English Language Arts/English Language Development (ELA/ELD) Framework Webinar Series

Session #7: Content Knowledge

March 12, 2024

CALIFORNIA DEPARTMENT OF EDUCATION
Tony Thurmond, State Superintendent of Public Instruction

ELA/ELD Framework Webinar Series: Purposes and Goals

- Recenter the *ELA/ELD Framework* as our primary guide for language and literacy policy and practice.
- Share knowledge about key content in the *ELA/ELD Framework.*
- Establish a foundation for successful and sustained implementation of the practices and systems promoted in the *ELA/ELD Framework.*

Recentering California's *ELA/ELD Framework* Webinars Series 2023–24

- September 26: Overview
- October 10: Foundational Skills
- November 14: ELD and Multilingual Programs
- December 12: Language Development
- January 9: Meaning Making
- February 13: Effective Expression
- March 12: Content Knowledge
- April 9: Assessment & Intervention
- May 14: Systems & the California Literacy Roadmap

Agenda

1. Welcome and Opening Remarks
2. Content Knowledge Theme: Overview
3. Content Knowledge in Elementary School
4. Content Knowledge in Middle and High School
5. Content Knowledge Theme: Explore and Discuss
6. Closing & Next Steps

Outcomes

- Understand the “big ideas” of the Content Knowledge theme in the *ELA/ELD Framework*.
- Identify sections in the *ELA/ELD Framework* that guide content knowledge instruction in grades TK–12.
- Determine next steps for using the *ELA/ELD Framework* to expand knowledge and enhance practices to support students’ content knowledge.

Guiding Questions

During the session, think about the following questions, and take notes, as needed.

1. What is resonating with you? What are you excited to hear?
2. What are some key points everyone you work with should know about? What do you want to remember?
3. What questions do you have?

Webinar Series Developers

Dr. Hallie Yopp

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Nancy Brynelson

Dr. Bonnie Garcia

Content Knowledge Theme: Overview

The ELA/ELD Framework is …

California's Conceptual Model for Comprehensive and Integrated Literacy

Link to Long Description

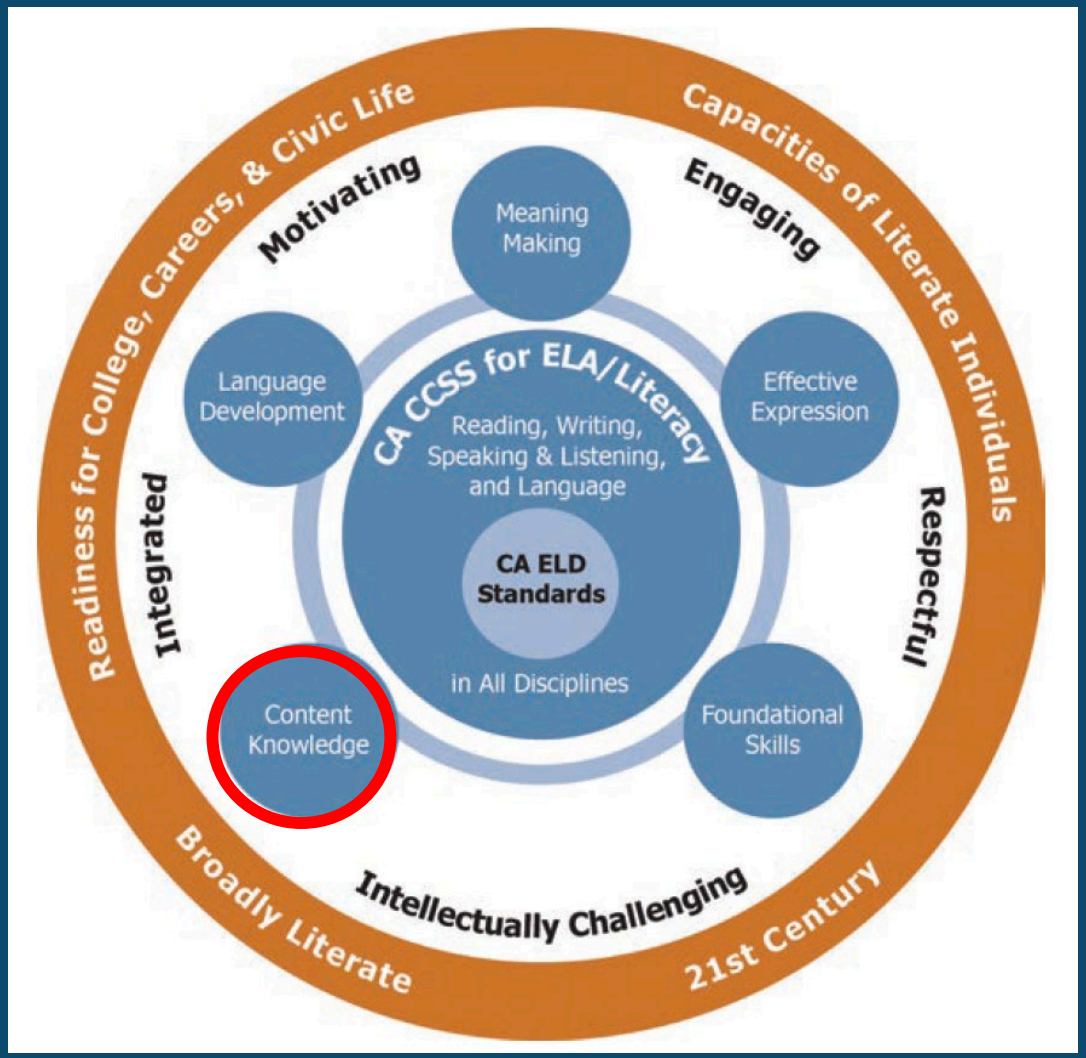


Figure 2.1 The *ELA/ELD Framework* Circles of Implementation

Content Knowledge: Our Charge

“Students establish a base of knowledge across a wide range of subject matter by engaging with works of quality and substance. They become proficient in new areas through research and study. They read purposefully and listen attentively to gain both general knowledge and discipline-specific expertise. They refine and share their knowledge through writing and speaking” (CA CCSS for ELA/Literacy, 6, CDE 2013).

A Concrete Example (1)

Earth is likely to cross a critical threshold for global warming within the next decade, and nations will need to make an immediate and drastic shift away from fossil fuels to prevent the planet from overheating dangerously beyond that level, according to a major new report released on Monday.

The report, by the Intergovernmental Panel on Climate Change, a body of experts convened by the United Nations, offers the most comprehensive understanding to date of ways in which the planet is changing. It says that global average temperatures are estimated to rise 1.5 degrees Celsius (2.7 degrees Fahrenheit) above preindustrial levels sometime around “the first half of the 2030s,” as humans continue to burn coal, oil and natural gas.

- Excerpt from "Climate Change Is Speeding Toward Catastrophe. The Next Decade Is Crucial, U.N. Panel Says." Brad Plumer, *New York Times*, 10/13/23

A Concrete Example (2)

How can the content knowledge needed to engage meaningfully with this text be developed?

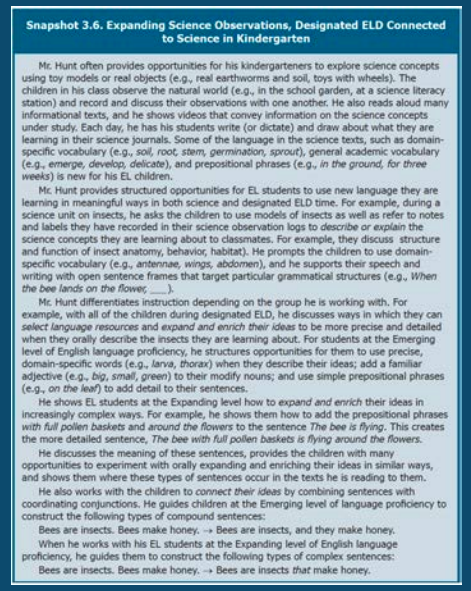
How is content knowledge best developed?

- Having science, history/social science, visual and performing arts, and health education in the school schedule
- Reading and writing complex texts in a variety of disciplines
- Reading volume, inside and outside of school
- Emphasizing content area learning from the earliest years
- Hands-on learning, play, field trips, virtual experiences, explorations and inquiries, projects, discussions, written texts, speeches, demonstrations, presentations, visual and performing arts, podcasts, lectures …

Content Knowledge: The Goal and Path

- Reading, writing, speaking, listening, and language are tools for acquiring, constructing, and conveying content knowledge.
- Content knowledge is necessary for engaging meaningfully and proficiently in complex literacy tasks.

Supporting Content Knowledge Development: Snapshots (1)



Snapshot 3.6. Expanding Science Observations, Designated ELD Connected to Science in Kindergarten

Mr. Hunt often provides opportunities for his kindergarteners to explore science concepts using toy models or real objects (e.g., real earthworms and soil, toys with wheels). The children in his class observe the natural world (e.g., in the school garden, at a science literacy station) and record and discuss their observations with one another. He also reads aloud many informational texts, and he shows videos that convey information on the science concepts under study. Each day, he has his students write (or dictate) and draw about what they are learning in their science journals. Some of the language in the science texts, such as domain-specific vocabulary (e.g., *soil, root, stem, germination, sprout*), general academic vocabulary (e.g., *emerge, develop, delicate*), and prepositional phrases (e.g., *in the ground, for three weeks*) is new for his EL children.

Mr. Hunt provides structured opportunities for EL students to use new language they are learning in meaningful ways in both science and designated ELD time. For example, during a science unit on insects, he asks the children to use models of insects as well as refer to notes and labels they have recorded in their science observation logs to *describe or explain* the science concepts they are learning about to classmates. For example, they discuss structure and function of insect anatomy, behavior, habitat). He prompts the children to use domain-specific vocabulary (e.g., *antennae, wings, abdomen*), and he supports their speech and writing with open sentence frames that target particular grammatical structures (e.g., *When the bee lands on the flower, ___*).

Mr. Hunt differentiates instruction depending on the group he is working with. For example, with all of the children during designated ELD, he discusses ways in which they can *select language resources* and *expand and enrich their ideas* to be more precise and detailed when they orally describe the insects they are learning about. For students at the Emerging level of English language proficiency, he structures opportunities for them to use precise, domain-specific words (e.g., *larva, thorax*) when they describe their ideas; add a familiar adjective (e.g., *big, small, green*) to their modify nouns; and use simple prepositional phrases (e.g., *on the leaf*) to add detail to their sentences.

He shows EL students at the Expanding level how to *expand and enrich* their ideas in increasingly complex ways. For example, he shows them how to add the prepositional phrases *with full pollen baskets* and *around the flowers* to the sentence *The bee is flying*. This creates the more detailed sentence, *The bee with full pollen baskets is flying around the flowers.*

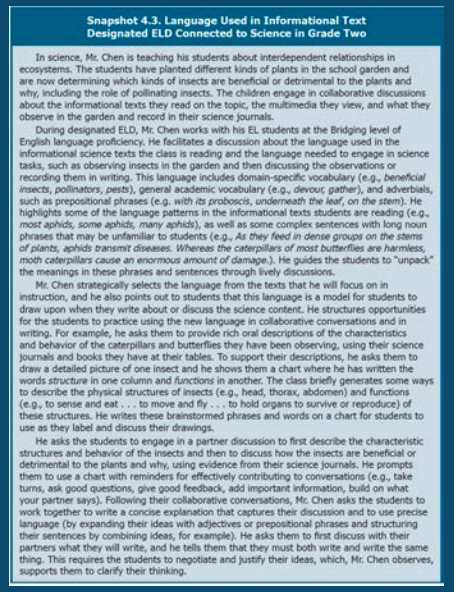
He discusses the meaning of these sentences, provides the children with many opportunities to experiment with orally expanding and enriching their ideas in similar ways, and shows them where these types of sentences occur in the texts he is reading to them.

He also works with the children to *connect their ideas* by combining sentences with coordinating conjunctions. He guides children at the Emerging level of language proficiency to construct the following types of compound sentences:

Bees are insects. Bees make honey. → Bees are insects, and they make honey.

When he works with his EL students at the Expanding level of English language proficiency, he guides them to construct the following types of complex sentences:

Bees are insects. Bees make honey. → Bees are insects *that* make honey.



Snapshot 4.3. Language Used in Informational Text Designated ELD Connected to Science in Grade Two

In science, Mr. Chen is teaching his students about interdependent relationships in ecosystems. The students have planted different kinds of plants in the school garden and are now determining which kinds of insects are beneficial or detrimental to the plants and why, including the role of pollinating insects. The children engage in collaborative discussions about the informational texts they read on the topic, the multimedia they view, and what they observe in the garden and record in their science journals.

During designated ELD, Mr. Chen works with his EL students at the Bridging level of English language proficiency. He facilitates a discussion about the language used in the informational science texts the class is reading and the language needed to engage in science tasks, such as observing insects in the garden and then discussing the observations or recording them in writing. This language includes domain-specific vocabulary (e.g., *beneficial insects, pollinators, pests*), general academic vocabulary (e.g., *devour, gather*), and adverbials, such as prepositional phrases (e.g. *with its proboscis, underneath the leaf, on the stem*). He highlights some of the language patterns in the informational texts students are reading (e.g., *most aphids, some aphids, many aphids*), as well as some complex sentences with long noun phrases that may be unfamiliar to students (e.g., *As they feed in dense groups on the stems of plants, aphids transmit diseases. Whereas the caterpillars of most butterflies are harmless, moth caterpillars cause an enormous amount of damage.*). He guides the students to "unpack" the meanings in these phrases and sentences through lively discussions.

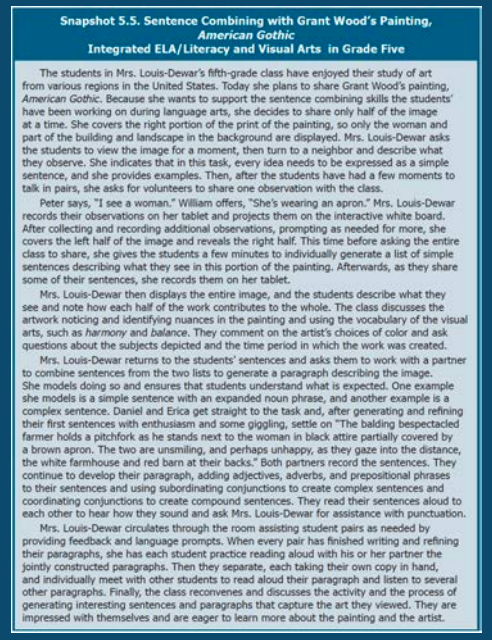
Mr. Chen strategically selects the language from the texts that he will focus on in instruction, and he also points out to students that this language is a model for students to draw upon when they write about or discuss the science content. He structures opportunities for the students to practice using the new language in collaborative conversations and in writing. For example, he asks them to provide rich oral descriptions of the characteristics and behavior of the caterpillars and butterflies they have been observing, using their science journals and books they have at their tables. To support their descriptions, he asks them to draw a detailed picture of one insect and he shows them a chart where he has written the words *structure* in one column and *functions* in another. The class briefly generates some ways to describe the physical structures of insects (e.g., head, thorax, abdomen) and functions (e.g., to sense and eat . . . to move and fly . . . to hold organs to survive or reproduce) of these structures. He writes these brainstormed phrases and words on a chart for students to use as they label and discuss their drawings.

He asks the students to engage in a partner discussion to first describe the characteristic structures and behavior of the insects and then to discuss how the insects are beneficial or detrimental to the plants and why, using evidence from their science journals. He prompts them to use a chart with reminders for effectively contributing to conversations (e.g., take turns, ask good questions, give good feedback, add important information, build on what your partner says). Following their collaborative conversations, Mr. Chen asks the students to work together to write a concise explanation that captures their discussion and to use precise language (by expanding their ideas with adjectives or prepositional phrases and structuring their sentences by combining ideas, for example). He asks them to first discuss with their partners what they will write, and he tells them that they must both write and write the same thing. This requires the students to negotiate and justify their ideas, which, Mr. Chen observes, supports them to clarify their thinking.

Snapshots 3.6 and 4.3

Supporting Content Knowledge Development: Snapshots (2)

Snapshots 5.5 and 7.1



Snapshot 5.5. Sentence Combining with Grant Wood's Painting, *American Gothic*
Integrated ELA/Literacy and Visual Arts in Grade Five

The students in Mrs. Louis-Dewar's fifth-grade class have enjoyed their study of art from various regions in the United States. Today she plans to share Grant Wood's painting, *American Gothic*. Because she wants to support the sentence combining skills the students' have been working on during language arts, she decides to share only half of the image at a time. She covers the right portion of the print of the painting, so only the woman and part of the building and landscape in the background are displayed. Mrs. Louis-Dewar asks the students to view the image for a moment, then turn to a neighbor and describe what they observe. She indicates that in this task, every idea needs to be expressed as a simple sentence, and she provides examples. Then, after the students have had a few moments to talk in pairs, she asks for volunteers to share one observation with the class.

Peter says, "I see a woman." William offers, "She's wearing an apron." Mrs. Louis-Dewar records their observations on her tablet and projects them on the interactive white board. After collecting and recording additional observations, prompting as needed for more, she covers the left half of the image and reveals the right half. This time before asking the entire class to share, she gives the students a few minutes to individually generate a list of simple sentences describing what they see in this portion of the painting. Afterwards, as they share some of their sentences, she records them on her tablet.

Mrs. Louis-Dewar then displays the entire image, and the students describe what they see and note how each half of the work contributes to the whole. The class discusses the artwork noticing and identifying nuances in the painting and using the vocabulary of the visual arts, such as *harmony* and *balance*. They comment on the artist's choices of color and ask questions about the subjects depicted and the time period in which the work was created.

Mrs. Louis-Dewar returns to the students' sentences and asks them to work with a partner to combine sentences from the two lists to generate a paragraph describing the image. She models doing so and ensures that students understand what is expected. One example she models is a simple sentence with an expanded noun phrase, and another example is a complex sentence. Daniel and Erica get straight to the task and, after generating and refining their first sentences with enthusiasm and some giggling, settle on "The balding bespectacled farmer holds a pitchfork as he stands next to the woman in black attire partially covered by a brown apron. The two are unsmiling, and perhaps unhappy, as they gaze into the distance, the white farmhouse and red barn at their backs." Both partners record the sentences. They continue to develop their paragraph, adding adjectives, adverbs, and prepositional phrases to their sentences and using subordinating conjunctions to create complex sentences and coordinating conjunctions to create compound sentences. They read their sentences aloud to each other to hear how they sound and ask Mrs. Louis-Dewar for assistance with punctuation.

Mrs. Louis-Dewar circulates through the room assisting student pairs as needed by providing feedback and language prompts. When every pair has finished writing and refining their paragraphs, she has each student practice reading aloud with his or her partner the jointly constructed paragraphs. Then they separate, each taking their own copy in hand, and individually meet with other students to read aloud their paragraph and listen to several other paragraphs. Finally, the class reconvenes and discusses the activity and the process of generating interesting sentences and paragraphs that capture the art they viewed. They are impressed with themselves and are eager to learn more about the painting and the artist.

Snapshot 7.1. Investigating Language, Culture, and Society: Linguistic Autobiographies
Integrated ELA and ELD in Grade Nine

Located in an urban neighborhood, Nelson Mandela Academy is home to a diverse student population, including bilingual students (e.g., Spanish-English, Hmong-English), students who speak one or more varieties of English (e.g., Chicana/Chicano English, African American English, Cambodian American English), English learners (ELs), and former ELs. In recognition of the cultural and linguistic resources their students bring to school and acknowledging the tensions students sometimes experience regarding language use, teachers of ninth-grade English classes include a project called Linguistic Autobiographies. For this project, students reflect on their own histories of using language in different contexts: at home, with friends, at school, at stores or in other public places where they interact with strangers. The students engage in a variety of collaborative academic literacy tasks, including:

- Viewing and discussing documentary films related to language and culture (e.g., the film *Precious Knowledge*, which portrays the highly successful but controversial Mexican American Studies Program at Tucson High School)
- Reading and discussing short essays and memoirs by bilingual and bidialectal authors to learn about their multilingual experiences (these texts also serve as models for writing their own personal narratives)
- Analyzing and discussing poetry (e.g., In Lak'ech: You Are My Other Me by Luis Valdez) and contemporary music lyrics (e.g., hip hop and rap) to identify how people's language choices reflect cultural values and identity
- Reflecting on and discussing their own multilingual or multidialectal experiences, including how others have reacted to their use of different languages or varieties of English
- Researching and documenting language use in their families and communities (e.g., interviewing parents or grandparents) to learn about different perspectives and to broaden their own
- Viewing and discussing playful and creative uses of multiple languages and dialects (e.g., the TED Talk "Reggie Watts: Beats that Defy Boxes")
- Writing personal narratives, poems, blog posts, informative reports, and arguments related to the relationships between language, culture, and society
- Producing original multimedia pieces, such as visual presentations and short documentary films, based on their research
- Presenting their multimedia projects to others (e.g., peers in the class, to parents and community members at school-sponsored events, to a wider audiences at conferences or online)

Students spend much of their class time engaging in collaborative conversations about challenging topics, including their reactions to negative comments in the media about their primary languages, "non-standard" varieties of English (e.g., African American English), accent (e.g., southern), or slang. Through these conversations, students learn to value linguistic and cultural diversity—their own and others'—and develop assertive and diplomatic ways of responding to pejorative comments regarding their primary languages or dialects. For their

Supporting Content Knowledge Development: Vignettes (1)

Vignette 6.3. You Are What You Eat
Close Reading of an Informational Text
Integrated ELA/Literacy and ELD Instruction in Grade Seven (cont.)

Mrs. Massimo guides the class to define the term in their own words, prompting them to refer to their notes and to go back into the text to achieve a precise definition. Here is what the class generates:

> ***Agribusinesses:*** *Huge companies that do big farming as their business. They sell the seeds, tools, and fertilizer to farmers, and they also make processed foods.*

Mrs. Massimo continues to facilitate the conversation, prompting students to provide details about the text, using evidence they cited while reading independently and in their collaborative conversations. She also clarifies any vocabulary that was confusing or that students were unable to define in their small groups. She anticipated that certain words might be unfamiliar to students (e.g., bolded words in the text excerpt) and has prepared short explanations for them, which she provides to students.

When students' responses are incomplete or not detailed enough, she prompts them to elaborate.

Mrs. Massimo: Why are chemical fertilizers so important and necessary to agribusiness?

Sandra: They help the food grow.

Mrs. Massimo: Can you say more about that?

Sandra: It has something in it that the crops need to grow. Nitra- (looks at her text) nitrogen. It was in all the ammonium nitrate they had at the weapons factory. And nitrogen helps the plants to grow. So they had all this ammonium nitrate, and they made it into chemical fertilizer, and that helped the corn—the hybrid corn—grow more.

Mrs. Massimo: Okay, so why was it so important for the agribusinesses to have this chemical fertilizer and for the hybrid corn to grow?

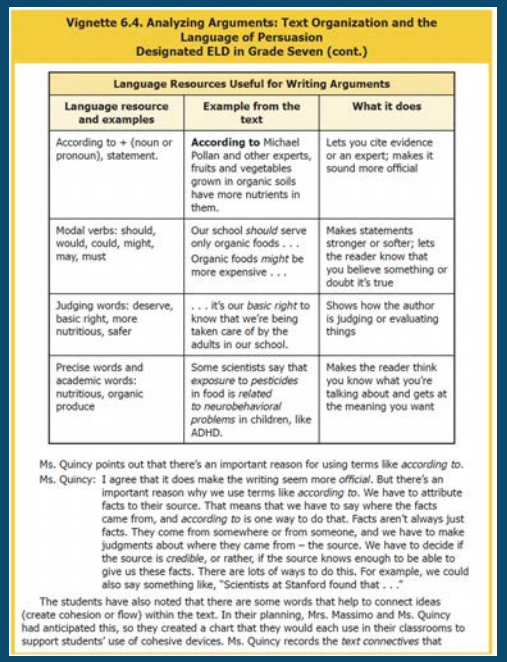
Sandra: Because they need a lot of cheap corn to make processed foods.

Most of the meanings of words in this text can be determined from the context. During class discussion of the text-dependent questions, Mrs. Massimo reviews how to learn vocabulary from contextual clues. For example, she shows students the following sentences from the text and explains that the definition of a challenging word can be embedded within the sentence (in an appositive phrase set off by commas), or in a phrase following the challenging word: *Because **ammonium nitrate**, the main ingredient in explosives, happens to be an excellent source of **nitrogen**. And nitrogen is one of the main ingredients in fertilizer.*)

Mrs. Massimo also points out that the connector *because* introduces a dependent clause—that is, a clause that should be combined with a complete sentence—yet here the clause stands alone.

Mrs. Massimo: Why do you think the author chose to do this? Take a look at the text and briefly talk with your group. (Waits for 30 seconds.)

Tom: The sentence that comes before it is a question, "How can a weapons plant make fertilizer?" so he's just answering his question.



Vignette 6.4. Analyzing Arguments: Text Organization and the Language of Persuasion
Designated ELD in Grade Seven (cont.)

Language Resources Useful for Writing Arguments

Language resource and examples	Example from the text	What it does
According to + (noun or pronoun), statement.	**According to** Michael Pollan and other experts, fruits and vegetables grown in organic soils have more nutrients in them.	Lets you cite evidence or an expert; makes it sound more official
Modal verbs: should, would, could, might, may, must	Our school *should* serve only organic foods . . . Organic foods *might* be more expensive . . .	Makes statements stronger or softer; lets the reader know that you believe something or doubt it's true
Judging words: deserve, basic right, more nutritious, safer	. . . it's our *basic right* to know that we're being taken care of by the adults in our school.	Shows how the author is judging or evaluating things
Precise words and academic words: nutritious, organic produce	Some scientists say that *exposure* to *pesticides* in food is *related to neurobehavioral problems* in children, like ADHD.	Makes the reader think you know what you're talking about and gets at the meaning you want

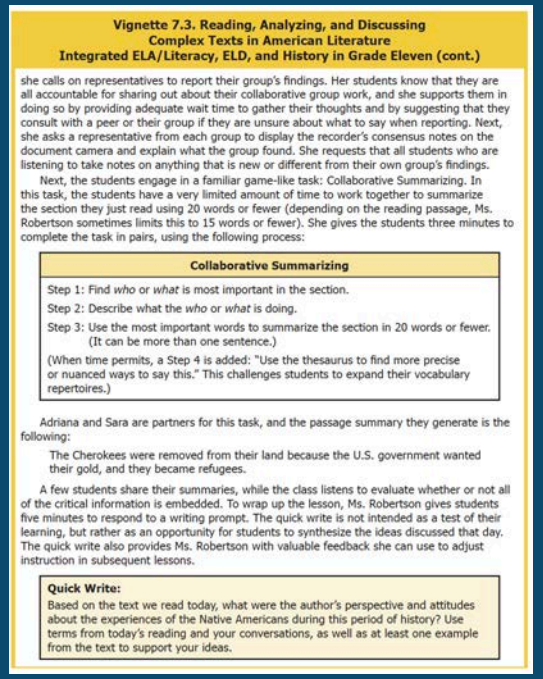
Ms. Quincy points out that there's an important reason for using terms like *according to*.

Ms. Quincy: I agree that it does make the writing seem more *official*. But there's an important reason why we use terms like *according to*. We have to attribute facts to their source. That means that we have to say where the facts came from, and *according to* is one way to do that. Facts aren't always just facts. They come from somewhere or from someone, and we have to make judgments about where they came from – the source. We have to decide if the source is *credible*, or rather, if the source knows enough to be able to give us these facts. There are lots of ways to do this. For example, we could also say something like, "Scientists at Stanford found that . . ."

The students have also noted that there are some words that help to connect ideas (create cohesion or flow) within the text. In their planning, Mrs. Massimo and Ms. Quincy had anticipated this, so they created a chart that they would each use in their classrooms to support students' use of cohesive devices. Ms. Quincy records the *text connectives* that

Vignettes 6.3 and 6.4

Supporting Content Knowledge Development: Vignettes (2)



Vignette 7.3. Reading, Analyzing, and Discussing Complex Texts in American Literature Integrated ELA/Literacy, ELD, and History in Grade Eleven (cont.)

she calls on representatives to report their group's findings. Her students know that they are all accountable for sharing out about their collaborative group work, and she supports them in doing so by providing adequate wait time to gather their thoughts and by suggesting that they consult with a peer or their group if they are unsure about what to say when reporting. Next, she asks a representative from each group to display the recorder's consensus notes on the document camera and explain what the group found. She requests that all students who are listening to take notes on anything that is new or different from their own group's findings.

Next, the students engage in a familiar game-like task: Collaborative Summarizing. In this task, the students have a very limited amount of time to work together to summarize the section they just read using 20 words or fewer (depending on the reading passage, Ms. Robertson sometimes limits this to 15 words or fewer). She gives the students three minutes to complete the task in pairs, using the following process:

Collaborative Summarizing

Step 1: Find *who* or *what* is most important in the section.

Step 2: Describe what the *who* or *what* is doing.

Step 3: Use the most important words to summarize the section in 20 words or fewer. (It can be more than one sentence.)

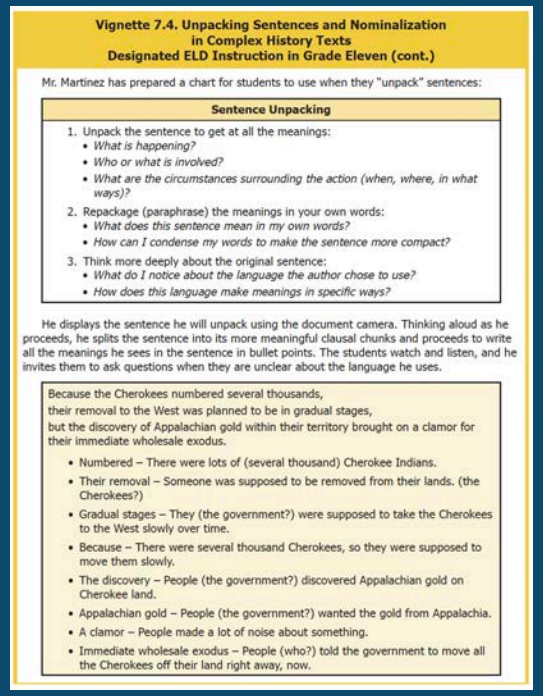
(When time permits, a Step 4 is added: "Use the thesaurus to find more precise or nuanced ways to say this." This challenges students to expand their vocabulary repertoires.)

Adriana and Sara are partners for this task, and the passage summary they generate is the following:

> The Cherokees were removed from their land because the U.S. government wanted their gold, and they became refugees.

A few students share their summaries, while the class listens to evaluate whether or not all of the critical information is embedded. To wrap up the lesson, Ms. Robertson gives students five minutes to respond to a writing prompt. The quick write is not intended as a test of their learning, but rather as an opportunity for students to synthesize the ideas discussed that day. The quick write also provides Ms. Robertson with valuable feedback she can use to adjust instruction in subsequent lessons.

Quick Write:
Based on the text we read today, what were the author's perspective and attitudes about the experiences of the Native Americans during this period of history? Use terms from today's reading and your conversations, as well as at least one example from the text to support your ideas.



Vignette 7.4. Unpacking Sentences and Nominalization in Complex History Texts Designated ELD Instruction in Grade Eleven (cont.)

Mr. Martinez has prepared a chart for students to use when they "unpack" sentences:

Sentence Unpacking

1. Unpack the sentence to get at all the meanings:
   - *What is happening?*
   - *Who or what is involved?*
   - *What are the circumstances surrounding the action (when, where, in what ways)?*
2. Repackage (paraphrase) the meanings in your own words:
   - *What does this sentence mean in my own words?*
   - *How can I condense my words to make the sentence more compact?*
3. Think more deeply about the original sentence:
   - *What do I notice about the language the author chose to use?*
   - *How does this language make meanings in specific ways?*

He displays the sentence he will unpack using the document camera. Thinking aloud as he proceeds, he splits the sentence into its more meaningful clausal chunks and proceeds to write all the meanings he sees in the sentence in bullet points. The students watch and listen, and he invites them to ask questions when they are unclear about the language he uses.

Because the Cherokees numbered several thousands,
their removal to the West was planned to be in gradual stages,
but the discovery of Appalachian gold within their territory brought on a clamor for their immediate wholesale exodus.

- Numbered – There were lots of (several thousand) Cherokee Indians.
- Their removal – Someone was supposed to be removed from their lands. (the Cherokees?)
- Gradual stages – They (the government?) were supposed to take the Cherokees to the West slowly over time.
- Because – There were several thousand Cherokees, so they were supposed to move them slowly.
- The discovery – People (the government?) discovered Appalachian gold on Cherokee land.
- Appalachian gold – People (the government?) wanted the gold from Appalachia.
- A clamor – People made a lot of noise about something.
- Immediate wholesale exodus – People (who?) told the government to move all the Cherokees off their land right away, now.

Vignettes 7.3 and 7.4

Content Knowledge in Elementary School

Key Points

- A reciprocal relationship exists between literacy and language development and content knowledge.
- Content area instruction should be given adequate time in the school day, including *during the earliest years of schooling*, and all learners should have full access to content area instruction.
- Content area instruction should include attention to literacy and language development in the subject matter along with subject-matter appropriate pedagogy (e.g., hands-on investigations, explorations, inquiries, projects, demonstrations, and discussions).
- The Framework calls for an integrated and interdisciplinary approach.

Integrated and Interdisciplinary Approach

Snapshot 3.3. Animal Informational Alphabet Books
Integrated ELA, Science, and Visual Arts in Transitional Kindergarten

It is spring and most of the transitional kindergarteners know many of the letters of the alphabet; some know them all. Mrs. Heaton has been sharing a variety of informational animal alphabet books with the students in recent weeks, including Jerry Pallotta's *The Ocean Alphabet Book*, *The Sea Mammal Alphabet Book*, and *The Butterfly Alphabet Book*, to reinforce their letter knowledge as well as expose them to informational text and life science concepts. The children are enraptured by the interesting information they are learning about animals and they enthusiastically ask and answer questions about the content. Mrs. Heaton leaves the books at a classroom center so the children can explore and enjoy them on their own.

One morning, the children enter the classroom to find butcher paper stretched all the way across one wall of the room. Spanning the length of the paper are the letters of the alphabet. Mrs. Heaton tells the children they are going to create a mural using many of the animals they have been reading about and add any other animals they would like t

Throughout the week, the children use the books and other materials, incl digital images, to paint one or more animals of their choice. They ask Mrs. and reread sections of the alphabet books to help them remember interest and they dictate sentences about their animals to Mrs. Heaton, who prints animal and the student's corresponding sentence on a large index card. As sentences, Mrs. Heaton takes the opportunity to broaden the children's lan by prompting them to provide more details about their animals (such as, it ocean) and to use precise vocabulary to describe them (such as, it uses its to get lots of plankton). She is mindful of how important this is for all child for her EL children.

With support from Mrs. Heaton or a family volunteer, the children cut animals and identify where to position them on the alphabet mural. Daniel, who drew a jellyfish, finds the letter "J" on the mural and requests that his painting and sentence under it. While the mural is under construction, and weeks thereafter, the students enjoy viewing the animals and listening to other adults read the information they dictated onto the index cards.

Resources

Pallotta, Jerry. 1989. *The Ocean Alphabet Book*. Watertown, MA: Charlesbridge.
Pallotta, Jerry. 1995. *The Butterfly Alphabet Book*. Watertown, MA: Charlesbridge.
Pallotta, Jerry. 2012. *The Sea Mammal Alphabet Book*. Watertown, MA: Bald Eagle Books.

CA CCSS for ELA/Literacy: RI.K.1; RF.K.1; RF.K.3a, b; W.K.2; L.K.6
CA ELD Standards: ELD.PI.K.2, 10, 12b; ELD.PII.K.4, 5
Related CA Next Generation Science Standards:
K-LS1-1 Use observations to describe patterns of what plants and animals (including humans) need to survive.
K-ESS2-1 Construct an argument supported by evidence for how plants and animals (including humans) can change the environment to meet their needs.
K-ESS3-1 Use a model to represent the relationship between the needs of different plants and animals (including humans) and the places they live.
Related Visual and Performing Arts Content Standards:
Visual Arts K.2.5 Use lines in drawings and paintings to express feelings.

Snapshot 3.4. Collecting and Reporting Data on Litter at School
Integrated ELA, ELD, Science, and History–Social Science in Kindergarten

The kindergarteners in Mr. Kravitz's classroom listen to several informational and literary texts about the importance of caring for the environment and the impact litter has on local habitats. Mr. Kravitz guides a discussion about this type of pollution, asking—and encouraging the children to ask—questions about the information they are learning from the texts. He prepares them for paired as well as large group conversations about what they are learning by revisiting the texts and images, and drawing attention to some of the vocabulary that may be particularly useful for their discussions. For example, he reviews and writes on a chart some of the general academic (e.g., *discard, accumulate, observe, impact*) and domain-specific (e.g., *habitat, pollute, litter*) vocabulary from the texts that convey important ideas.

Next he has students meet in pairs to talk about what they have learned. Many of them refer to the chart to remind themselves and each other about the concepts and accompanying vocabulary. After sharing in pairs, the children gather in small groups to draw and label illustrations about what they learned and discussed. They work collaboratively, talking about their understandings and making decisions about their illustrations and the words they will use to label them. After each group presents and explains a labeled illustration to the entire class, the illustrations are displayed on a bulletin board. Next the children identify three areas of the school grounds where they can examine litter in their school environment. They identify the location where students are dropped off and picked up, the outdoor lunch area, and the playground. For five days in a row, teams count (and safely collect and discard) individual items during the final half hour of school and record the count in each area on a chart.

At the end of the week, the children determine which area accumulated the most trash by adding the daily counts. Mr. Kravitz leads a discussion about their findings and guides children to think about the consequences of the litter in these locations and possible actions they can take to change the amount of litter accumulating in these places. Some of the children say that the litter makes their school ugly. Others mention the potential danger to their own health and that of the birds and other animals who visit their school. Together, with Mr. Kravitz serving as scribe, they jointly craft a letter to the principal, incorporating some of the special terminology used in their discussions and readings. After carefully revising and editing it as a group with teacher assistance, they invite the principal to the class to share their findings and present their letter to her.

CA CCSS for ELA/Literacy: RL.K.1; RF.K.2; W.K.2; SL.K.1, 6; L.K.6
CA ELD Standards: ELD.PI.K.1–2, 5, 6, 9–11, 12b; ELD.K.PII.1, 3
Related CA Next Generation Science Standards:
Performance Expectation
K-ESS3-3 Communicate solutions that will reduce the impact of humans on the land, water, air, and/or other living things in the local environment.
Science and Engineering Practices
Planning and Carrying Out Investigations
Analyzing and Interpreting Data
Related CA History–Social Science Standard:
Civic participation

Snapshot 3.9. Teaching Science Vocabulary
Integrated ELA, ELD, and Science in Grade One

After initial teaching that included child-friendly definitions at point-of-contact (while reading texts aloud to students or discussing science concepts), Mr. Rodriguez selects several domain-specific words from the students' ongoing study of life cycles for deeper exploration. One word he selects is *metamorphosis* because it represents a crucial concept in the content. He asks students to think about where they had heard the word during their study, and with his assistance, they recall that it was used in the book about caterpillars changing into moths and in the time-lapse video clip showing tadpoles becoming frogs. On large chart paper he draws a graphic known as a Frayer Model. He writes the target word in the center and labels the four quadrants. He reminds the students of the definition—it was one they had discussed many times—and asks them to share with a neighbor something they know about the concept after the recent few weeks of investigat
children's assistance in one quadrant of

Mr. Rodriguez then asks students to
of animals that undergo metamorphosi
places on the chart. Importantly, he als
metamorphosis, thus better supporting
children in identifying some characteris
some important aspects of metamorph
students with sufficient time to turn an
students' participation and engagement
thing that's important about metamorp

Snapshot 3.11. Expanding Sentences and Building Vocabulary
Designated ELD Connected to ELA/Social Studies in Grade One

In Social Studies, Mr. Dupont's class has been learning about how being a good citizen involves acting in certain ways. Through teacher read alouds of informational and literary texts (including stories and folktales), as well as viewing videos and other media, the children experience and identify examples of honesty, courage, determination, individual responsibility, and patriotism in American and world history. Mr. Dupont takes care to emphasize American and international heroes that reflect his students' diverse backgrounds. He frequently asks the children to discuss their ideas and opinions in order to prepare them to write an opinion piece explaining why they admire a historical figure mentioned in one of the texts they have been reading.

Because Mr. Dupont's EL children are at the Bridging level of English language proficiency, during designated ELD he provides his students with extended opportunities to discuss their ideas and opinions, as he knows that this will support them later when writing down their ideas. He strategically targets particular language that he would like students to use in their opinion pieces by constructing sentence frames that contain specific vocabulary and grammatical structures that will enable his students to be more precise and detailed (e.g., My favorite hero is ___ because ___. ___ was *very courageous* when ___.). He explains to the children how they can expand their ideas in different ways by adding information about where, when, how, and so forth. For example, he explains that instead of simply saying, "She worked on a farm," children could say, "She worked on a farm *in California*," or they could add even more detail and precision by saying, "She worked on a farm *in the central valley of California*." He provides his students with many opportunities to construct these expanded sentence structures as the students discuss the historical figures they are learning about and then write short summaries of their discussions at the end of each lesson. During these lessons, he encourages the children to refer to the texts they have previously read together and to cite evidence from them to support their ideas.

Snapshots 3.3, 3.4, 3.9, and 3.11

Supporting Knowledge Development: Wide Reading

- Teachers provide a wide range of texts to broaden students' knowledge and interests.
- Teachers select texts carefully to build content knowledge.
- Children also have the opportunity to pursue texts of their choice.

Figure 2.2. Range of Text Types

Grade Span	Literature			Informational Text
	Stories	Drama	Poetry	Literary Nonfiction and Historical, Scientific, and Technical Texts
K–5	Includes children's adventure stories, folktales, legends, fables, fantasy, realistic fiction, and myth.	Includes staged dialogue and brief familiar scenes.	Includes nursery rhymes and the subgenres of the narrative poem, limerick, and free verse poem.	Includes biographies and autobiographies; books about history, social studies, science, and the arts; technical texts, including directions, forms, and the information displayed in graphs, charts, or maps; and digital sources on a range of topics.

Figure 4.10. Texts to Build Knowledge on Topics in Science

Grade Two – Rock Cycle	Grade Three – Solar System
Rocks: Hard, Soft, Smooth and Rough by Natalie Rosinsky (2004)	*Comets, Meteors, and Asteroids* by Seymour Simon (1994)
Everybody Needs a Rock by Byrd Baylor (1995)	*The Moon* by Seymour Simon (2003)
Cool Rocks: Creating Fun and Fascinating Collections by Kompelien (2007)	*Eyewitness Books: Astronomy* by Kristen Lippincott (1994)
A Gift From the Sea by K. Banks (2008)	*Postcards from Pluto: A Tour of the Solar System* by Loreen Leedy (2006)
If You Find A Rock by P. Christian (2008)	*Solar System* by Gregory Vogt
Rocks by Sally M. Walker (2007)	*What Makes Day Night* by Franklyn Branley (1961)
Earthshake – Poems From the Ground Up by L. Westberg Peters (2003)	*The Usborne Complete Book of Astronomy and Space* by Lisa Miles, Alastair Smith, and Judy Tatchell (2010)
What Is The Rock Cycle? by Natalie Hyde (2010)	*Stargazers* by Gail Gibbons (1999)
The Rock Factory by Jacqueline Bailey (2006)	*The Moon Book* by Gail Gibbons (1998)
What Are Igneous Rocks? by Molly Aloian (2010)	*The Moon* by Michael Carlowicz (2007)
What Are Sedimentary Rocks? by Natalie Hyde (2010)	*The Big Dipper* by Franklyn Branley (1991)
What Are Metamorphic Rocks? by Molly Aloian (2010)	*The Magic School Bus: Lost in the Solar System* by Joanna Cole (1992)

Figures 2.2 and 4.10

Supporting Knowledge Development: Informational Text (1)

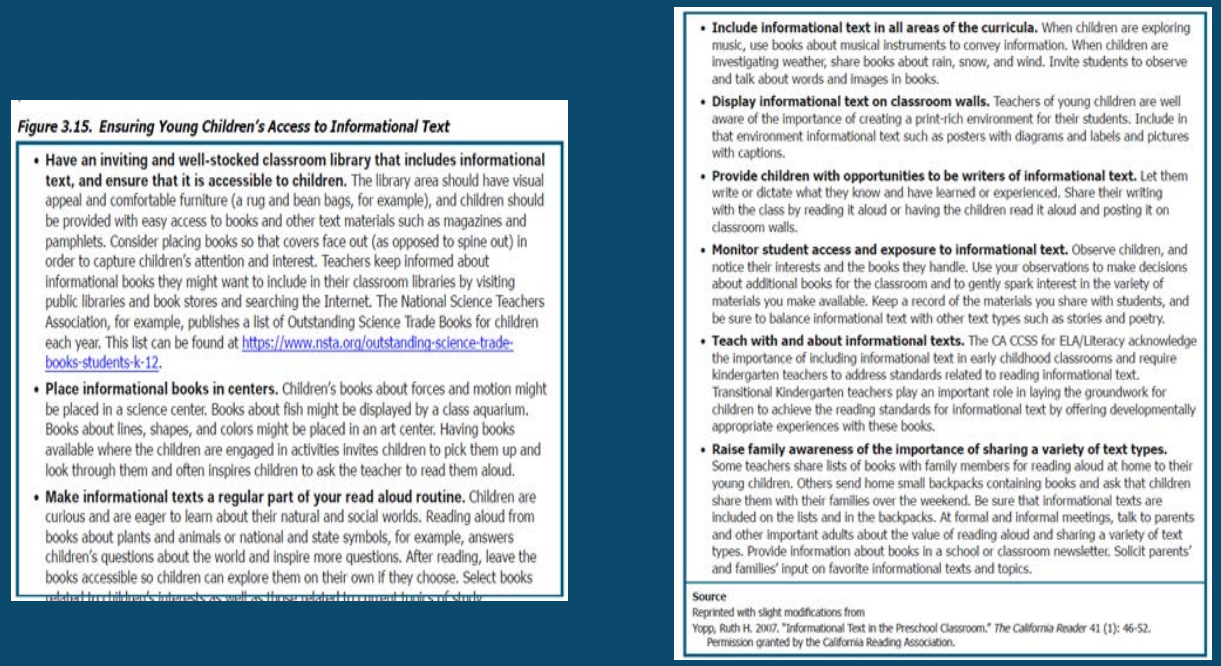


Figure 3.15. Ensuring Young Children's Access to Informational Text

- **Have an inviting and well-stocked classroom library that includes informational text, and ensure that it is accessible to children.** The library area should have visual appeal and comfortable furniture (a rug and bean bags, for example), and children should be provided with easy access to books and other text materials such as magazines and pamphlets. Consider placing books so that covers face out (as opposed to spine out) in order to capture children's attention and interest. Teachers keep informed about informational books they might want to include in their classroom libraries by visiting public libraries and book stores and searching the Internet. The National Science Teachers Association, for example, publishes a list of Outstanding Science Trade Books for children each year. This list can be found at https://www.nsta.org/outstanding-science-trade-books-students-k-12.
- **Place informational books in centers.** Children's books about forces and motion might be placed in a science center. Books about fish might be displayed by a class aquarium. Books about lines, shapes, and colors might be placed in an art center. Having books available where the children are engaged in activities invites children to pick them up and look through them and often inspires children to ask the teacher to read them aloud.
- **Make informational texts a regular part of your read aloud routine.** Children are curious and are eager to learn about their natural and social worlds. Reading aloud from books about plants and animals or national and state symbols, for example, answers children's questions about the world and inspire more questions. After reading, leave the books accessible so children can explore them on their own if they choose. Select books

- **Include informational text in all areas of the curricula.** When children are exploring music, use books about musical instruments to convey information. When children are investigating weather, share books about rain, snow, and wind. Invite students to observe and talk about words and images in books.
- **Display informational text on classroom walls.** Teachers of young children are well aware of the importance of creating a print-rich environment for their students. Include in that environment informational text such as posters with diagrams and labels and pictures with captions.
- **Provide children with opportunities to be writers of informational text.** Let them write or dictate what they know and have learned or experienced. Share their writing with the class by reading it aloud or having the children read it aloud and posting it on classroom walls.
- **Monitor student access and exposure to informational text.** Observe children, and notice their interests and the books they handle. Use your observations to make decisions about additional books for the classroom and to gently spark interest in the variety of materials you make available. Keep a record of the materials you share with students, and be sure to balance informational text with other text types such as stories and poetry.
- **Teach with and about informational texts.** The CA CCSS for ELA/Literacy acknowledge the importance of including informational text in early childhood classrooms and require kindergarten teachers to address standards related to reading informational text. Transitional Kindergarten teachers play an important role in laying the groundwork for children to achieve the reading standards for informational text by offering developmentally appropriate experiences with these books.
- **Raise family awareness of the importance of sharing a variety of text types.** Some teachers share lists of books with family members for reading aloud at home to their young children. Others send home small backpacks containing books and ask that children share them with their families over the weekend. Be sure that informational texts are included on the lists and in the backpacks. At formal and informal meetings, talk to parents and other important adults about the value of reading aloud and sharing a variety of text types. Provide information about books in a school or classroom newsletter. Solicit parents' and families' input on favorite informational texts and topics.

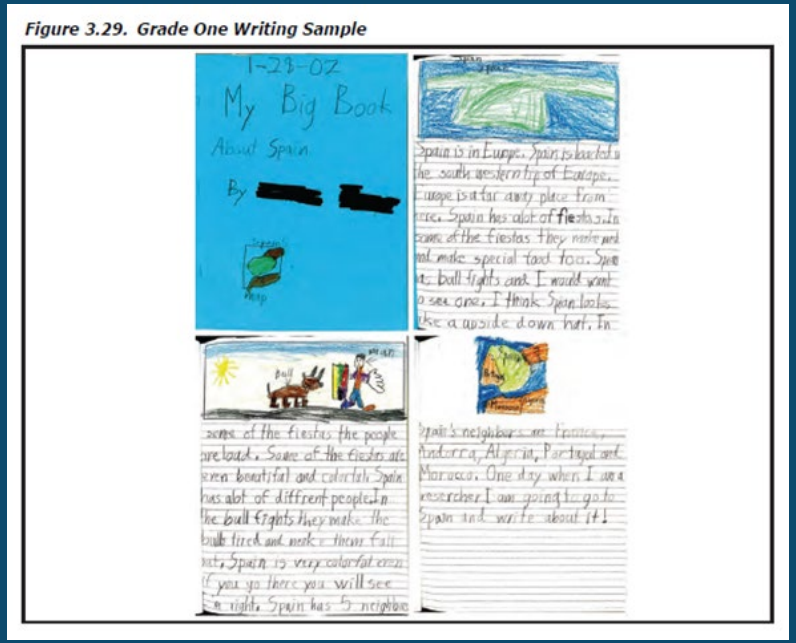
Source
Reprinted with slight modifications from
Yopp, Ruth H. 2007. "Informational Text in the Preschool Classroom." *The California Reader* 41 (1): 46-52.
Permission granted by the California Reading Association.

Figure 3.15

Supporting Knowledge Development: Informational Text (2)

"Replacing texts with other sources of information—in spite of the intention to ensure access to the curriculum—limits students' skill to independently learn with texts in the future. In other words, instruction should be provided that enables all students to learn with texts alongside other learning experiences [inquiry and hands-on experiences, teacher presentations and demonstrations, class discussions, and audio and visual media]." (414)

Supporting Knowledge Development: Writing



Annotation

The writer of this piece:

- Names the topic (in the title).
  - *My Big Book About Spain*
- Supplies some facts about the topic.
  - *Spain is loacted* (located) *in the south western tip of Europe.*
  - *Spain has alot of fiestas.*
  - *Spain . . . has bull fights . . . .*
  - *Spain's neighbors are France, Andorra, Algeria, Portugal and Morocco.*
- Provides some sense of closure.
  - *One day when I am a researcher I am going to go to Spain and write about it!*
- Demonstrates command of some of the conventions of standard written English.

This piece illustrates the writer's awareness of beginning-of-sentence capitalization and end-of-sentence punctuation as well as the use of capital letters for proper nouns.

Source

National Governors Association Center for Best Practices and Council of Chief State School Officers. 2010b. *Common Core State Standards for English Language Arts and Literacy in History/Social Studies, Science, and Technical Subjects. Appendix C*, 11-12. National Governors Association Center for Best Practices, Council of Chief State School Officers, Washington DC.

Informational text written by a first grader (Figure 3.29, p. 243)

Supporting Knowledge Development: Research (1)

Writing Standard 7

- Participate in shared research and writing projects (K–2)
- Conduct short research projects that build knowledge about a topic. (3)
- Conduct short research projects that build knowledge through investigation of different aspects of a topic. (4)
- Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic. (5)

Supporting Knowledge Development: Research (2)

Research projects

- Foster motivation
- Provide authentic reasons to make use of and expand language and literacy skills as children explore, communicate, use text resources, write, and present
- Promote content knowledge development as children discover and make connections between existing and new knowledge

Content Knowledge in Middle and High School

Disciplinary Literacy (1)

Scientists, historians, mathematicians, and language arts experts “call on particular ways of using spoken and written language as well as a range of multimodal representations” (Coffin & Derewianka, 2009; O’Halloran, 2005; Unsworth, 2008).

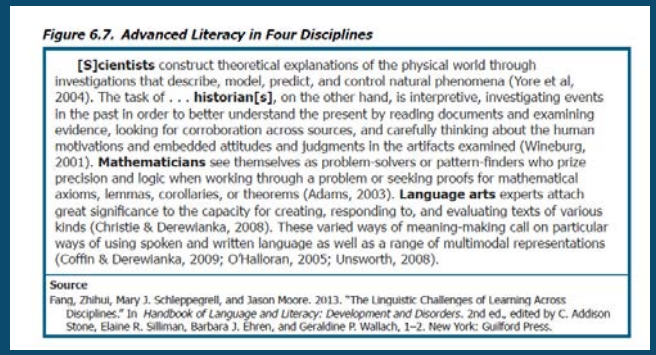


Figure 6.7. Advanced Literacy in Four Disciplines

[S]cientists construct theoretical explanations of the physical world through investigations that describe, model, predict, and control natural phenomena (Yore et al, 2004). The task of . . . **historian[s]**, on the other hand, is interpretive, investigating events in the past in order to better understand the present by reading documents and examining evidence, looking for corroboration across sources, and carefully thinking about the human motivations and embedded attitudes and judgments in the artifacts examined (Wineburg, 2001). **Mathematicians** see themselves as problem-solvers or pattern-finders who prize precision and logic when working through a problem or seeking proofs for mathematical axioms, lemmas, corollaries, or theorems (Adams, 2003). **Language arts** experts attach great significance to the capacity for creating, responding to, and evaluating texts of various kinds (Christie & Derewianka, 2008). These varied ways of meaning-making call on particular ways of using spoken and written language as well as a range of multimodal representations (Coffin & Derewianka, 2009; O'Halloran, 2005; Unsworth, 2008).

Source

Fang, Zhihui, Mary J. Schleppegrell, and Jason Moore. 2013. "The Linguistic Challenges of Learning Across Disciplines." In *Handbook of Language and Literacy: Development and Disorders*. 2nd ed., edited by C. Addison Stone, Elaine R. Silliman, Barbara J. Ehren, and Geraldine P. Wallach, 1–2. New York: Guilford Press.

Figure 6.7, p. 532

Disciplinary Literacy (2)

Figure 7.12. Student Goals for Building Knowledge of the Disciplines

Literature	Mathematics
Literary genres: Use of diverse genres and subgenres to predict how ideas are organized	**Conceptual categories:** Different areas of math knowledge (e.g., number, algebra, functions, geometry, statistics and probability, modeling)
Literary themes: Universal themes (e.g., good vs. evil, ideal vs. flawed behavior) and how to trace their development	**Mathematical reasoning:** Thinking interchangeably about a math problem in abstract and quantitative terms; monitoring of reasonableness of the relationship between the two
Literary structures: How different literary structures (e.g., plot, stanza, act) organize and contribute to meaning	**Mathematical representation:** Reading and representing with words, formulas, and symbols; reading and creating diagrams, tables, graphs, and flowcharts for mathematic purposes
Literary commentary: How commentary (e.g., social, historical, economic, political, cultural) is incorporated or promoted, either transparently or through figuration (e.g., irony, allegory, and symbolism)	**Mathematical language:** Precise nature of language and its use for exact communication
Literary movements: How literary movements (e.g., transcendentalism, romanticism, realism, feminism) affect a piece of literature	**Problem identification:** Identifying "the problem" in a math problem
Narrative voice: Narrative voice (first-person, third-person, third-person omniscient, unreliable narrator) and authorial voice, including relationships between the author and narrator	**Problem solving:** Conjectures and evaluation of alternative approaches; monitoring reasonableness of a solution approach
Language choices: Imagery, tone, dialogue, rhythm, and syntax to shape meaning	**Accuracy:** Possibility of alternate approaches to a solution, but only one correct answer; checking that final solution makes sense and all computation is correct
Literary inquiry: Reference and interpretation within and across texts and experiences; others' evidence-based inferences and interpretations	**Pattern application:** Structures, approaches, and patterns that can apply to the solution of new problems
Literary identity: Awareness of evolving identity as a reader and writer of literary forms	**Mathematical identity:** Awareness of evolving identity as a reader and user of mathematics

Science	History
Scientific documents: Diverse documents (e.g., reports, data tables and graphs, illustrations and other visuals, equations, textbooks, models)	**Historical documents and artifacts:** Identification and use of diverse types
Scientific text: Predictable structures (e.g., classification and definition, structure and function, process and interaction, claim and evidence, procedure); visuals and numerical representations; text often tightly packed with new terms/ideas; frequent use of passive voice and complex sentence constructions	**Primary and secondary sources:** Differences between primary and secondary sources
Scientific language: Familiar terms used in unfamiliar ways; precise use of names and labels for processes and structures	**Document sourcing:** Evaluating credibility and point of view by identifying who wrote a document or account, when, why, and for what audience
Scientific sourcing: Evaluating authority or reliability of document, set of data, or piece of evidence	**Document corroboration:** Comparison of documents or accounts for evidence that what is written is credible and other points of view of perspectives
Scientific inquiry: Cycles of questioning, observing, explaining, and evaluating; reading and describing investigations	**Chronological thinking:** Ordering events and assessing their duration and relationships in time
Scientific evidence: Claims supported by carefully collected, evaluated, and reported evidence so others can judge its value	**Historical schema:** Particular times and places and how they differ (e.g., geography, people, customs, values, religions, beliefs, languages, technologies, roles of men, women, children, minority groups)
Scientific explanation: Writing to make claims about observations and defending with evidence	**Historical contextualization:** What it was like in times and places that one cannot personally experience
Scientific corroboration: Corroborating findings to find out how likely they are to be true	**Historical cause and effect:** Identification of historical relationships and impacts
Scientific understanding: Moving forward with best evidence and information, even if proved incomplete or wrong in future	**Historical record and interpretation:** Combination of what can be observed, how it is observed, what can be interpreted, and how it is interpreted
Conceptual change: Deciding whether compelling evidence changes understanding of the natural world	**Historical identity:** Awareness of evolving identity as a reader of and actor in history
Scientific identity: Awareness of evolving identity as a reader, user, and consumer of science	

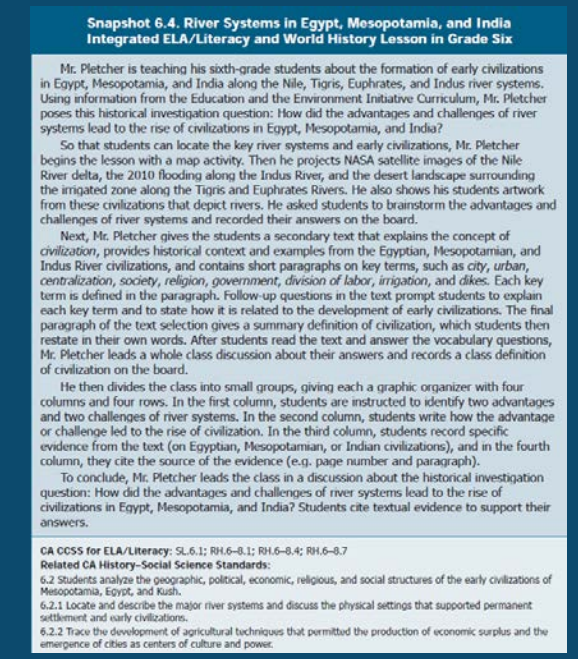
Source
Adapted from
Schoenbach, Ruth, Cynthia Greenleaf, and Lynn Murphy. 2012. *Reading for Understanding: How Reading Apprenticeship Improves Disciplinary Learning in Secondary and College Classrooms*, 2nd ed., 275, 276, 278, 280, and 283. San Francisco, CA: Jossey-Bass.

Examples of the ways in which reading, writing, and language are used to build knowledge and communicate ideas in the disciplines.

Figure 7.12, pp. 700–701

Engaging with Literary & Informational Texts (1)

Informational texts provide rich opportunities for literacy development, including vocabulary and language development, as well as critical thinking.



Snapshot 6.4. River Systems in Egypt, Mesopotamia, and India
Integrated ELA/Literacy and World History Lesson in Grade Six

Mr. Pletcher is teaching his sixth-grade students about the formation of early civilizations in Egypt, Mesopotamia, and India along the Nile, Tigris, Euphrates, and Indus river systems. Using information from the Education and the Environment Initiative Curriculum, Mr. Pletcher poses this historical investigation question: How did the advantages and challenges of river systems lead to the rise of civilizations in Egypt, Mesopotamia, and India?

So that students can locate the key river systems and early civilizations, Mr. Pletcher begins the lesson with a map activity. Then he projects NASA satellite images of the Nile River delta, the 2010 flooding along the Indus River, and the desert landscape surrounding the irrigated zone along the Tigris and Euphrates Rivers. He also shows his students artwork from these civilizations that depict rivers. He asked students to brainstorm the advantages and challenges of river systems and recorded their answers on the board.

Next, Mr. Pletcher gives the students a secondary text that explains the concept of *civilization*, provides historical context and examples from the Egyptian, Mesopotamian, and Indus River civilizations, and contains short paragraphs on key terms, such as *city*, *urban*, *centralization*, *society*, *religion*, *government*, *division of labor*, *irrigation*, and *dikes*. Each key term is defined in the paragraph. Follow-up questions in the text prompt students to explain each key term and to state how it is related to the development of early civilizations. The final paragraph of the text selection gives a summary definition of civilization, which students then restate in their own words. After students read the text and answer the vocabulary questions, Mr. Pletcher leads a whole class discussion about their answers and records a class definition of civilization on the board.

He then divides the class into small groups, giving each a graphic organizer with four columns and four rows. In the first column, students are instructed to identify two advantages and two challenges of river systems. In the second column, students write how the advantage or challenge led to the rise of civilization. In the third column, students record specific evidence from the text (on Egyptian, Mesopotamian, or Indian civilizations), and in the fourth column, they cite the source of the evidence (e.g. page number and paragraph).

To conclude, Mr. Pletcher leads the class in a discussion about the historical investigation question: How did the advantages and challenges of river systems lead to the rise of civilizations in Egypt, Mesopotamia, and India? Students cite textual evidence to support their answers.

CA CCSS for ELA/Literacy: SL.6.1; RH.6–8.1; RH.6–8.4; RH.6–8.7
Related CA History–Social Science Standards:
6.2 Students analyze the geographic, political, economic, religious, and social structures of the early civilizations of Mesopotamia, Egypt, and Kush.
6.2.1 Locate and describe the major river systems and discuss the physical settings that supported permanent settlement and early civilizations.
6.2.2 Trace the development of agricultural techniques that permitted the production of economic surplus and the emergence of cities as centers of culture and power.

Snapshot 6.4, p. 563

Engaging with Literary & Informational Texts (2)

- Literature as a discipline & content area
- Samples of Paired Literary & Informational Texts
  Figure 7.13, pp. 706–08
- Research-Based Learning Techniques (Study Skills)
  Figure 7.14, pp. 709–10

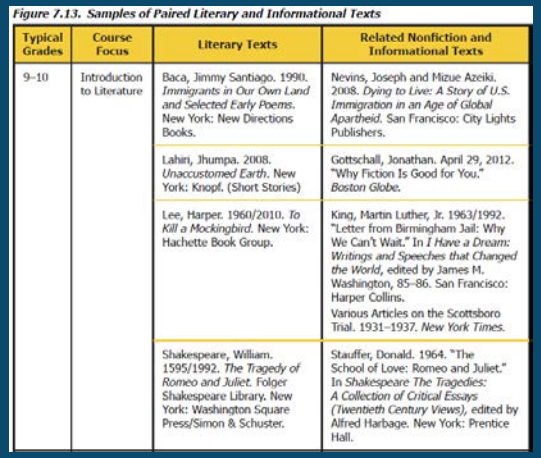


Figure 7.13. Samples of Paired Literary and Informational Texts

Typical Grades	Course Focus	Literary Texts	Related Nonfiction and Informational Texts
9–10	Introduction to Literature	Baca, Jimmy Santiago. 1990. *Immigrants in Our Own Land and Selected Early Poems.* New York: New Directions Books.	Nevins, Joseph and Mizue Azeiki. 2008. *Dying to Live: A Story of U.S. Immigration in an Age of Global Apartheid.* San Francisco: City Lights Publishers.
		Lahiri, Jhumpa. 2008. *Unaccustomed Earth.* New York: Knopf. (Short Stories)	Gottschall, Jonathan. April 29, 2012. "Why Fiction Is Good for You." *Boston Globe.*
		Lee, Harper. 1960/2010. *To Kill a Mockingbird.* New York: Hachette Book Group.	King, Martin Luther, Jr. 1963/1992. "Letter from Birmingham Jail: Why We Can't Wait." In *I Have a Dream: Writings and Speeches that Changed the World,* edited by James M. Washington, 85–86. San Francisco: Harper Collins. Various Articles on the Scottsboro Trial. 1931–1937. *New York Times.*
		Shakespeare, William. 1595/1992. *The Tragedy of Romeo and Juliet.* Folger Shakespeare Library. New York: Washington Square Press/Simon & Schuster.	Stauffer, Donald. 1964. "The School of Love: Romeo and Juliet." In *Shakespeare The Tragedies: A Collection of Critical Essays (Twentieth Century Views),* edited by Alfred Harbage. New York: Prentice Hall.

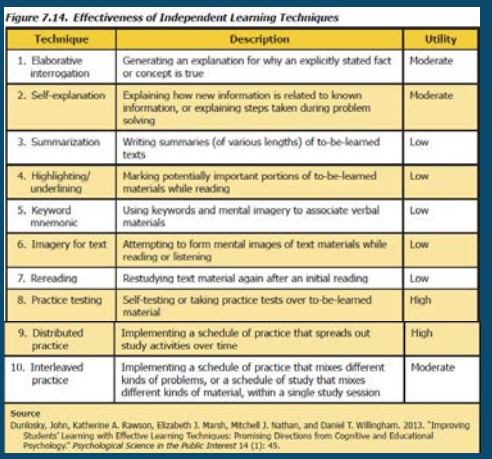


Figure 7.14. Effectiveness of Independent Learning Techniques

Technique	Description	Utility
1. Elaborative interrogation	Generating an explanation for why an explicitly stated fact or concept is true	Moderate
2. Self-explanation	Explaining how new information is related to known information, or explaining steps taken during problem solving	Moderate
3. Summarization	Writing summaries (of various lengths) of to-be-learned texts	Low
4. Highlighting/ underlining	Marking potentially important portions of to-be-learned materials while reading	Low
5. Keyword mnemonic	Using keywords and mental imagery to associate verbal materials	Low
6. Imagery for text	Attempting to form mental images of text materials while reading or listening	Low
7. Rereading	Restudying text material again after an initial reading	Low
8. Practice testing	Self-testing or taking practice tests over to-be-learned material	High
9. Distributed practice	Implementing a schedule of practice that spreads out study activities over time	High
10. Interleaved practice	Implementing a schedule of practice that mixes different kinds of problems, or a schedule of study that mixes different kinds of material, within a single study session	Moderate

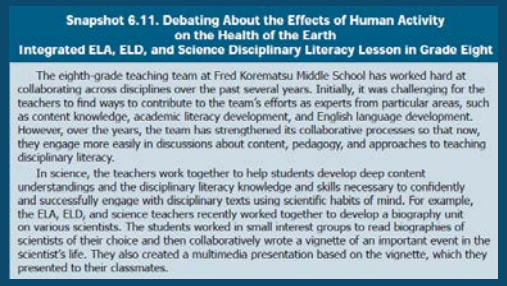
Source
Dunlosky, John, Katherine A. Rawson, Elizabeth J. Marsh, Mitchell J. Nathan, and Daniel T. Willingham. 2013. "Improving Students' Learning with Effective Learning Techniques: Promising Directions from Cognitive and Educational Psychology." *Psychological Science in the Public Interest* 14 (1): 45.

Engaging in Research (1)

"Opportunities to engage in research contribute to students' content knowledge." Chapter 7, p. 710

- Writing standards require students to
  - Conduct short (W.6–8.7)/sustained research projects (W.9–12.7)
  - Gather relevant information (W.6–8.8); use advanced searches effectively and assess the usefulness of each source (W.9–10.8); assess the strengths and limitations of each source and integrate information into the text (W.11–12.8)
- *Model School Library Standards* identify a number of competencies that can support students in their research efforts.

Engaging in Research (2)



Snapshot 6.11. Debating About the Effects of Human Activity on the Health of the Earth
Integrated ELA, ELD, and Science Disciplinary Literacy Lesson in Grade Eight

The eighth-grade teaching team at Fred Korematsu Middle School has worked hard at collaborating across disciplines over the past several years. Initially, it was challenging for the teachers to find ways to contribute to the team's efforts as experts from particular areas, such as content knowledge, academic literacy development, and English language development. However, over the years, the team has strengthened its collaborative processes so that now, they engage more easily in discussions about content, pedagogy, and approaches to teaching disciplinary literacy.

In science, the teachers work together to help students develop deep content understandings and the disciplinary literacy knowledge and skills necessary to confidently and successfully engage with disciplinary texts using scientific habits of mind. For example, the ELA, ELD, and science teachers recently worked together to develop a biography unit on various scientists. The students worked in small interest groups to read biographies of scientists of their choice and then collaboratively wrote a vignette of an important event in the scientist's life. They also created a multimedia presentation based on the vignette, which they presented to their classmates.

Snapshot 6.11. Debating About the Effects of Human Activity on the Health of the Earth
Integrated ELA, ELD, and Science Disciplinary Literacy Lesson in Grade Eight (cont.)

From the science teacher's perspective, the ELA and ELD teachers have helped her to be more explicit about the language in science texts when she facilitates discussions. From the ELA and ELD teachers' perspectives, the science teacher has familiarized them with the core science principles and conceptual understandings that are important for students to understand and given them insights into how scientists think. As the three teachers analyze the texts they use in their various disciplines and discuss the types of writing they expect their students to do, they discover that each discipline has its own culture or ways of reading, writing, speaking, thinking, and reasoning.

For example, they notice that arguments look different in ELA than they do in science or social studies and that these differences go beyond vocabulary knowledge. In ELA, students learn to respond to literature by analyzing and evaluating novels, short stories, and other literary texts. In literary responses, students are expected to present and justify arguments having to do with themes and abstract ideas about the human condition, explain figurative devices (e.g., metaphor, symbolism, irony), and interpret characters' actions and dialogue and using evidence from the text to support their claims. In science, students learn to reason and argue scientifically, composing arguments supported by evidence that is presented in ways that reflect scientific knowledge and thinking. The language used to shape arguments reflects differences in the purposes of argumentation in each discipline. To support their students, the teachers plan ways to more explicitly teach the language of argument in general and to help students attend to some of the differences in argumentative writing that occur across content areas.

Currently, the teachers are collaborating on a unit where their students will research the effects of human activity on the health of the world. Among the tasks students will complete is an argument for how increases in human population and per capita consumption of natural resources impact Earth's systems and people's lives. Together, the teachers design meaningful and engaging tasks that will support all students in achieving the performance task. These tasks include overt attention to how arguments in science are constructed with much discussion about the language resources used. Some discussions are facilitated in a whole class format, while others are conducted in small collaborative groups. Likewise, some tasks are facilitated in the science classroom, while others are facilitated in the ELA and ELD classrooms. Teachers engage their students in the following in order to enhance their skills in reading and writing arguments in science:

Building Students' Skill in Reading and Writing Arguments in Science

- Reading many texts, viewing media, and multiple discussions to develop deep knowledge about the topic
- Conducting collaborative research investigating the topic and gathering evidence in notebooks for possible use in written arguments and debates
- Using mentor science argumentative texts to identify and discuss *claims, position statements, counterarguments, supporting evidence,* and *persuasive language*

Snapshot 6.11. Debating About the Effects of Human Activity on the Health of the Earth
Integrated ELA, ELD, and Science Disciplinary Literacy Lesson in Grade Eight (cont.)

- Unpacking claims to determine what types of evidence and warrants are expected
- Unpacking paragraphs and sentences in mentor science argumentative texts to identify language resources used and discuss why the writer used them
- Weighing competing positions and discussing what makes arguments or counterarguments more credible
- Identifying and discussing audiences (their beliefs, attitudes, and experiences) for particular arguments and how to convince them to accept different positions
- Orally debating positions, using supporting evidence from research, to practice formulating claims and counterarguments, engage in rebuttals, and define partners' claims in order to undermine them
- Using templates to organize ideas and jointly construct short arguments for different audiences
- Role playing to rehearse making arguments for intended audiences, providing feedback to peers on language they use and evidence they present, and adjusting language and content, based on feedback received

When the students write their arguments about the impact of human activity on the Earth, they do so collaboratively in interest groups. They write for a peer audience, adopting an academic stance while also envisioning a clear purpose for their writing. That is, they attempt to persuade their peers to think a certain way (e.g., climate change is affecting food supply) or do a certain thing (e.g., recycle to conserve natural resources) based on their sound arguments that include credible and convincing evidence. Each group's argument will be evaluated by two other groups as well as the teacher, using criteria that the class generates over the course of the unit as they learn more about what makes an effective science argument.

As the unit progresses, the science, ELA, and ELD teachers meet frequently to discuss how the learning tasks are going and to make adjustments based on their observations of student discussions and writing tasks. At the end of the unit, they agree that the intensive cross-disciplinary approach they have employed has helped students understand the structure of different types of arguments they read and to produce their own arguments in different disciplines. The combined activities have also supported them to take a more critical stance to reading and writing tasks more generally.

CA CCSS for ELA/Literacy: RI.8.1–3, 5, 8; W.8.1, 7; SL.8.1, 3, 4, 6; RST.8.1, 5, 8; WHST.8.1, 7, 9
CA ELD Standards: ELD.PI.8.1–4, 6a, 7–9, 10a, 11a; ELD.PII.8.1–2
Related CA Next Generation Science Standard:
MS-ESS3-4 Construct an argument supported by evidence for how increases in human population and per capita consumption of natural resources impact Earth's systems.

Snapshot 6.11, pp. 631–33

Engaging in research provides rich opportunities for students to develop deep content understandings & disciplinary literacy knowledge and skills.

In Snapshot 6.11, students investigate a science topic & learn to read & write arguments in science, work collaboratively, & develop their English language proficiency.

Engaging in Research (3)

Implications for the CAASPP in Grades 6–8 and 11

Claim	Percent of Items by Claim
Reading	38.5
Listening	15.4
Writing	26.9
Research	19.2

Combined Claims	Score Report Performance Areas
Reading and Listening	53.9
Writing and Research	46.1

Essay scores are reported on a 4-point scale for each of three areas: Organization & Purpose; Development & Elaboration; & Conventions.

Wide Reading

Becoming Broadly Literate – Chapter 2

- Wide and Independent Reading, p. 56–57
- Planning an Independent Reading Program, pp. 57–58
- Reading Aloud, pp. 58–60

Planning for Wide Reading – Chapters 6 and 7

- Grades 6–8, pp. 537–38
- Grades 9–12, p. 712

Content Knowledge Theme: Explore and Reflect

Activity:
Explore and Reflect

Directions:

1. Open the “Content Knowledge Guidance" document provided in the chat.
2. Choose a grade level or topic you’re interested in. Click on the link to go to the chapter. Explore away!

Questions and Answers

Link to Long Description

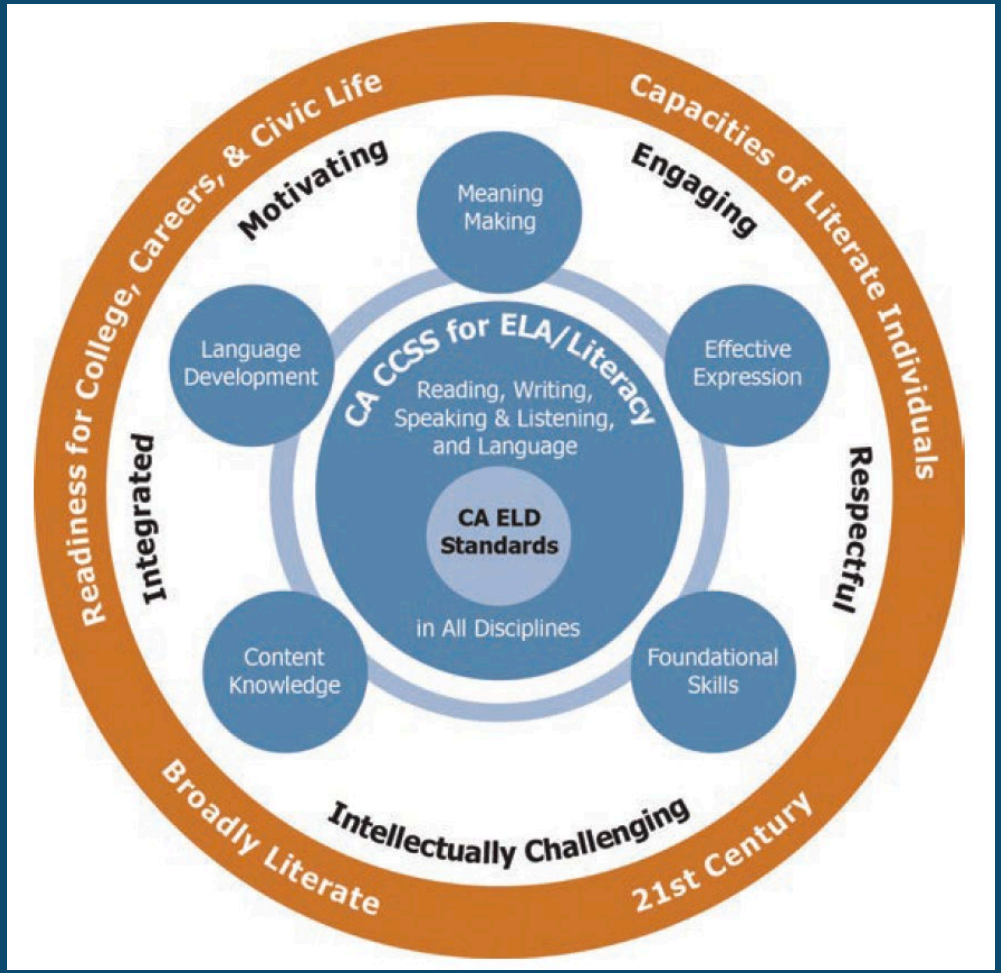


Figure 2.1 The *ELA/ELD Framework* Circles of Implementation

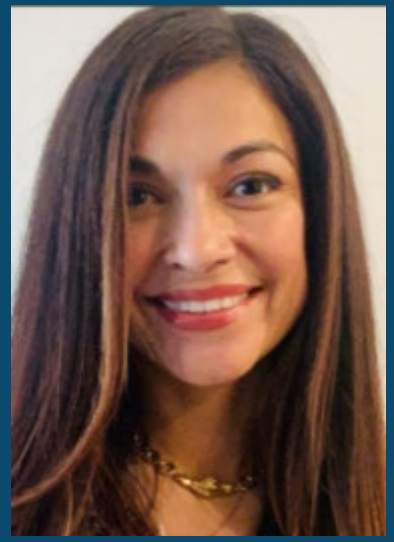
Closing & Next Steps

Recentering California's ELA/ELD Framework

Upcoming Webinars: 3:30–4:45 p.m.

- April 9: Assessment & Intervention
- May 14: Systems for Implementation & the California Literacy Roadmap

Contacts



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Thank you!

CALIFORNIA DEPARTMENT OF EDUCATION
Tony Thurmond, State Superintendent of Public Instruction

Circles of Implementation Long Description

The outer ring: Overarching goals

- Readiness for college, careers, and civic life
- Attained the capacities of literate individuals
- Become broadly literate
- Acquired the skills for living and learning in the 21st century

Inner field: Context in which instruction occurs:

- Integrated
- Motivating
- Engaging
- Respectful
- Intellectually challenging

Circles of Implementation Long Description (2)

Orbiting the center: Key Themes of the ELA/Literacy Standards

- Meaning Making
- Language Development
- Effective Expression
- Content Knowledge
- Foundational Skills

Center:

- CA CCSS for ELA/Literacy
- CA ELD Standards

Return to slide 9

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