

STEM Correlation - CCSS English Language Arts

Reading Standards for Literature K-12

- Integration of Knowledge and ideas:

2nd Grade

7) Use information gained from the illustrations and words in a print or digital text to demonstrate understanding of its characters, setting, or plot.

5th Grade

7) Analyze how visual and multimedia elements contribute to the meaning, tone, or beauty of a text (e.g., graphic novel, multimedia presentation of fiction, folktale, myth, poem).

6th Grade

7) Compare and contrast the experience of reading a story, drama, or poem to listening to or viewing an audio, video, or live version of the text, including contrasting what they “see” and “hear” when reading the text to what they perceive when they listen or watch.

7th Grade

7) Compare and contrast a written story, drama, or poem to its audio, filmed, staged, or multimedia version, analyzing the effects of techniques unique to each medium (e.g., lighting, sound, color, or camera focus and angles in a film).

Informational Text K-12

- Craft and Structure

3rd Grade

5) Use text features and search tools (e.g., key words, sidebars, hyperlinks) to locate information relevant to a given topic efficiently.

- Integration of Knowledge and Ideas

3rd Grade

7) Interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, time lines, animations, or interactive elements on Web pages) and explain how the information contributes to an understanding of the text in which it appears.

6th Grade

7) Integrate information presented in different media or formats (e.g., visually, quantitatively) as well as in words to develop a coherent understanding of a topic or issue.

7th Grade

7) Compare and contrast a text to an audio, video, or multimedia version of the text, analyzing each medium’s portrayal of the subject (e.g., how the delivery of a speech affects the impact of the words).

8th Grade

7) Evaluate the advantages and disadvantages of using different mediums (e.g., print or digital text, video, multimedia) to present a particular topic or idea.

9th - 10th Grades

7) Analyze various accounts of a subject told in different mediums (e.g., a person's life story in both print and multimedia), determining which details are emphasized in each account.

11th - 12th Grades

7) . Integrate and evaluate multiple sources of information presented in different media or formats (e.g., visually, quantitatively) as well as in words in order to address a question or solve a problem.

- Range of Reading and Level of Text Complexity

3rd Grade

10) By the end of the year, read and comprehend informational texts, including history/social studies, science, and technical texts, at the high end of the grades 2–3 text complexity band independently and proficiently.

4th Grade

10) By the end of year, read and comprehend informational texts, including history/social studies, science, and technical texts, in the grades 4–5 text complexity band proficiently, with scaffolding as needed at the high end of the range.

5th Grade

10) By the end of the year, read and comprehend informational texts, including history/social studies, science, and technical texts, at the high end of the grades 4–5 text complexity band independently and proficiently.

College and Career Readiness Anchor Standards for Writing

- Production and Distribution of Writing

K - 12

6) Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.

- Research to Build and Present Knowledge

K - 12

7) Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.

8) Gather relevant information from multiple print and digital sources, assess the credibility and accuracy of each source, and integrate the information while avoiding plagiarism.

Writing Standards K - 5

- Production and Distribution of Writing

K, 1st, 2nd

6) With guidance and support from adults, explore a variety of digital tools to produce and publish writing, including in collaboration with peers.

3rd

6) With guidance and support from adults, use technology to produce and publish writing (using keyboarding skills) as well as to interact and collaborate with others.

4th - 5th

6) With some guidance and support from adults, use technology, including the Internet, to produce and publish writing as well as to interact and collaborate with others; demonstrate sufficient command of keyboarding skills to type a minimum of one page in a single sitting.

6th

6) Use technology, including the Internet, to produce and publish writing as well as to interact and collaborate with others; demonstrate sufficient command of keyboarding skills to type a minimum of three pages in a single sitting.

7th

6) Use technology, including the Internet, to produce and publish writing and link to and cite sources as well as to interact and collaborate with others, including linking to and citing sources.

8th

6) Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas efficiently as well as to interact and collaborate with others.

9th - 10th

6) Use technology, including the Internet, to produce, publish, and update individual or shared writing products, taking advantage of technology's capacity to link to other information and to display information flexibly and dynamically.

11th - 12th

6) Use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information.

- Research to Build and Present Knowledge

3rd

8) Recall information from experiences or gather information from print and digital sources; take brief notes on sources and sort evidence into provided categories.

4th

8) Recall relevant information from experiences or gather relevant information from print and digital sources; take notes and categorize information, and provide a list of sources.

5th

8) Recall relevant information from experiences or gather relevant information from print and digital sources; summarize or paraphrase information in notes and finished work, and provide a list of sources.

6th

8) Gather relevant information from multiple print and digital sources; assess the credibility of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and providing basic bibliographic information for sources.

7th

8) Gather relevant information **from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source;** and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.

8th

8) Gather relevant information **from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source;** and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.

9th - 10th

8) Gather relevant information [from multiple authoritative print and digital sources, using advanced searches effectively](#); assess the usefulness of each source in answering the research question; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and following a standard format for citation.

11th - 12th

8) Gather relevant information [from multiple authoritative print and digital sources, using advanced searches effectively](#); assess the strengths and limitations of each source in terms of the task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation.

College and Career Readiness Anchor Standards for Speaking and Listening

- Comprehension and Collaboration

K - 12

1) Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.

2) Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively, and orally.

- Presentation of Knowledge and Ideas

K - 12

5) Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations.

Note on range and content of student speaking and listening:

... New technologies have broadened and expanded the role that speaking and listening play in acquiring and sharing knowledge and have tightened their link to other forms of communication. The Internet has accelerated the speed at which connections between speaking, listening, reading, and writing can be made, requiring that students be ready to use these modalities nearly simultaneously. Technology itself is changing quickly, creating a new urgency for students to be adaptable in response to change.

Speaking and Listening Standards

- Comprehension and Collaboration

6th Grade

2) . Interpret information presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how it contributes to a topic, text, or issue under study.

7th Grade

2) Analyze the main ideas and supporting details presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how the ideas clarify a topic, text, or issue under study.

8th Grade

2) . Analyze the purpose of information presented in diverse media and formats (e.g., visually, quantitatively, orally) and evaluate the motives (e.g., social, commercial, political) behind its presentation.

9th - 10th Grades

2) . Integrate multiple sources of information presented in diverse media or formats (e.g., visually, quantitatively, orally) evaluating the credibility and accuracy of each source.

11th - 12th Grades

2) Integrate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, orally) in order to make informed decisions and solve problems, evaluating the credibility and accuracy of each source and noting any discrepancies among the data.

- Presentation of Knowledge and Ideas

2nd Grade

5) Create audio recordings of stories or poems; add drawings or other visual displays to stories or recounts of experiences when appropriate to clarify ideas, thoughts, and feelings.

3rd Grade

5) Create engaging audio recordings of stories or poems that demonstrate fluid reading at an understandable pace; add visual displays when appropriate to emphasize or enhance certain facts or details.

4th Grade

5) Add audio recordings and visual displays to presentations when appropriate to enhance the development of main ideas or themes.

5th Grade

5) . Include multimedia components (e.g., graphics, sound) and visual displays in presentations when appropriate to enhance the development of main ideas or themes.

6th Grade

5) Include multimedia components (e.g., graphics, images, music, sound) and visual displays in presentations to clarify information.

7th Grade

5) Include multimedia components and visual displays in presentations to clarify claims and findings and emphasize salient points.

8th Grade

5) Integrate multimedia and visual displays into presentations to clarify information, strengthen claims and evidence, and add interest.

9th - 12th Grades

5) Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest.