Ohio State Common Core Standards for English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects
K – 12 TECHNOLOGY FOCUS

Key Design Considerations
Research and **media** skills blended into the Standards as a whole To be ready for college, workforce training, and life in a technological society, students need the ability to gather, comprehend, evaluate, synthesize, and report on information and ideas, to conduct original research in order to answer questions or solve problems, and to analyze and create a high volume and extensive range of print and nonprint texts in **media** forms old and new. The need to conduct research and to produce and consume **media** is embedded into every aspect of today's curriculum. In like fashion, research and **media** skills and understandings are embedded throughout the Standards rather than treated in a separate section.

Students Who are College and Career Ready in Reading, Writing, Speaking, Listening, and Language
They use **technology** and **digital media** strategically and capably. Students employ **technology** thoughtfully to enhance their reading, writing, speaking, listening, and language use. They tailor their searches online to acquire useful information efficiently, and they integrate what they learn using **technology** with what they learn offline. They are familiar with the strengths and limitations of various technological tools and mediums and can select and use those best suited to their communication goals.

K–5 College and Career Readiness Anchor Standards for Reading

GENERAL K-5: Integration of Knowledge and Ideas
7. Integrate and evaluate content presented in diverse **media** and formats, including visually and quantitatively, as well as in words. *(Please see "Research to Build and Present Knowledge" in Writing and "Comprehension and Collaboration" in Speaking and Listening for additional standards relevant to gathering, assessing, and applying information from print and **digital sources**.)*

Reading Standards for Literature K–5 [RL]
GRADE 2
Key Ideas and Details
7. Use information gained from the illustrations and words in a print or **digital** text to demonstrate understanding of its characters, setting, or plot.

GRADE 5
Key Ideas and Details
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).

Reading Standards for Informational Text K–5 [RI]

GRADE 1
Key Ideas and Details
5. Know and use various **text features** (e.g., **headings**, **tables** of contents, glossaries, **electronic** menus, **icons**) to locate key facts or information in a text.

GRADE 2
Key Ideas and Details
5. Know and use various **text features** (e.g., captions, **bold print**, sub**headings**, glossaries, indexes, **electronic** menus, **icons**) to locate key facts or information in a text efficiently.

GRADE 3
Key Ideas and Details
5. Use **text features** and **search tools** (e.g., key words, sidebars, **hyperlinks**) to locate information relevant to a given topic efficiently.

GRADE 4
Key Ideas and Details
7. Interpret information presented visually, orally, or quantitatively (e.g., in **charts**, graphs, diagrams, time lines, animations, or interactive elements on **Web page**s) and explain how the information contributes to an understanding of the text in which it appears.

GRADE 5
Key Ideas and Details
7.　Draw on information from multiple print or **digital** sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently.

Writing Standards K–5 [W]

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

GRADE 1
Text Types and Purposes
6. With guidance and support from adults, use a variety of **digital** tools to produce and **publish** writing, including in collaboration with peers.

GRADE 2
Text Types and Purposes
6. With guidance and support from adults, use a variety of **digital** tools to produce and **publish** writing, including in collaboration with peers.

GRADE 4
Research to Build and Present Knowledge
2. Write informative/explanatory texts to examine a topic and convey ideas and information clearly.
a. Introduce a topic clearly and group related information in paragraphs and sections; include **formatting** (e.g., **headings**), illustrations, and **multimedia** when useful to aiding comprehension.
b. Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic.
c. Link ideas within categories of information using words and phrases (e.g., another, for example, also, because).
d. Use precise language and domain-specific vocabulary to inform about or explain the topic.
e. Provide a concluding statement or section related to the information or explanation presented.

GRADE 5
Research to Build and Present Knowledge
2. Write informative/explanatory texts to examine a topic and convey ideas and information clearly.
a. Introduce a topic clearly, provide a general observation and focus, and group related information logically; include **formatting** (e.g., **headings**), illustrations, and **multimedia** when useful to aiding comprehension.
b. Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic.
c. Link ideas within and across categories of information using words, phrases, and clauses (e.g., in contrast, especially).
d. Use precise language and domain-specific vocabulary to inform about or explain the topic.
e. Provide a concluding statement or section related to the information or explanation presented.

Writing Standards K–5   [W]

GRADE 3
Production and Distribution of Writing
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.
8. Recall information from experiences or gather information from print and **digital sources**; take brief notes on sources and sort evidence into provided categories.

GRADE 4
Production and Distribution of Writing
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.
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.

GRADE 5
Production and Distribution of Writing
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 two pages in a single sitting.
Research to Build and Present Knowledge
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.

College and Career Readiness Anchor Standards for Speaking and Listening

Comprehension and Collaboration
2. Integrate and evaluate information presented in diverse **media** and formats, including visually, quantitatively, and orally.
5. Make strategic use of **digital media** and visual displays of data to express information and enhance understanding of presentations.

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. **Digital** texts confront students with the potential for continually updated content and dynamically changing combinations of words, **graphics**, images, **hyperlinks**, and embedded **video** and **audio**.

Speaking and Listening Standards K–5   [SL]

GRADE 2
Comprehension and Collaboration
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.

Speaking and Listening Standards K–5   [SL]

GRADE 3
Comprehension and Collaboration
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.

GRADE 4
Comprehension and Collaboration
5. Add **audio recordings** and visual displays to presentations when appropriate to enhance the development of main ideas or themes.

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

College and Career Readiness Anchor Standards for Language

Conventions of Standard English

Language Standards K–5   [L]

GRADE 2
Vocabulary Acquisition and Use
4. Determine or clarify the meaning of unknown and multiple- meaning words and phrases based on grade 2 reading and content, choosing flexibly from an array of strategies. a. Use sentence-level context as a clue to the meaning of a word or phrase.
b. Determine the meaning of the new word formed when a known prefix is added to a known word (e.g., happy/unhappy, tell/retell).
c. Use a known root word as a clue to the meaning of an unknown word with the same root (e.g., addition, additional).
d. Use knowledge of the meaning of individual words to predict the meaning of compound words (e.g., birdhouse, lighthouse, housefly; bookshelf, notebook, bookmark).
e. Use glossaries and beginning dictionaries, both print and **digital**, to determine or clarify the meaning of words and phrases.

GRADE 3
Vocabulary Acquisition and Use
4. Determine or clarify the meaning of unknown and multiple- meaning word and phrases based on grade 3 reading and content, choosing flexibly from a range of strategies.
a. Use sentence-level context as a clue to the meaning of a word or phrase.
b. Determine the meaning of the new word formed when a known affix is added to a known word (e.g., agreeable/disagreeable, comfortable/uncomfortable, care/careless, heat/preheat).
c. Use a known root word as a clue to the meaning of an unknown word with the same root (e.g., company, companion).
d. Use glossaries or beginning dictionaries, both print and **digital**, to determine or clarify the precise meaning of key words and phrases.

GRADE 4
Vocabulary Acquisition and Use
4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 4 reading and content, choosing flexibly from a range of strategies.
a. Use context (e.g., definitions, examples, or restatements in text) as a clue to the meaning of a word or phrase.
b. Use common, grade-appropriate Greek and Latin affixes and roots as clues to the meaning of a word (e.g., telegraph, photograph, autograph).
c. Consult reference materials (e.g., dictionaries, glossaries, thesauruses), both print and **digital**, to find the pronunciation and determine or clarify the precise meaning of key words and phrases.

GRADE 5
Vocabulary Acquisition and Use
4. Determine or clarify the meaning of unknown and multiple- meaning words and phrases based on

grade 5 reading and content, choosing flexibly from a range of strategies.

a. Use context (e.g., cause/effect relationships and comparisons in text) as a clue to the meaning of a word or phrase.

b. Use common, grade-appropriate Greek and Latin affixes and roots as clues to the meaning of a word (e.g., photograph, photosynthesis).

c. Consult reference materials (e.g., dictionaries, glossaries, thesauruses), both print and **digital**, to find the pronunciation and determine or clarify the precise meaning of key words and phrases.

Key Ideas and Details

7. Integrate and evaluate content presented in diverse formats and **media**, including visually and quantitatively, as well as in words. *(Please see "Research to Build Knowledge" in Writing and "Comprehension and Collaboration" in Speaking and Listening for additional standards relevant to gathering, assessing, and applying information from print and **digital sources**.)*

Reading Standards for Informational Text 6–12   [RI]

GRADE 6
Key Ideas and Details

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.

GRADE 7
Key Ideas and Details

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).

GRADE 8
Key Ideas and Details

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.

Writing Standards 6–12   [W]

GRADE 6
Text Types and Purposes

2. Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.

a. Introduce a topic; organize ideas, concepts, and information, using strategies such as definition, classification, comparison/contrast, and cause/effect; include **formatting** (e.g., **headings**), **graphics** (e.g., **charts**, **tables**), and **multimedia** when useful to aiding comprehension.

b. Develop the topic with relevant facts, definitions, concrete details, quotations, or other information and examples.

c. Use appropriate transitions to clarify the relationships among ideas and concepts.

d. Use precise language and domain-specific vocabulary to inform about or explain the topic.

e. Establish and maintain a formal style.

f. Provide a concluding statement or section that follows from the information or explanation presented.

GRADE 7
Text Types and Purposes
2. Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.
a. Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information, using strategies such as definition, classification, comparison/contrast, and cause/effect; include **formatting** (e.g., **headings**), **graphics** (e.g., **charts**, **tables**), and **multimedia** when useful to aiding comprehension.
b. Develop the topic with relevant facts, definitions, concrete details, quotations, or other information and examples.
c. Use appropriate transitions to create cohesion and clarify the relationships among ideas and concepts.
d. Use precise language and domain-specific vocabulary to inform about or explain the topic.
e. Establish and maintain a formal style.
f. Provide a concluding statement or section that follows from and supports the information or explanation presented.

GRADE 8
Text Types and Purposes
2. Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.
a. Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information into broader categories; include **formatting** (e.g., **headings**), **graphics** (e.g., **charts**, **tables**), and **multimedia** when useful to aiding comprehension.
b. Develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples.
c. Use appropriate and varied transitions to create cohesion and clarify the relationships among ideas and concepts.
d. Use precise language and domain-specific vocabulary to inform about or explain the topic.
e. Establish and maintain a formal style.
f. Provide a concluding statement or section that follows from and supports the information or explanation presented.

GRADE 6
Production and Distribution of Writing
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.

GRADE 7
Production and Distribution of Writing
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.

GRADE 8
Production and Distribution of Writing
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.

GRADE 6
Research to Build and Present Knowledge
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.

GRADE 7
Research to Build and Present Knowledge
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.

GRADE 8
Research to Build and Present Knowledge
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.

GRADES 9-10
Text Types and Purposes
2. Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content.
a. Introduce a topic; organize complex ideas, concepts, and information to make important connections and distinctions; include **formatting** (e.g., **headings**), **graphics** (e.g., figures, **tables**), and **multimedia** when useful to aiding comprehension.
b. Develop the topic with well-chosen, relevant, and sufficient facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic.
c. Use appropriate and varied transitions to link the major sections of the text, create cohesion, and clarify the relationships among complex ideas and concepts.
d. Use precise language and domain-specific vocabulary to manage the complexity of the topic.
e. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing.
f. Provide a concluding statement or section that follows from and supports the information or explanation presented (e.g., articulating implications or the significance of the topic).

GRADES 11-12
Text Types and Purposes
2. Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content.
a. Introduce a topic; organize complex ideas, concepts, and information so that each new element builds on that which precedes it to create a unified whole; include **formatting** (e.g., **headings**), **graphics** (e.g., figures, **tables**), and **multimedia** when useful to aiding comprehension.
b. Develop the topic thoroughly by selecting the most significant and relevant facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the

audience's knowledge of the topic.

c. Use appropriate and varied transitions and syntax to link the major sections of the text, create cohesion, and clarify the relationships among complex ideas and concepts.

d. Use precise language, domain-specific vocabulary, and techniques such as metaphor, simile, and analogy to manage the complexity of the topic.

e. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing.

f. Provide a concluding statement or section that follows from and supports the information or explanation presented (e.g., articulating implications or the significance of the topic).

GRADES 9-10
Production and Distribution of Writing

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.

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.

GRADES 11-12
Production and Distribution of Writing

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

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.

Speaking and Listening Standards 6–12   [SL]

GRADE 6
Comprehension and Collaboration

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.

GRADE 7
Comprehension and Collaboration

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.

GRADE 8
Comprehension and Collaboration

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.

GRADE 6
Presentation of Knowledge and Ideas
5. Include **multimedia** components (e.g., **graphics**, images, music, sound) and visual displays in presentations to clarify information.

GRADE 7
Presentation of Knowledge and Ideas
5. Include **multimedia** components and visual displays in presentations to clarify claims and findings and emphasize salient points.

GRADE 8
Presentation of Knowledge and Ideas
5. Integrate **multimedia** and visual displays into presentations to clarify information, strengthen claims and evidence, and add interest.

Speaking and Listening Standards 6–12   [SL]

GRADES 9-10
Comprehension and Collaboration
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.

GRADES 11-12
Comprehension and Collaboration
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.

GRADES 9-10
Presentation of Knowledge and Ideas
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.

GRADES 11-12
Presentation of Knowledge and Ideas
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.

Language Standards 6–12   [L]

GRADE 6
Vocabulary Acquisition and Use
4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 6 reading and content, choosing flexibly from a range of strategies.
a. Use context (e.g., the overall meaning of a sentence or paragraph; a word's position or function in a sentence) as a clue to the meaning of a word or phrase.
b. Use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word

(e.g., audience, auditory, audible).
c. Consult reference materials (e.g., dictionaries, glossaries, thesauruses), both print and **digital**, to find the pronunciation of a word or determine or clarify its precise meaning or its part of speech.
d. Verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary).

GRADE 7
Vocabulary Acquisition and Use
4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 7 reading and content, choosing flexibly from a range of strategies.
a. Use context (e.g., the overall meaning of a sentence or paragraph; a word's position or function in a sentence) as a clue to the meaning of a word or phrase.
b. Use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., belligerent, bellicose, rebel).
c. Consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses), both print and **digital**, to find the pronunciation of a word or determine or clarify its precise meaning or its part of speech.
d. Verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary).

GRADE 8
Vocabulary Acquisition and Use
4. Determine or clarify the meaning of unknown and multiple- meaning words or phrases based on grade 8 reading and content, choosing flexibly from a range of strategies.
a. Use context (e.g., the overall meaning of a sentence or paragraph; a word's position or function in a sentence) as a clue to the meaning of a word or phrase.
b. Use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., precede, recede, secede).
c. Consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses), both print and **digital**, to find the pronunciation of a word or determine or clarify its precise meaning or its part of speech.
d. Verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary).

Language Standards 6–12   [L]

GRADES 9-10
Conventions of Standard English
4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grades 9–10 reading and content, choosing flexibly from a range of strategies.
a. Use context (e.g., the overall meaning of a sentence, paragraph, or text; a word's position or function in a sentence) as a clue to the meaning of a word or phrase.
b. Identify and correctly use patterns of word changes that indicate different meanings or parts of speech (e.g., analyze, analysis, analytical; advocate, advocacy).
c. Consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses), both print and **digital**, to find the pronunciation of a word or determine or clarify its precise meaning, its part of speech, or its etymology.
d. Verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary).

GRADES 11-12
Conventions of Standard English
4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grades 11–12 reading and content, choosing flexibly from a range of strategies.
a. Use context (e.g., the overall meaning of a sentence, paragraph, or text; a word's position or function in a sentence) as a clue to the meaning of a word or phrase.
b. Identify and correctly use patterns of word changes that indicate different meanings or parts of speech (e.g., conceive, conception, conceivable).
c. Consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses), both print and **digital**, to find the pronunciation of a word or determine or clarify its precise meaning, its part of speech, its etymology, or its standard usage.
d. Verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary).

Reading Standards for Literacy in History/Social Studies 6–12   [RH]

GRADE 6
Integration of Knowledge and Ideas
7. Integrate visual information (e.g., in **charts**, graphs, **photo**graphs, **video**s, or maps) with other information in print and **digital** texts.

GRADE 7
Integration of Knowledge and Ideas 7.
Integrate quantitative or technical analysis (e.g., **charts**, research data) with qualitative analysis in print or **digital** text.

GRADE 8
Integration of Knowledge and Ideas
7. Integrate and evaluate multiple sources of information presented in diverse formats and **media** (e.g., visually, quantitatively, as well as in words) in order to address a question or solve a problem.

Reading Standards for Literacy in Science and Technical Subjects 6–12   [RST]

GRADE 6
Integration of Knowledge and Ideas
7. Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table).
9. Compare and contrast the information gained from experiments, **simulations**, **video**, or **multimedia** sources with that gained from reading a text on the same topic.

GRADE 7
Integration of Knowledge and Ideas
7. Translate quantitative or technical information expressed in words in a text into visual form (e.g., a table or chart) and translate information expressed visually or mathematically (e.g., in an equation) into words.
9. Compare and contrast findings presented in a text to those from other sources (including their own experiments), noting when the findings support or contradict previous explanations or accounts.

GRADE 8
Integration of Knowledge and Ideas
7. Integrate and evaluate multiple sources of information presented in diverse formats and **media** (e.g., quantitative data, **video**, **multimedia**) in order to address a question or solve a problem.
9. Synthesize information from a range of sources (e.g., texts, experiments, **simulations**) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible.

Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects 6–12   [WHST]

Grades 6–8 students:
Text Types and Purposes

2.   Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes.
a. Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information into broader categories as appropriate to achieving purpose; include **formatting** (e.g., **headings**), **graphics** (e.g., **charts**, **tables**), and **multimedia** when useful to aiding comprehension.
b. Develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples.
c. Use appropriate and varied transitions to create cohesion and clarify the relationships among ideas and concepts.
d. Use precise language and domain-specific vocabulary to inform about or explain the topic.
e. Establish and maintain a formal style and objective tone.
f. Provide a concluding statement or section that follows from and supports the information or explanation presented.

Grades 9–10 students:
Text Types and Purposes
2. Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes.
a. Introduce a topic and organize ideas, concepts, and information to make important connections and distinctions; include **formatting** (e.g., **headings**), **graphics** (e.g., figures, **tables**), and **multimedia** when useful to aiding comprehension.
b. Develop the topic with well-chosen, relevant, and sufficient facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic.
c. Use varied transitions and sentence structures to link the major sections of the text, create cohesion, and clarify the relationships among ideas and concepts.
d. Use precise language and domain-specific vocabulary to manage the complexity of the topic and convey a style appropriate to the discipline and context as well as to the expertise of likely readers.
e. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing.
f. Provide a concluding statement or section that follows from and supports the information or explanation presented (e.g., articulating implications or the significance of the topic).

Grades 11–12 students:
Text Types and Purposes
2. Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes.
a. Introduce a topic and organize complex ideas, concepts, and information so that each new element builds on that which precedes it to create a unified whole; include **formatting** (e.g., **headings**), **graphics** (e.g., figures, **tables**), and **multimedia** when useful to aiding comprehension.
b. Develop the topic thoroughly by selecting the most significant and relevant facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic.
c. Use varied transitions and sentence structures to link the major sections of the text, create cohesion, and clarify the relationships among complex ideas and concepts.
d. Use precise language, domain-specific vocabulary and techniques such as metaphor, simile, and analogy to manage the complexity of the topic; convey a knowledgeable stance in a style that responds to the discipline and context as well as to the expertise of likely readers.
e. Provide a concluding statement or section that follows from and supports the information or explanation provided (e.g., articulating implications or the significance of the topic).

Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects 6–12   [WHST]

Grades 6–8 students:
Production and Distribution of Writing
6.   Use **technology**, including the **Internet**, to produce and **publish** writing and present the relationships between information and ideas clearly and efficiently.

Grades 9–10 students:
Production and Distribution of Writing
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.

Grades 11–12 students:
Production and Distribution of Writing
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.

Grades 6–8 students:
Research to Build and Present Knowledge
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.

Grades 9–10 students:
Research to Build and Present Knowledge
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.

Grades 11–12 students:
Research to Build and Present Knowledge
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 specific 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.