

Oregon Standards for Literacy in Science and Technical Subjects

Grades 11-12 Standards

June 2019



Introduction to the Oregon Standards for English Language Arts and Literacy

Preparing Oregon's Students

When Oregon adopted the Common Core State Standards (CCSS) in October 2010, our state joined other states in the pursuit of a common, standards-based education for our students, kindergarten through high school. Common standards can increase the likelihood that all students, no matter where they live, are prepared for success in college and the workplace. Because skillful reading, writing, language use, and speaking and listening are similar across the states, common standards make sense. They make possible common assessments, common achievement goals for grade level groups, and efficiencies of scale for instructional and professional development materials.

Incorporating a Unique Design

The College and Career Readiness (CCR) Anchor Standards, the "backbone" of the Standards, describe the literacy skills which all students need when they graduate. The grade-specific standards describe the literacy skills, corresponding to the CCR Anchor Standards by number, which all students need when they finish each grade.

Keeping the college and career focus at the forefront of kindergarten through grade 11/12 implementation is critical; that is why the CCRs are placed before the grade-specific standards in the CCSS. It is this unique design that supports the preparation of all students to be successful in school, from the beginning of school, and proficient in the Essential Skills of Reading, Writing, and Speaking and Listening required for an Oregon Diploma.

Using an Integrated Model of Literacy

- The Standards are cross-referenced across all four strands—Reading, Writing, Language, and Speaking and Listening—so they can be clustered for instruction.
- Language Standards apply to the other three strands—Reading, Writing, and Speaking and Listening.

Focusing on Key Features

- Reading: Text complexity and the growth of comprehension
- Writing: Text types, responding to reading, and research
- Speaking and Listening: Flexible communication and collaboration
- Language: Conventions, effective use, and vocabulary

College and Career Readiness Anchor Standards for Reading

The grades 6 -12 standards define what students should understand and be able to do by the end of each grade. Each grade-specific standard corresponds to the same College and Career Readiness (CCR) Anchor Standard below by number. The CCR and grade-specific standards are necessary complements—the former providing broad standards, the latter providing additional

^{*} Denotes a revision has been made to the original Common Core State Standard.



specificity—that together define the skills and understandings that all students must demonstrate.

Key Ideas and Details

- Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.
- 2. Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.
- 3. Analyze how and why individuals, events, and ideas develop and interact over the course of a text.

Craft and Structure

- 4. Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyze how specific word choices shape meaning or tone.
- 5. Analyze the structure of texts, including how specific sentences, paragraphs, and larger portions of the text (e.g., a section, chapter, scene, or stanza) relate to each other and the whole.
- 6. Assess how point of view or purpose shapes the content and style of a text.

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.
- 8. Delineate and evaluate the argument and specific claims in a text, including the validity of the reasoning as well as the relevance and sufficiency of the evidence.
- 9. Analyze how two or more texts address similar themes or topics in order to build knowledge or to compare the approaches the authors take.

Range of Reading and Level of Text Complexity

10. Read and comprehend complex literary and informational texts independently and proficiently.

Note on Range and Content of Student Reading: To become college and career ready, students must grapple with works of exceptional craft and thought whose range extends across genres, cultures, and centuries. Such works offer profound insights into the human condition and serve as models for students' own thinking and writing. Along with high-quality contemporary works, these texts should be chosen from among seminal U.S. documents, the classics of American literature, and the timeless dramas of Shakespeare. Through wide and deep reading of literature and literary nonfiction of steadily increasing sophistication, students gain a reservoir

^{*} Denotes a revision has been made to the original Common Core State Standard.



of literary and cultural knowledge, references, and images; the ability to evaluate intricate arguments; and the capacity to surmount the challenges posed by complex texts

Reading Standards: Literacy in History/Social Studies

The Reading standards specific to the content areas begin at grade 6; standards for K–5 reading in history/social studies, science, and technical subjects are integrated into the K–5 Reading standards. The CCR anchor standards and high school standards in literacy work in tandem to define college and career readiness expectations—the former providing broad standards, the latter providing additional specificity.

Grades 9-10 Reading Informational Text (9-10.RH) Key Ideas and Details

11-12.RST.1	Analyze what science and technical texts say explicitly as well as inferentially, citing evidence to support the analysis, attending to important distinctions the author makes and to any gaps or inconsistencies in the account.*
11-12.RST.2	Determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms.
11-12.RST.3	Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text.

Craft and Structure

11-12.RST.4	Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to <i>grades 11–12 texts and topics</i> .
11-12.RST.5	Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.
11-12.RST.6	Analyze the author's purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved.

^{*} Denotes a revision has been made to the original Common Core State Standard.



Integration of Knowledge and Ideas

11-12.RST.7	Integrate and evaluate multiple sources of information presented in diverse formats and media in order to address a question or solve a problem.*
11-12.RST.8	Evaluate the hypotheses, data, analysis, and conclusions in a science or technical text, verifying the data when possible and corroborating or challenging conclusions with other sources of information.
11-12.RST.9	Synthesize information from a range of sources into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible.*

Range of Reading and Level of Text Complexity

11-12.RST.10 By the end of grade 12, read and comprehend science/technical texts in the grades 11-CCR text complexity band independently and proficiently.

College and Career Readiness Anchor Standards for Writing

The grade 6-12 standards define what students should understand and be able to do by the end of each grade. Each grade-specific standard corresponds to the same College and Career Readiness (CCR) Anchor Standard below by number. The CCR and grade-specific standards are necessary complements—the former providing broad standards, the latter providing additional specificity—that together define the skills and understandings that all students must demonstrate.

Text Types and Purposes

- 1. Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.
- Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.
- 3. Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences.

Production and Distribution of Writing

4. Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

^{*} Denotes a revision has been made to the original Common Core State Standard.



- 5. Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.
- 6. Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.

Research to Build and Present Knowledge

- 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.
- 9. Draw evidence from literary or informational texts to support analysis, reflection, and research.

Range of Writing

10. Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences.

Note on Range and Content of Student Writing: For students, writing is a key means of asserting and defending claims, showing what they know about a subject, and conveying what they have experienced, imagined, thought, and felt. To be college- and career- ready writers, students must take task, purpose, and audience into careful consideration, choosing words, information, structures, and formats deliberately. They need to know how to combine elements of different kinds of writing—for example, to use narrative strategies within argument and explanation within narrative—to produce complex and nuanced writing. They need to be able to use technology strategically when creating, refining, and collaborating on writing. They have to become adept at gathering information, evaluating sources, and citing material accurately, reporting findings from their research and analysis of sources in a clear and cogent manner. They must have the flexibility, concentration, and fluency to produce high-quality first-draft text under a tight deadline as well as the capacity to revisit and make improvements to a piece of writing over multiple drafts when circumstances encourage or require it.

Writing Standards

The Writing standards specific to the content areas begin at grade 6; standards for K–5 writing in history/social studies, science, and technical subjects are integrated into the K–5 Writing standards. The CCR anchor standards and high school standards in literacy work in tandem to define college and career readiness expectations—the former providing broad standards, the latter providing additional specificity.

^{*} Denotes a revision has been made to the original Common Core State Standard.



Grades 11-12 Writing (11-12.WHST)

Text Types and Purposes

11-12.WHST.10 Write arguments focused on discipline-specific content. 11-12.WHST.1a Introduce precise, knowledgeable claim(s), establish the significance of the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences the claim(s), counterclaims, reasons, and evidence. 11-12.WHST.1b Develop claim(s) and counterclaims fairly and thoroughly, supplying the most relevant data and evidence for each while pointing out the strengths and limitations of both claim(s) and counterclaims in a discipline-appropriate form that anticipates the audience's knowledge level, concerns, values, and possible biases. 11-12.WHST.1c Use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims. 11-12.WHST.1d Establish a style and tone relevant to the discipline in which they are writing.* 11-12.WHST.2 Provide a concluding statement or section that follows from or supports the argument presented. 11-12.WHST.2 Write informative/explanatory texts, including the narration of historical events, scientific procedures/experiments, or technical processes. 11-12.WHST.2a 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, graphics, and multimedia when useful in aiding comprehension.* 11-12.WHST.2b 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.		
the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences the claim(s), counterclaims, reasons, and evidence. 11-12.WHST.1b Develop claim(s) and counterclaims fairly and thoroughly, supplying the most relevant data and evidence for each while pointing out the strengths and limitations of both claim(s) and counterclaims in a discipline-appropriate form that anticipates the audience's knowledge level, concerns, values, and possible biases. 11-12.WHST.1c Use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims. 11-12.WHST.1d Establish a style and tone relevant to the discipline in which they are writing.* 11-12.WHST.1e Provide a concluding statement or section that follows from or supports the argument presented. 11-12.WHST.2 Write informative/explanatory texts, including the narration of historical events, scientific procedures/experiments, or technical processes. 11-12.WHST.2a 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, graphics, and multimedia when useful in aiding comprehension.* 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	11-12.WHST.1	Write arguments focused on discipline-specific content.
most relevant data and evidence for each while pointing out the strengths and limitations of both claim(s) and counterclaims in a discipline-appropriate form that anticipates the audience's knowledge level, concerns, values, and possible biases. 11-12.WHST.1c Use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims. 11-12.WHST.1d Establish a style and tone relevant to the discipline in which they are writing.* 11-12.WHST.1e Provide a concluding statement or section that follows from or supports the argument presented. 11-12.WHST.2 Write informative/explanatory texts, including the narration of historical events, scientific procedures/experiments, or technical processes. 11-12.WHST.2a 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, graphics, and multimedia when useful in aiding comprehension.* 11-12.WHST.2b 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	11-12.WHST.1a	the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences the claim(s),
sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims. 11-12.WHST.1d Establish a style and tone relevant to the discipline in which they are writing.* 11-12.WHST.1e Provide a concluding statement or section that follows from or supports the argument presented. 11-12.WHST.2 Write informative/explanatory texts, including the narration of historical events, scientific procedures/experiments, or technical processes. 11-12.WHST.2a 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, graphics, and multimedia when useful in aiding comprehension.* 11-12.WHST.2b 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	11-12.WHST.1b	most relevant data and evidence for each while pointing out the strengths and limitations of both claim(s) and counterclaims in a discipline-appropriate form that anticipates the audience's knowledge
writing.* 11-12.WHST.1e Provide a concluding statement or section that follows from or supports the argument presented. 11-12.WHST.2 Write informative/explanatory texts, including the narration of historical events, scientific procedures/experiments, or technical processes. 11-12.WHST.2a 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, graphics, and multimedia when useful in aiding comprehension.* 11-12.WHST.2b 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	11-12.WHST.1c	sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and
the argument presented. 11-12.WHST.2 Write informative/explanatory texts, including the narration of historical events, scientific procedures/experiments, or technical processes. 11-12.WHST.2a 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, graphics, and multimedia when useful in aiding comprehension.* 11-12.WHST.2b 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	11-12.WHST.1d	·
events, scientific procedures/experiments, or technical processes. 11-12.WHST.2a 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, graphics, and multimedia when useful in aiding comprehension.* 11-12.WHST.2b 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	11-12.WHST.1e	_
so that each new element builds on that which precedes it to create a unified whole; include formatting, graphics, and multimedia when useful in aiding comprehension.* 11-12.WHST.2b 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	11-12.WHST.2	
relevant facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's	11-12.WHST.2a	so that each new element builds on that which precedes it to create a unified whole; include formatting, graphics, and multimedia when useful
	11-12.WHST.2b	relevant facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's

^{*} Denotes a revision has been made to the original Common Core State Standard.



11-12.WHST.2c 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.

11-12.WHST.2d 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.

11-12.WHST.2e Provide a concluding statement or section that follows from and supports

the information or explanation provided.*

11-12.WHST.3 (See note; not applicable as a separate requirement)

Note: Students' narrative skills continue to grow in these grades. The Standards

require that students be able to incorporate narrative elements effectively

into arguments and informative/explanatory texts. In history/social

studies, students must be able to incorporate narrative accounts into their

analyses of individuals or events of historical import.

Production and Distribution of Writing

11-12.WHST.4 Produce clear and coherent writing in which the development,

organization, and style are appropriate to task, purpose, and audience.

11-12.WHST.5 Develop and strengthen writing as needed by planning, revising, editing,

rewriting, or trying a new approach, focusing on addressing what is most

significant for a specific purpose and audience.

11-12.WHST.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

11-12.WHST.7 Conduct short as well as more sustained research projects to answer a

question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on

the subject, demonstrating understanding of the subject under

investigation.

11-12.WHST.8 Gather relevant information from multiple authoritative print and digital

sources, using advanced searches effectively; assess the strengths and

^{*} Denotes a revision has been made to the original Common Core State Standard.



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.

11-12.WHST.9

Draw evidence from informational texts to support analysis, reflection, and research.

Range of Writing

11-12.WHST.10

Write routinely over extended time frames (time for reflection and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.

^{*} Denotes a revision has been made to the original Common Core State Standard.