

Nevada • English Language Arts

DOCUMENTS REVIEWED

Nevada English Language Arts Standards. November 30, 2007.

Accessed from: http://www.doe.nv.gov/Standards_EnglishLangArts_Standards.html

Overview

Nevada's standards are generally well organized and written in precise, jargon-free language. The repetition of expectations across grade levels, coupled with the inclusion of too many broadly worded standards however, leaves teachers in the Silver State with little specific guidance about what, precisely, students should know and be able to do at each grade level.



Clarity and Specificity: 1/3
Content and Rigor: 4/7
Total State Score: 5/10
(Common Core Grade: B+)

General Organization

The *Nevada English Language Arts Standards* are divided into eight content standards, which are common across all grades:

- » Content Standard 1.0 Word Analysis
- » Content Standard 2.0 Reading Strategies
- » Content Standard 3.0 Literary Text
- » Content Standard 4.0 Expository Text
- » Content Standard 5.0 Effective Writing
- » Content Standard 6.0 Types of Writing
- » Content Standard 7.0 Listening
- » Content Standard 8.0 Speaking

Each content standard is divided into several strands, then into grade-specific “indicators.” (Note, though, that these grade-level indicators are provided only for K-8. High school indicators are presented in a single band spanning grades 9-12.)

Clarity and Specificity

The Nevada standards are clearly organized, concise, and generally devoid of unnecessary jargon. Some indicators are clear and specific, including:

Analyze plot development with a focus on

- exposition
- rising action
- falling action (grades 7-12)

Unfortunately, far too many standards are so broadly written and repetitive that they provide little guidance as to what students should know and be able to do from grade to grade. For example, the standard above, while clear and specific, is repeated verbatim in every grade, 7-12, thus showing no progression of rigor.

Worse, many of the repetitive standards are so general that they are instructionally meaningless. For example, the following vacuous standards are also repeated verbatim across several grades:

- Write poetry (grades 2-12)
- Write responses to literary text (grades 1-3)
- Write response to expository text (grades 1-3)

In many cases, there are only a small handful of standards provided for each strand, and because many of those are vague, teachers are left with virtually no guidance about what, precisely, students should know or be able to do.

Finally, Nevada makes a woefully inadequate attempt to scaffold skills across grade levels by simply adding the phrase “with assistance” to the front of many standards. According to the state, this term is used to reflect the realities:

1. that many skills require more than one year for a student to become proficient,
2. that students are provided support from teachers, peers, and other resources when appropriate, and/or
3. that these skills are not state-testable at this grade level.

In practice, this distinction adds more confusion than clarity or scaffolding. Take, for example, the following speaking indicators:

- With assistance, communicate information that maintains a clear focus (grade 1)
- With assistance, communicate information in a logical sequence (grade 2)

What “assistance” should teachers be providing first- and second-grade students to communicate information that maintains a clear focus or that is presented in a logical sequence? Unfortunately, rather than answering that question by actually scaffolding the knowledge and skills that students would need to master these capstone standards, the state has merely tacked an empty statement onto the beginning, thus leaving far too much room for interpretation.

While Nevada’s standards are well organized and concisely written, these serious shortcomings prevent them from providing the guidance that teachers and curriculum and assessment developers need to ensure students are being held to equally rigorous standards across the state. Accordingly, Nevada earns one point out of three for Clarity and Specificity. (See *Common Grading Metric*, Appendix A.)

Content and Rigor

Content Strengths

Nevada’s standards for phonological awareness, phonemic awareness, phonics, and structural analysis are clearly defined and comprehensive. The standards dealing with English language conventions are also generally strong and delineate a clear progression of skills, particularly for spelling, capitalization, punctuation skills, and sentence types.

Although too many indicators at this level include the nebulous “with assistance” caveat, the K-4 standards do address systematic vocabulary development; for example:

- Comprehend vocabulary using
 - suffixes
 - synonyms
 - antonyms (grade 1)
- With assistance, comprehend vocabulary using
 - homographs
 - homophones
 - abbreviations
 - context clues (grade 1)

The standards also include a strong research strand that outlines expectations for specific components of the research process, such as:

Write research papers by

- choosing and narrowing a research topic
- locating, collecting, and analyzing information from primary and secondary sources
- recording information
- paraphrasing and summarizing information
- organizing collected information
- documenting and citing sources in a consistent format (grade 8)

Demonstrate an understanding of the difference between original works and plagiarized works (grade 8)

Evaluate credibility of resources (grade 8)

The writing standards generally include expectations for the characteristics of quality writing products, particularly in grades K-4 where the standards clearly delineate a progression from writing sentences to paragraphs, to multiple paragraphs, to multiple paragraphs with transitions.

Standards for literary texts also include some important content. For example, some indicators focus on the methods of characterization used by authors: the character's motivations; the development of characters; supporting conclusions about characters with textual evidence; examining relationships among protagonists, antagonists, supporting characters, etc. In addition, some standards focus on crucial elements of plot development, including climax, resolution, exposition, rising action, and falling action.

Content Weaknesses

Although the standards for reading literary texts do include some important content, it is often impossible to discern how their rigor progresses from grade to grade because too many standards are repeated verbatim across grades 5-12, as in the examples cited above (see "Clarity and Specificity").

The state also specifies standards for reading non-literary texts, though essential genre-specific content is not well prioritized. Take, for example, these two standards from the Expository Text strand:

Identify and explain the use of

- bold-faced words
- underlined words
- highlighted words
- italicized words (grades 6-12)

Evaluate information from

- illustrations
- graphs
- charts
- titles
- text boxes
- diagrams
- headings
- maps (grades 6-12)

Devoting an entire standard to drawing attention to important words in non-literary texts is excessive, particularly when equally important text features are lumped together in other standards. And, in both cases, the standard is repeated verbatim across six grade levels with no discernable progression of rigor.

In addition, the standards fail to delineate expectations for describing the truth and/or validity of an argument or for recognizing and explaining the presence of fallacious reasoning.

What’s more, the state gives virtually no guidance about the quality and complexity of literary and non-literary texts that students should read across grade levels. While the standards indicate that students should be reading “grade-appropriate” works of literature, what constitutes “grade-appropriate” is inadequately explained:

Grade-appropriate in this document is determined by length of text, vocabulary, sentence complexity, layers of meaning, complexity of concept, and percentage of text versus pictures.

The failure to mention any exemplar texts or authors leaves little confidence that students across the state will be exposed to equally rigorous texts in any grade. Similarly, the standards fail to mention reading outstanding works of American literature that reflect our common culture.

While the K-4 writing standards, mentioned above, are reasonably strong, the 5-12 standards do not provide clear expectations for the quality of writing expected at each grade level. For example, the following standard is repeated verbatim at every grade, 5-12, with no additional detail about what students should know and be able to do:

Draft multiple paragraph papers about a single topic that address

- audience
- purpose
- supporting details
- introduction
- conclusion
- transitions (grades 5-12)

In addition, as discussed above, while the state technically includes genre-specific standards for writing, those standards are so broadly written that they fail to outline significant content, nor do they provide guidance about how rigor should progress from grade to grade.

Finally, the state provides no standards for media and viewing.

Taken together, these shortcomings leave as much as 50 percent of the critical ELA content missing, thus earning the standards four points out of seven for Content and Rigor. (See *Common Grading Metric*, Appendix A.)

The Bottom Line

With their grade of C, Nevada’s ELA standards are mediocre. Those developed by the Common Core State Standards Initiative earn a solid B-plus. The CCSS ELA standards are superior to what the Silver State has in place today.

Nevada • Mathematics

DOCUMENTS REVIEWED

Nevada Mathematics Standards, Integrating Content and Process. Summer 2006.

Accessed from: http://www.doe.nv.gov/Standards/Mathematics/New_Nevada_Math_Standards_Complete_Document_6.29.06_PDF.pdf

Overview

Nevada's standards are well organized and easy to read. Arithmetic is prioritized and developed reasonably well. The high school standards, however, are scant—a single set of standards for grades 9-12 omits much essential content.



Clarity and Specificity: 2/3

Content and Rigor: 4/7

Total State Score: 6/10

(Common Core Grade: A-)

General Organization

Nevada's K-8 math standards are divided into five content strands: Numbers, Number Sense and Computation; Patterns, Functions and Algebra; Measurement; Spatial Relationships, Geometry and Logic; and Data Analysis. Each strand is subdivided into topics, and then into grade-level standards. (Note, though, that not all topics include grade-level standards.)

In high school, the standards are organized similarly, except that only one set of standards is presented for grades 9-12.

In addition to the content strands mentioned above, Nevada provides four process standards, such as problem-solving and mathematical reasoning. These process standards are meant to be integrated into the instruction of all content strands.

Finally, Nevada explicitly prioritizes its standards by labeling them with one of three codes: E for “enduring...big ideas,” I for “important,” and W for “worth knowing,” respectively.

Clarity and Specificity

The standards are well presented and easy to read. Statements are generally concise and clear:

Identify the value of a given digit in the 1's, 10's and 100's place (grade 2)

Identify perfect squares to 225 and their corresponding square roots (grade 8)

The organization of the K-8 standards is clear and helpful. Topics are generally focused on important content, such as place value or fractions, which makes the sequencing through the grades clear and easy to follow, as demonstrated below:

Compare fractions with unlike denominators using models and drawings, and by finding common denominators (grade 5)

Add and subtract fractions with unlike denominators (grade 6)

Some standards, however, are overly broad and subject to interpretation. This is particularly true in high school, where the standards for all grades are combined. Here are two examples of excessive breadth:

Select and use appropriate measurement tools, techniques, and formulas to solve problems in mathematical and practical situations (grades 9-12)

Solve mathematical and practical problems involving linear and quadratic equations with a variety of methods, including discrete methods (with and without technology) (grades 9-12)

Without further detail, it is not clear what students are expected to know or what kinds of problems they should be able to solve.

The organization of the high school standards by strand is unhelpful. Standards on specific topics, such as quadratics or geometry, are not presented coherently, but are scattered throughout the strands.

The organization for K-8 is elegant, simple, and easy to read and understand. In high school, both the organization and clarity of the standards are not as strong. The standards do not quite provide a clear guide to users and receive a Clarity and Specificity score of two points out of three. (See the *Common Grading Metric*, Appendix A.)

Content and Rigor

Content Priorities

By labeling each standard E, I, or W (as described above), Nevada provides some helpful guidance about content priorities. While this scheme is not completely clear, the hierarchy suggests that the “big idea” (E) standards are the highest-priority standards, and, using that as a guide, arithmetic standards in the crucial elementary grades comprise more than 40 percent of the standards. This prioritizes arithmetic moderately well.

Content Strengths

Memorization of the basic number facts is explicit:

Immediately recall and use addition and subtraction facts (grade 3)

Immediately recall and use multiplication and corresponding division facts (products to 144) (grade 4)

Although done without mention of fluency or standard algorithms, Nevada provides straightforward arithmetic standards:

Add and subtract one- and two-digit numbers without regrouping (grade 2)

Add and subtract two- and three-digit numbers with and without regrouping (grade 3)

Add and subtract multi-digit numbers (grade 4)

This is a clearly developed sequence for addition and subtraction. Multiplication and division are presented similarly.

The connection between decimals and place value is clear:

Identify and use place value positions of whole numbers and decimals to hundredths (grade 5)

Although the high school standards are generally very weak, some are good and clear:

Identify parallel, perpendicular, and intersecting lines by slope (grades 9-12)

Content Weaknesses

The content in elementary school has a few problems. Both fluency and standard procedures are missing in the development of arithmetic. Although the structure of arithmetic is generally well covered, the inverse nature of addition and subtraction and of multiplication and division is not developed.

Some essential content is not explicitly covered in the development of perimeter and area. For instance, triangles are not explicitly covered, though students are expected to find the area of plane figures, which implicitly includes triangles. The following sequence of standards illustrates this gap:

- Define and determine the perimeter of polygons and the area of rectangles, including squares (grade 4)
- Select, model, and apply formulas to find the perimeter, circumference, and area of plane figures (grade 6)

Nevada's high school standards are too scant to cover the essential content well. In geometry, proofs and axioms are missing, as are theorems about triangles, congruence, similarity, and circles. There are very few algebra standards. Quadratic equations appear in only a few standards, and the development is weak. Although quadratic equations are to be solved, no techniques for doing so are mentioned, such as completing the square. Polynomials, though included as a topic, are covered only with the following:

- Add, subtract, multiply, and factor 1st and 2nd degree polynomials connecting the arithmetic and algebraic processes (grades 9-12)

STEM-ready content is largely missing, including exponential and logarithmic functions, complex numbers, and polar coordinates. Trigonometry is introduced but not developed.

Arithmetic is reasonably well developed and prioritized. The high school standards, which are combined for all grades, are missing much of the essential content. These serious problems result in a Content and Rigor score of four points out of seven. (See *Common Grading Metric*, Appendix A.)

The Bottom Line

With their grade of C, Nevada's mathematics standards are mediocre, while those developed by the Common Core State Standards Initiative earn an impressive A-minus. The CCSS math standards are significantly superior to what the Silver State has in place today.