared understanding.

Lack of Models for Quality Writing

In order to understand what is good we need to see it. Models, whether created by other students, by professionals, or by the teacher help students identify and describe what quality writing in a particular genre looks like and sounds like. Schools can collect good models representing diverse formats and grade levels into a valuable resource for teachers who are developing critique lessons or rubrics.

Not Providing Enough Time for Students to Revise and Improve

Good writing takes time—to draft, reflect, revise, edit, and polish. Teachers need to balance the assignment of short, on-demand tasks with long-term authentic tasks that involve revision. Short tasks are often a good way for students to practice a discrete writing skill and to assess knowledge along the way. In the end, though, students need time to assimilate their new learning, to practice, make mistakes, and revise in response to both teacher and peer feedback. Careful calendaring will help teachers avoid the trap of low quality resulting from too little time.

NOTES

1. EL Education's online *Models of Excellence: The Center for High-Quality Student Work* includes a collection of student writing distinguished by voice, imagination, and impact (<http://modelsofexcellence.ededucation.org/>). Other resources for student-writing models include the *Concord Review* (www.tcr.org), which publishes well-crafted academic and research papers written by secondary students, *The Write Source* (thewritesource.com), which provides student-written models from all grade levels and in many formats, and *Achieve the Core's* "In Common" collection of student writing samples for all Common Core standards (<http://achievethecore.org/page/507/in-common-effective-writing-for-all-students>).
2. *Going Online with Protocols: New Tools for Teaching and Learning* by Joseph P. McDonald, Janet Mannheimer Zydney, Alan Dichter, and Elizabeth C. McDonald is an excellent resource.