California • English Language Arts

DOCUMENTS REVIEWED¹

California Academic Content Standards: English Language Arts. December 1997. Accessed from: http://www.cde.ca.gov/be/st/ss/documents/elacontentstnds.pdf

Overview

California's well-sequenced and thorough ELA standards explicitly address all of the essential content that students must master in a rigorous, collegeprep K-12 curriculum. With very few exceptions, the standards are clear and concise and exhibit an appropriate level of rigor at each grade. Minor flaws are noted below, but overall these standards are exceptionally strong.



Clarity and Specificity:3/3Content and Rigor:7/7Total State Score10/10(Common Core Grade: B+)

General Organization

California's K-12 standards are organized into four strands: Reading, Writing, Written and Oral Conventions, and Listening and Speaking. Each strand is then broken into sub-strands, and finally into grade-specific standards. The high school grades are grouped into pairs (9-10 and 11-12).

Clarity and Specificity

The standards are very clear and specific, making it easy for teachers and students to understand what students should know and be able to do. For example, while many states merely ask students to distinguish facts from opinions, California goes a step further:

Distinguish facts, supported inferences, and opinions in text (grade 5)

In all strands, the California standards offer specific details and often include examples that help clarify expectations, such as in the following "Literary Response and Analysis" standard in grade 7:

Narrative Analysis of Grade-Level-Appropriate Text

- Identify events that advance the plot and determine how each event explains past or present action(s) or foreshadows future action(s)
- Analyze characterization as delineated through a character's thoughts, words, speech patterns, and actions; the narrator's description; and the thoughts, words, and actions of other characters
- Identify and analyze recurring themes across works (e.g., the value of bravery, loyalty, and friendship; the effects of loneliness)
- Contrast points of view (e.g., first and third person, limited and omniscient, subjective and objective) in narrative text and explain how they affect the overall theme of the work (grade 7)

In a few places, the language is vague, which compromises the readability of the standard and the clarity of the state's expectation. For example:

Analyze the philosophical arguments presented in literary works to determine whether the authors' positions have contributed to the quality of each work and the credibility of the characters (Philosophical approach) (grades 11-12)

Such exceptions are rare, however, and overall these standards easily earn full marks, or three points out of three, for Clarify and Specificity. (See *Common Grading Metric*, Appendix A.)

Content and Rigor

Content Strengths

California's standards for early reading delineate explicit and systematic expectations for phonemic awareness, phonics, fluency, and comprehension skills. Similarly, the Reading standards across all grades address systematic vocabulary development, including etymology.

Specific expectations for reading and analyzing literary and non-literary texts are included. There is a clear focus on exceptional American literature, though only in grades 11-12. California also supplies recommended reading lists for all grade levels that include many good works of American and other literature.

California admirably includes standards devoted specifically to logic, including:

Critique the power, validity, and truthfulness of arguments set forth in public documents; their appeal to both friendly and hostile audiences; and the extent to which the arguments anticipate and address reader concerns and counterclaims (e.g., appeal to reason, to authority, to pathos and emotion) (grades 11-12)

Such detail in the reading section helps ensure that students not only understand the essential structures and elements of arguments, but also that they have a meta-language for analyzing those arguments effectively. These skills, essential to citizenship, are missing from many state standards.

The Writing standards address the analysis and production of all writing genres and include rigorous expectations regarding research, as in the following standard from grades 9-10:

Use clear research questions and suitable research methods (e.g., library, electronic media, personal interview) to elicit and present evidence from primary and secondary sources.

- Develop the main ideas within the body of the composition through supporting evidence (e.g., scenarios, commonly held beliefs, hypotheses, definitions)
- Synthesize information from multiple sources and identify complexities and discrepancies in the information and the different perspectives found in each medium (e.g., almanacs, microfiche, news sources, in-depth field studies, speeches, journals, technical documents)
- Integrate quotations and citations into a written text while maintaining the flow of ideas
- Use appropriate conventions for documentation in the text, notes, and bibliographies by adhering to those in style manuals (e.g., *Modern Language Association Handbook, The Chicago Manual of Style*)
- Design and publish documents by using advanced publishing software and graphic programs (grades 9-10)

The standards for English language conventions are thorough and demonstrate a reasonable progression through the grades.

Standards for Listening and Speaking are also well addressed, including such specific expectations for oral presentations in various genres as:

Deliver oral responses to literature:

- Advance a judgment demonstrating a comprehensive grasp of the significant ideas of works or passages (i.e., make and support warranted assertions about the text)
- Support important ideas and viewpoints through accurate and detailed references to the text or to other works.
- Demonstrate awareness of the author's use of stylistic devices and an appreciation of the effects created (grades 9-10)

Content Weaknesses

Minor weaknesses are apparent in each of the content strands. With the exception of the grade 11-12 standards referenced above, both the early reading and the reading standards lack a focus on American literature.

One troublesome aspect of the standards is their inclusion of laudable but unmeasurable goals, such as the extracurricular annual reading goals (up to two million words per year in grade 12). Coupled with the issue of measurability, the fact that accountability lies outside the classroom makes these guidelines unrealistic.

The other three strands—Writing, Written and Oral Conventions, and Listening and Speaking—merit only minor critiques. The Writing standards, for example, do not include samples of acceptable student writing, which could help delineate the rigor of the expectations. The Listening and Speaking strand could be improved by adding expectations for the evaluation of presentations.

Together, these shortcomings represent no more than 5 percent of absent content. The standards earn seven points out of seven in the category of Content and Rigor. (See *Common Grading Metric*, Appendix A.)

The Bottom Line

California's standards are clearer, more thorough, and easier to read than the Common Core standards. The essential content is grouped more logically, so that standards addressing inextricably linked characteristics, such as themes in literary texts, can be found together rather than spread across strands. In addition, the California standards treat both literary and non-literary texts in systematic detail, addressing the specific genres, sub-genres, and characteristics of both text types. California's standards for logic, writing applications, and oral presentations are also more detailed than those of the Common Core.

On the other hand, the Common Core includes samples of student writing to clarify grade- and genre-specific expectations for writing, and explicitly addresses foundational U.S. documents. The Common Core also includes more rigorous and thorough standards addressing group discussions and working as a group to accomplish a task. Such enhancements would benefit California's already-strong standards.

California's academic content standards have not changed since Fordham's last evaluation, the State of State English Standards 2005. However, the evaluation criteria that we used to judge the 2010 standards have been substantially revised and improved since 2005. (See Appendix C for a complete explanation of changes in criteria.) Even through this new lens, California's ELA grade remained an impressive A. The complete 2005 review can be found here: http://www.edexcellence.net/detail/news.cfm?news_id=337&pubsubid=1032#1032.

California • Mathematics

DOCUMENTS REVIEWED¹

Mathematics Framework for California Public Schools. Revised 2005. Accessed from: http://www.cde.ca.gov/ci/ma/cf/documents/mathfrwkcomplete.pdf

Mathematics Content Standards for California Public Schools. December 1997. Accessed from: http://www.cde.ca.gov/be/st/ss/documents/mathstandard.pdf

Overview

California's standards could well serve as a model for internationally competitive national standards. They are explicit, clear, and cover the essential topics for rigorous mathematics instruction. The introduction for the standards is notable for providing excellent and clear guidance on mathematics education. The introduction states simply:



Clarity and Specificity: 3/3 Content and Rigor: 7/7 Total State Score: 10/10 (Common Core Grade: A-)

An important theme stressed throughout this framework is the need for a balance in emphasis on computational and procedural skills, conceptual understanding, and problem solving. This balance is defined by the standards and is illustrated by problems that focus on these components individually and in combination. All three components are essential.

California has provided a set of standards that achieves these goals admirably.

General Organization

The organization of California's standards is straightforward and clear. The standards are organized by typical content strands such as "Number Sense" and "Measurement and Geometry," and the strands are broken down into grade-level standards. The standards also include "Mathematical Reasoning" as a strand that, rather than serving as a stand-alone strand, is "inherently embedded" in the other strands.

Unlike most states, which organize standards by grade level for K-8, and then by course (rather than by grade) for high school, California provides grade-specific standards for K-7 and organizes standards by course for grades 8-12.

The grade-level standards are notable in that they provide guidance on priorities and focus directly within the document. The most important standards for each grade are clearly marked as "green dot" standards, and are easily distinguished from the other standards.

Clarity and Specificity

California's standards are well presented and organized. They are easy to read and understand, and the mathematics content is illuminated by the use of sample problems. The sample problems immediately address any potential lack of clarity in the statements. For example, in fourth grade, California has the somewhat broadly stated standard:

Use concepts of negative numbers (e.g., on a number line, in counting, in temperature, in "owing") (grade 4)

This standard includes two examples of the kinds of problems a student is expected to be able to solve, including:

Yesterday's temperature was 5 degrees Celsius, but the temperature dropped 9 degrees Celsius overnight. What is today's temperature? (grade 4)

Such clarification illuminates exactly what students are expected to know and be able to do across the grades. The reader is not left in doubt as to what a standard means or what kinds of problems students are expected to solve. California receives the top score of three points out of three for Clarity and Specificity. (See *Common Grading Metric*, Appendix A.)

Content and Rigor

Content Priorities

California's standards are, perhaps, excessive in number; but any potential problem with the volume of standards is mitigated through the prioritization scheme of the "green dot" standards described above. For example, there are thirty-seven standards for sixth grade, and fourteen of them appear in the Statistics, Data Analysis, and Probability (DASP) strand alone. However, the reader can clearly and easily distinguish the most important content, and this reduces any excess in the number of standards. For example, of the thirty-seven standards for sixth grade, only seventeen of them are green dot standards. Priorities are thus set admirably.

Content Strengths

These standards cover nearly all of the essential content. They explicitly prioritize foundational mathematics and outline a clear and coherent path for mathematics education.

The essential content of elementary arithmetic is developed well and emphasized throughout. Examples include the following simply stated standards:

Memorize to automaticity the multiplication table for numbers between 1 and 10 (grade 3)

Demonstrate an understanding of, and the ability to use, standard algorithms for the addition and subtraction of multidigit numbers (grade 4)

Identify and represent on a number line decimals, fractions, mixed numbers, and positive and negative integers (grade 5)

The straightforward statements in the following standards are also exemplary.

Identify and graph ordered pairs in the four quadrants of the coordinate plane (grade 5) Calculate given percentages of quantities and solve problems involving discounts at sales, interest earned, and tips (grade 6)

Content Weaknesses

There are a few minor issues in the course for eighth grade (Algebra I) and the course content for high school. Lines and linear equations are generally well covered, but students are not required to algebraically move from one form of a linear equation to another. There is also no standard that states that students should be able to find the equation for a line that goes through two points, though the standards state that this should be understood as part of the standard on point-slope form for lines. The complete analysis of quadratic equations, which begins in Algebra I and concludes in Algebra II is missing a few details on standard form and symmetry.

California's standards cover practically all the essential content in a high-quality and rigorous manner. They are easy to read and follow and do not include much extraneous material. At all levels, they prepare students to move on to the next level of mathematics, including rigorous college preparation. They easily satisfy all of the criteria for a score of seven points out of seven for Content and Rigor. (See *Common Grading Metric*, Appendix A.)

The Bottom Line

With some minor differences, Common Core and California both cover the essential content for a rigorous, K-12 mathematics program. That said, California's standards are exceptionally clear and well presented, and indeed represent a model for mathematically sound writing. They are further supported by excellent peripheral material, including the *Framework* that provides clear and detailed guidance on the standards. Taken together, these enhancements make the standards easier to read and follow than Common Core. In addition, the high school content is organized so that the standards about various topics, such as quadratic functions, are grouped together in a mathematically coherent way. The organization of the Common Core is more difficult to navigate, in part because standards on related topics sometimes appear separately rather than together.

Common Core includes some minor high school content—including the vertex form of quadratics and max/min problems—that is missing in California.

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