

Information Literacy in the California Content Standards

This document presents some of the obvious places where information literacy skills are discussed in the California Content Standards in Grades Nine through Twelve.

Science

Investigation & Experimentation - Grades 9 to 12

www.cde.ca.gov/be/st/ss/scinvestigation.asp

Investigate a science-based societal issue by researching the literature, analyzing data, and communication the findings. Examples of issues include irradiation of food, cloning of animals by somatic cell nuclear transfer, choice of energy sources, and land and water use decisions in California.

Mathematics

Introduction - Grades Eight Through Twelve

<http://www.cde.ca.gov/be/st/ss/mthgrades8-12.asp>

By grade eight, students' mathematical sensitivity should be sharpened. Students need to start perceiving logical subtleties and appreciate the need for sound mathematical arguments before making conclusions. As students progress in the study of mathematics, they learn to distinguish between inductive and deductive reasoning; understand the meaning of logical implication; test general assertions; realize that one counterexample is enough to show that a general assertion is false; understand conceptually that although a general assertion is true in a few cases, it is not true in all cases; distinguish between something being proven and a mere plausibility argument; and identify logical errors in chains of reasoning.

English-Language Arts

Grades Nine & Ten

<http://www.cde.ca.gov/be/st/ss/enggrades9-10.asp>

Reading

2.0 Reading Comprehension (Focus on Informational Materials)

Students read and understand grade-level-appropriate material. They analyze the organizational patterns, arguments, and positions advanced. The selections in Recommended Literature, Grades Nine Through Twelve (1990) illustrate the quality and complexity of the materials to be read by students. In addition, by grade twelve, students read two million words annually on their own, including a wide variety of classic and contemporary literature, magazines, newspapers, and online information. In grades nine and ten, students make substantial progress toward this goal.

Structural Features of Informational Materials

2.1 Analyze the structure and format of functional workplace documents, including the graphics and headers, and explain how authors use the features to achieve their purposes.

2.2 Prepare a bibliography of reference materials for a report using a variety of consumer, workplace, and public documents. Comprehension and Analysis of Grade-Level-Appropriate Text

2.3 Generate relevant questions about readings on issues that can be researched.

2.4 Synthesize the content from several sources or works by a single author dealing with a single issue; paraphrase the ideas and connect them to other sources and related topics to demonstrate comprehension.

2.5 Extend ideas presented in primary or secondary sources through original analysis, evaluation, and elaboration.

2.6 Demonstrate use of sophisticated learning tools by following technical directions (e.g., those found with graphic calculators and specialized software programs and in access guides to World Wide Web sites on the Internet).

Expository Critique

2.7 Critique the logic of functional documents by examining the sequence of information and procedures in anticipation of possible reader misunderstandings.

2.8 Evaluate the credibility of an author's argument or defense of a claim by critiquing the relationship between generalizations and evidence, the comprehensiveness of evidence, and the way in which the author's intent affects the structure and tone of the text (e.g., in professional journals, editorials, political speeches, primary source material).

Writing

1.0 Writing Strategies

Research and Technology

1.3 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.

- 1.4 Develop the main ideas within the body of the composition through supporting evidence (e.g., scenarios, commonly held beliefs, hypotheses, definitions).
- 1.5 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).
- 1.6 Integrate quotations and citations into a written text while maintaining the flow of ideas.
- 1.7 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).
- 1.8 Design and publish documents by using advanced publishing software and graphic programs.

2.0 Writing Applications (Genres and Their Characteristics)

Students combine the rhetorical strategies of narration, exposition, persuasion, and description to produce texts of at least 1,500 words each. Student writing demonstrates a command of standard American English and the research, organizational, and drafting strategies outlined in Writing Standard 1.0.

Using the writing strategies of grades nine and ten outlined in Writing Standard 1.0, students:

- 2.3 Write expository compositions, including analytical essays and research reports:
 - a. Marshal evidence in support of a thesis and related claims, including information on all relevant perspectives.
 - b. Convey information and ideas from primary and secondary sources accurately and coherently.
 - c. Make distinctions between the relative value and significance of specific data, facts, and ideas.
 - d. Include visual aids by employing appropriate technology to organize and record information on charts, maps, and graphs.
 - e. Anticipate and address readers' potential misunderstandings, biases, and expectations.
 - f. Use technical terms and notations accurately.

Grades Eleven & Twelve

<http://www.cde.ca.gov/be/st/ss/enggrades11-12.asp>

Reading

2.0 Reading Comprehension (Focus on Informational Materials)

Students read and understand grade-level-appropriate material. They analyze the organizational patterns, arguments, and positions advanced. The selections in Recommended Readings in Literature, Grades Nine Through Twelve illustrate the quality and complexity of the materials to be read by students. In addition, by grade twelve, students read two million words annually on their own, including a wide variety of classic and contemporary literature, magazines, newspapers, and online information.

Structural Features of Informational Materials

2.1 Analyze both the features and the rhetorical devices of different types of public documents (e.g., policy statements, speeches, debates, platforms) and the way in which authors use those features and devices.

Comprehension and Analysis of Grade-Level-Appropriate Text

2.2 Analyze the way in which clarity of meaning is affected by the patterns of organization, hierarchical structures, repetition of the main ideas, syntax, and word choice in the text.

2.3 Verify and clarify facts presented in other types of expository texts by using a variety of consumer, workplace, and public documents.

2.4. Make warranted and reasonable assertions about the author's arguments by using elements of the text to defend and clarify interpretations.

2.5 Analyze an author's implicit and explicit philosophical assumptions and beliefs about a subject.

Expository Critique

2.6 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).

Writing

1.0 Writing Strategies

Research and Technology

1.6 Develop presentations by using clear research questions and creative and critical research strategies (e.g., field studies, oral histories, interviews, experiments, electronic sources).

1.7 Use systematic strategies to organize and record information (e.g., anecdotal scripting, annotated bibliographies).

1.8 Integrate databases, graphics, and spreadsheets into word-processed documents.

2.0 Writing Applications (Genres and Their Characteristics)

2.4 Write historical investigation reports:

- a. Use exposition, narration, description, argumentation, exposition, or some combination of rhetorical strategies to support the main proposition.
- b. Analyze several historical records of a single event, examining critical relationships between elements of the research topic.
- c. Explain the perceived reason or reasons for the similarities and differences in historical records with information derived from primary and secondary sources to support or enhance the presentation.
- d. Include information from all relevant perspectives and take into consideration the validity and reliability of sources.
- e. Include a formal bibliography.

Listening and Speaking

2.0 Speaking Applications (Genres and Their Characteristics)

Students deliver polished formal and extemporaneous presentations that combine traditional rhetorical strategies of narration, exposition, persuasion, and description. Student speaking demonstrates a command of standard American English and the organizational and delivery strategies outlined in Listening and Speaking Standard 1.0.

Using the speaking strategies of grades eleven and twelve outlined in Listening and Speaking Standard 1.0, students:

2.4 Deliver multimedia presentations:

- a. Combine text, images, and sound by incorporating information from a wide range of media, including films, newspapers, magazines, CD-ROMs, online information, television, videos, and electronic media-generated images.
- b. Select an appropriate medium for each element of the presentation.
- c. Use the selected media skillfully, editing appropriately and monitoring for quality.
- d. Test the audience's response and revise the presentation accordingly.

History-Social Science

Grades 9 Through 12: Introduction

<http://www.cde.ca.gov/be/st/ss/hstgrades9through12.asp>

Historical and Social Sciences Analysis Skills

The intellectual skills noted below are to be learned through, and applied to, the content standards for grades nine through twelve. They are to be assessed only in conjunction with the content standards in grades nine through twelve.

In addition to the standards for grades nine through twelve, students demonstrate the following intellectual, reasoning, reflection, and research skills.

Historical Research, Evidence, and Point of View

1. Students distinguish valid arguments from fallacious arguments in historical interpretations.
2. Students identify bias and prejudice in historical interpretations.
3. Students evaluate major debates among historians concerning alternative interpretations of the past, including an analysis of authors' use of evidence and the distinctions between sound generalizations and misleading oversimplifications.
4. Students construct and test hypotheses; collect, evaluate, and employ information from multiple primary and secondary sources; and apply it in oral and written presentations.