

AS OF JUNE 20, 2010,
THIS STATE HAD ADOPTED
THE COMMON CORE
STATE STANDARDS.

Wyoming • English Language Arts

DOCUMENTS REVIEWED

Wyoming Language Arts Content and Performance Standards. 2008.
Accessed from: <http://www.k12.wy.us/SA/standards.asp>

Overview

Wyoming's standards touch on some important content, but overlook much. Vague wording makes it difficult to discern a rigorous progression of content throughout the grades. In addition, high school standards are provided for grade 11 only, thus omitting much content from the grade 9-12 expectations.



Clarity and Specificity: 1/3
Content and Rigor: 3/7
Total State Score: 4/10
(Common Core Grade: B+)

General Organization

Wyoming's K-8 ELA expectations are organized into three major standards: Reading, Writing, and Speaking and Listening. The standards are then divided into sub-categories that vary by grade, and finally into grade-specific benchmarks.

The high school standards are similarly organized, except that they exist only for grade 11.

In addition, Wyoming includes "performance-level descriptors" for each grade. These are essentially rubrics that describe what students at four levels—advanced performance, proficient performance, basic performance, and below basic performance—should know and be able to do.

Clarity and Specificity

The Wyoming standards are generally well organized and clearly presented, though the benchmarks themselves are not consistently clear or specific. Some are clear, such as:

Students organize writing logically, chronologically, and coherently using strong beginnings, supporting sentences, appropriate transitions, and strong conclusions (grade 7)

Unfortunately, many benchmarks are written in vague or awkward language that uses unmeasurable verbs, such as:

Students make connections with the text (grade 1)

Students are familiar with a variety of information modes, such as news articles, magazines, online information, books by same author [sic], demonstrations, biographies, and autobiographies (grade 5)

Students write and share literary texts (poetry, journals, letters, short stories, plays, essays, personal narratives, short stories, literary responses) using appropriate strategies (grade 8)

Such standards provide scant guidance about what, precisely, students should know and be able to do across grade levels.

Finally, the failure to articulate grade-specific or even grade-band benchmarks for grades 9-12 makes it impossible to discern a clear progression of content or rigor in high school.

Taken together, these shortcomings leave teachers in the Equality State without the guidance they need to drive rigorous curriculum, instruction, and assessment, and therefore earn the standards one point out of three for Clarity and Specificity. (See *Common Grading Metric*, Appendix A.)

Content and Rigor

Content Strengths

Wyoming’s Speaking and Listening standards are reasonably strong, particularly those for group discussions, which build logically across grades. In grade 5, for example, the standard reads:

| In small group discussion, students ask relevant questions to determine purpose or clarify meaning (grade 5)

By grade 11, students:

| Use strategies to contribute to group discussions by:

- a. Considering others’ ideas and opinions before responding;
- b. Determining the purpose of discussions;
- c. Acting as a leader, participant, and moderator; and
- d. Conveying criticism in a constructive way (grade 11)

Some benchmarks delineating expectations for media analysis are also included, as in:

| Students understand and explain techniques used in media such as propaganda and visual symbols (grade 6)

Students are also expected to incorporate media into presentations. Grade 11 standards for the delivery of formal oral presentations are strong, although because the state fails to delineate expectations for grades 9, 10, or 12, a progression of content and rigor is not evident across grades.

Content Weaknesses

Wyoming’s standards for early reading are cursory. They do not describe a systematic sequence of phonological awareness, phonics, fluency, and comprehension. Instead they merely touch upon certain important expectations, as in these first-grade standards:

| Students use letter-sound relationships, context, and high-frequency words to decode unknown words and understand text (grade 1)

| Students use sequence to understand text and to make predictions about content (grade 1)

| Students compare information from several sources to understand text (grade 1)

| Students connect prior knowledge to textual information (grade 1)

| Students monitor and self-correct for meaning (grade 1)

| Students read aloud with fluency in a manner that sounds like natural speech (grade 1)

| Students are familiar with a variety of modes such as Big Books, storytelling, magazines, newspapers, and audio and video modes (grade 1)

What’s more, these seven benchmarks represent the entirety of the first-grade reading comprehension standards. The second- and third-grade standards are equally sparse and barely touch on essential content. For instance, only a single second-grade standard addresses word analysis, while the rest focus on such unmeasurable reading “strategies” as:

| Students make connections with the text (grade 2)

While standards delineating expectations for the comprehension and analysis of literary and non-literary texts are included, these benchmarks are too general to determine what students would actually be responsible for doing or producing, as in:

| Students make connections within and among texts and themselves (grade 6)

Such content-empty standards impart little confidence that students across the state will be held to equally rigorous standards.

It's a mouthful, but Wyoming does include a single standard on American literature in grade 11:

Students read a variety of literary genres from American literature and various world cultures, and understand the defining characteristics of these literary texts and the relationship between literature and the historical period, culture, and societal context, such as the influence of literary works on political events (grade 11)

Unfortunately, because the standard does not address American literature exclusively and is so vaguely worded, it fails to provide adequate guidance.

The treatment of informational text is inconsistent. In high school, for example, the sum of students' work with informational text is described in three standards: one that requires students to read "a variety of informational genres"; one that asks them to conduct research "using grade-appropriate sources"; and one prescribing that they "use a process to apply research strategies." While some further detail is offered, such standards don't come close to including the essential content that students must master in high school. Analysis of arguments and persuasive writing, for example, are completely absent.

Writing standards in Wyoming are inconsistent, largely a mix of process and product statements that rarely delineate clear expectations for what student writing products should look like at each grade. In grade 3, for example, students must simply, "write reports using research."

Interestingly, the fourth-grade research standard requires students to:

Use strategies to write research reports such as evaluating and synthesizing information for use in writing; incorporating notes into a finished product; using appropriate visual aids; including facts, details, explanations, and examples; and using more than one source (grade 4)

While this standard is clear and far more specific, the state has failed to adequately scaffold the skills necessary to prepare students to master this fourth-grade benchmark.

In addition, the Writing standards fail to prioritize writing genres appropriately across grades. For example, narrative writing and literary analyses seem to be emphasized at every grade, but arguments and persuasive writing are largely absent. "Expository essays, technical writing and reports" appear at eighth grade, but not until grade 11 are "persuasive essays" addressed, and then only nominally.

Finally, research and conventions both get short changed. As noted above, research is sometimes addressed in the Writing standards, but sporadically. Conventions are also addressed in Writing, but treated superficially. For example, in grade 2, students are supposed to "use grade-appropriate conventions...such as...use of adjectives." The only other mention of adjectives is in grade 8 where "comparative adjectives" are mentioned, though of course those could be addressed much earlier.

Taken together, these shortcomings leave as much as 65 percent of the essential ELA content missing, thus earning the standards three points out of seven for Content and Rigor. (See Common Grading Metric, Appendix A.)

The Bottom Line

With their grade of D, Wyoming's ELA standards are among the worst in the country, while those developed by the Common Core State Standards Initiative earn a solid B-plus. The CCSS ELA standards are significantly superior to what the Equality State has in place today.

AS OF JUNE 20, 2010,
THIS STATE HAD ADOPTED
THE COMMON CORE
STATE STANDARDS.

Wyoming • Mathematics

DOCUMENTS REVIEWED

Wyoming Mathematics Content and Performance Standards. November 19, 2008.
Accessed from: [http://www.k12.wy.us/SA/standards/Standards 2008 Math.pdf](http://www.k12.wy.us/SA/standards/Standards%2008%20Math.pdf)

Overview

Wyoming's standards are minimal. There are fewer than twenty-five of them for each grade and only twenty-three standards for all of high school. Had the state chosen to focus on only the most critical mathematics content, the brevity of the standards could have been a strength. Unfortunately, Wyoming's standards fail to include much of the mathematics content that is essential for a rigorous K-12 program.



Clarity and Specificity: 1/3
Content and Rigor: 1/7
Total State Score: 2/10
(Common Core Grade: A-)

General Organization

Wyoming's K-8 standards are organized by content strands, such as Algebra and Geometry.

Wyoming also includes a sequence of "Performance Descriptors" that accompany the grade-level benchmark standards. These Performance Descriptors are designed to describe student performance levels—from below basic to advanced performance—for each grade-specific standard. These descriptions are written too broadly to help clarify the content that students must master at each level.

At the high school level, standards follow the same organizational structure as the elementary standards, but are only provided for eleventh grade.

Clarity and Specificity

The standards are well presented and easy to read. Some of them are clear and specific, such as:

Students tell time, using both analog and digital clocks to the nearest half-hour (grade 1)

However, many of the standards are stated so broadly as to be nearly meaningless in terms of conveying what students are supposed to know or be able to do. For example, the following standards are neither clear nor measurable:

Students select, use, and communicate organizational methods in a problem-solving situation using 2- and 3-dimensional geometric objects (grade 3)

Students apply knowledge of appropriate grade-level patterns when solving problems (grade 4)

Note specifically that the grade 4 standard refers to "grade-level patterns" but that the standards provide no further clarification of what is an appropriate grade-level pattern, so this reference is meaningless. Many other standards make similar references to "grade-level" work without providing clarification.

Many of the high school standards are similarly vague, such as:

Students connect geometry with other mathematical topics (grade 11)

While some of the standards are specific and clear, a majority are not. The standards make vague reference to grade-level appropriateness but fail to specify what content is appropriate for a grade. There are many broadly stated standards that are left to interpretation by the reader. This serious lack of detail results in a Clarity and Specificity score of one point out of three. (See *Common Grading Metric*, Appendix A.)

Content and Rigor

Content Priorities

Wyoming does not offer explicit guidance as to what content is the most important. Moreover, in the elementary grades, the arithmetic standards comprise only about one-third of the standards, which does not properly prioritize the role of arithmetic.

Content Strengths

The standards are admirably brief. The measurement strand is reasonably detailed and well written. The small number of standards keeps geometry and data analysis, statistics, and probability (DASP) from overwhelming the elementary content. In addition, once they are beyond the foundations of arithmetic, goals are sometimes stated very clearly, for example:

- Students multiply and divide fractions and mixed numbers (grade 7)
- Students divide decimal numbers by decimal numbers (grade 7)

Content Weaknesses

The list of problems with content that is either missing or covered with inadequate detail is extensive.

The development of arithmetic is weak, in part because the crucial instant recall of number facts is never explicitly required. “Computational fluency” is not sufficient; students must know these facts and not have to stop and compute them each time they see them.

This standard is the capstone standard for whole-number addition and subtraction:

- Students add and subtract to thousands (grade 4)

While this is a desirable standard, a rigorous treatment of addition and subtraction should include fluency with the standard algorithms. This lack of specificity could result in arbitrary computational techniques.

The development of fraction arithmetic is similarly weak despite the standards specifying that students be able to manipulate fractions. Fractions do not appear in the standards until fourth grade, and there, just barely: halves, thirds, and fourths. Common denominators are never mentioned.

Arithmetic properties such as commutativity and associativity are missing. The inverse nature of addition and subtraction and of multiplication and division are both missing.

There are no formulas for area. The standards are very weak regarding ratios and rates.

For high school, much essential content is not mentioned. It is stated in the introduction that students intending to pursue mathematics or science will need to take additional mathematics, but the content for such classes is not included in the standards. The high school standards contain only twenty-three standards and most of the essential content is missing, including STEM-ready content, proofs in geometry, quadratic equations, and polynomials.

Wyoming’s standards lack much of the essential content of mathematics. The content that is included is not covered in a rigorous way. Arithmetic is not well developed or prioritized, and much of the content for high school is completely missing. These numerous problems result in a score of one point out of seven for Content and Rigor. (See *Common Grading Metric*, Appendix A.)

The Bottom Line

With their grade of F, Wyoming's mathematics standards are among the worst in the country, while those developed by the Common Core State Standards Initiative earn an impressive A-minus. The CCSS math standards are vastly superior to what the Equality State has in place today.