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

Hawaii • English Language Arts

DOCUMENTS REVIEWED

Hawaii Content and Performance Standards III: Interactive Database. December 17, 2007. Accessed from: http://165.248.30.40/hcpsv3/

Overview

Despite the inclusion of some very strong standards for grammar and conventions—the skills that are most often cited by college professors and employers as deficiencies of today's high school graduates—Hawaii's standards are often vague and lack the essential ELA content needed to guide rigorous, K-12 instruction.

GRADE **C**

Clarity and Specificity:	1/3
Content and Rigor:	4/7
Total State Score:	**5/10**

(*Common Core Grade: B+*)

General Organization

The Hawaii ELA standards are divided into three strands across grades K-8: Reading, Writing, and Oral Communication. Each strand is then broken down into standards, topics, and grade-band benchmarks. Finally, for each benchmark, the state provides a sample performance assessment question and a rubric that articulates the skills a student would need to master to be considered advanced, proficient, partially proficient, or novice. (However, it is neither clear what role this somewhat repetitive rubric is supposed to play in instructional or assessment planning, nor to which level students are held accountable at each grade.)

The high school standards follow the same organizational structure, but include standards for American Literature, British Literature, Expository Writing (I and II), World Literature, Reading Workshop, and Creative Writing.

Clarity and Specificity

Hawaii's ELA standards contain a few bright spots but mostly lack the clarity and specificity that teachers need to help drive rigorous curriculum, daily instruction, and assessments.

Among the standards that do provide admirable detail are those that specifically delineate the grammatical knowledge that students must master to be college-ready. Take, for example, the following:

> Edit writing to correct use of the following punctuation:
> - commas in letters, dates, addresses, and items in a simple series
> - apostrophes in contractions and singular possessives
> - quotation marks and commas or end marks in direct quotations and dialogue
>
> The student: Inserts commas correctly in letters, dates, addresses, and items in a simple series; replaces a deleted letter(s) with an apostrophe in a contraction; forms singular possessives by adding an apostrophe and sets off quotations with quotation marks and ends them appropriately with a comma or end mark (grade 3)

In addition, the standards that address expectations for oral presentations are generally clear and provide specific guidance about what students should know and be able to do.

Unfortunately, many more standards lack this critical detail, and the inclusion of sample performance assessments and benchmark-specific rubrics does little more than restate (with minor elaboration) the expectations of the oft-vague benchmarks themselves. Take, for example, the following third-grade reading standard and subsequent rubric:

> Use new grade-appropriate vocabulary, including homophones and homographs, introduced in stories, informational texts, word study, and reading (grade 3)

Advanced	Proficient	Partially Proficient	Novice
Use new grade-appropriate vocabulary, including homophones and homographs, with precision, fluency, and accuracy	Use new grade-appropriate vocabulary, including homophones and homographs, with no significant errors	Use new grade-appropriate vocabulary, including homophones and homographs, with difficulty and a few significant and/or many minor errors	Use new grade-appropriate vocabulary, including homophones and homographs, with great difficulty and/or many significant errors

This rubric adds little to clarify an already vague standard, and similar problems plague standards across grade levels and strands. Therefore, despite their few bright spots, Hawaii's standards can earn no higher than a one point out of three for Clarity and Specificity. (See *Common Grading Metric,* Appendix A.)

Content and Rigor

Content Strengths

In some areas, we find strong evidence of increasing rigor and complexity from grade to grade. This is especially true for grammar standards, which make it clear exactly what content students should master each year, and how that content builds from grade to grade. Consider these sixth- and ninth-grade standards:

> Form and use the following grammatical constructions correctly when editing writing:
> - consistent verb tense across paragraphs
> - comparative and superlative forms of adjectives
> - coordinating and subordinating conjunctions
> - prepositional phrases
> - compound sentence joined by semicolon rather than conjunction and comma
> - subject-verb agreement with intervening phrase (grade 6)

> Form and use the following grammatical constructions correctly when editing writing:
> parallel structures in various contexts (e.g., items in a series, complements, items juxtaposed for emphasis)
> - subordination and coordination to indicate relationship between ideas
> - restrictive clauses with appropriate use of that
> - abbreviations used in research citation (grade 9)

Other standards emphasize different expectations for reading literary and non-literary texts, especially in the American Literature and World Literature sections. For example:

> Analyze, based on clear and precise textual evidence, the effects of diction, tone, mood, syntax, sound, form, figurative language, meter, rhyme, and structure on the meaning of poems from different cultures (American Literature and World Literature, "Advanced" level of rubric)

In Writing, the high school standards for expository writing clearly outline the essential components of research that students must master, while other standards define student expectations for analyzing information in multimedia formats and creating multimedia presentations.

Finally, while they lack some specificity, the standards do address expectations for speaking and active listening as well as for making effective oral presentations.

Content Weaknesses

Unfortunately, these bright spots pale alongside the critical flaws in Hawaii's ELA standards.

For starters, in some areas—writing chief among them—Hawaii falls victim to "everything-but-the-kitchen-sink" syndrome. It fails to make the kinds of tough prioritization decisions that differentiate between standards that are precise, rigorous (and teachable) and those that are too vague or numerous to guide effective instruction and assessment.

For example, while the Writing standards require students to study various important genres, including fiction, literary analysis, poetry, and persuasive writing, they do not effectively prioritize this content from grade to grade. Instead, the standards merely layer additional genres as the grade level increases so that, by twelfth grade, students are expected to study narrative writing, poetry, literary analysis, persuasive writing, personal essays, research, "functional" writing, and "reflections that draw comparisons between specific incidents and broader themes."

Most rigorous college-prep curricula spend far more time developing writing skills in the early grades via narrative and creative writing, and then prioritize essential persuasive and expository writing at the high school level. Hawaii would do well to clarify which of these genres deserves more time and attention at each grade level and outline content-specific expectations within each genre.

Further, while specific authors or books are mentioned occasionally in the Reading standards, the standards documents supply neither lists of exemplar texts nor guidance on text complexity to help define what students should be reading at various stages of their education. Even the standards for American, British, and World Literature make little or no mention of specific works, imparting in the reader scant confidence that students across the Aloha state will be held to rigorous content-based standards.[1]

Taken together, more than a third of the critical ELA content is missing. As such, Hawaii's state standards can earn no more than four points out of seven for Content and Rigor. (See *Common Grading Metric*, Appendix A.)

The Bottom Line

With their grade of C, Hawaii'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 Aloha State has in place today.

1 Separate from the standards and in a different part of the website (the "Document Library"), there are reading lists for the high school grades and book lists for the American, World, and British Literature courses. These are presented as suggestions and are rife with misspellings (e.g., Dickenson, Hemmingway). There are no book lists for K-8.

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

Hawaii • Mathematics

DOCUMENTS REVIEWED

Hawaii Content and Performance Standards for Mathematics K-12. December 17, 2007.
Accessed from: http://standardstoolkit.k12.hi.us/index.html

Overview

Hawaii's standards are well written and organized. However, the coverage is uneven. While high school is covered with some rigor, arithmetic is not prioritized or developed appropriately.

GRADE **C**

Clarity and Specificity:	3/3
Content and Rigor:	3/7
Total State Score:	**6/10**

(*Common Core Grade: A-*)

General Organization

Hawaii's math standards have multiple layers. The K-8 standards are divided into five content strands such as "Measurement" and "Number and Operations." Each strand is subdivided into broad statements called "Standards," which are further subdivided into "Topics." The strands, standards, and topics are all common across all grades.

Finally, the state provides grade-specific benchmarks for each topic. (Note, though, that not all topics or standards have benchmarks in each grade. For example, under the standard "Probability," no grade-level benchmarks appear until the third grade.) In addition, a Sample Performance Assessment question, designed to help clarify expectations, is provided for each benchmark.

The high school standards follow the same organization, but are divided by course.

It is the grade-level benchmarks that will be referred to below as standards.

Clarity and Specificity

Despite the complex hierarchical nature of the standards, they are fairly easy to read and understand. Each standard is clearly and succinctly stated and there are generally fewer than thirty-five standards per year, making it easy to grasp the entirety. A nice feature is that not all topics appear in each grade or course. For example, there are appropriately no data analysis standards in first grade, or in the high school Geometry course.

The statements of the standards themselves are usually clear, and parenthetical examples are sometimes included to clarify the intent. The Sample Performance Assessment (or SPA) that accompanies each standard also serves to clarify the intent.

Examples of standards with their SPAs from grades 1 and 5 are:

> Identify measurement tools that could be used to measure length, capacity, and weight.
>
> The student: Identifies the appropriate tool to measure an object (e.g., chooses the picture of a scale when asked what he or she could use to weigh a watermelon) (grade 1)
>
> Apply the inverse relationship between addition and subtraction, and multiplication and division, to solve problems.
>
> The student: Solves a multiplication problem involving a missing factor (e.g., 8 x __ = 89) by using division; solves an addition problem involving a missing addend (e.g., 45 + __ = 67) by using subtraction (grade 5)

While not every standard is clear, the standards are generally easy to read and understand. The SPAs are an excellent feature that serves to clarify intent. The Clarity and Specificity score is three points out of three. (See *Common Grading Metric*, Appendix A.)

Content and Rigor

Content Priorities

Hawaii does not provide explicit guidance as to which content is the most important. The number of standards in each grade is generally reasonable, but only about 30 percent of the standards are devoted to arithmetic and this does not sufficiently prioritize fundamental arithmetic skills.

Content Strengths

In elementary school, memorization of addition facts is explicit. There are many strong standards on rates and ratios in middle school, including the following excellent eighth-grade standard and SPA:

> Express rates of change as a ratio of two different measures, where units are included in the ratio, and use the derived rate to solve problems.
>
> The student: Measures two quantities that are related (e.g., the capacity of water that comes out of a water fountain in 10 seconds), expresses the quantities as a ratio (rate), and uses it to solve a problem (e.g., "How long would it take to fill a gallon of water from a water fountain?") (grade 8)

There are explicit standards for high school courses in Algebra I and II, Geometry, Trigonometry, and Analytical Geometry. Most STEM-ready material is well covered, including series, completing the square, conic sections, trigonometric identities, inverse trig functions, polar coordinates, complex numbers, exponential functions, and logarithmic functions.

Content Weaknesses

The development of whole-number arithmetic is weak. As stated above, the standards do call for memorization of addition facts. Unfortunately, they do not specify similar automaticity for multiplication facts.

The continued development of whole-number arithmetic is inadequate. Fluency is not required and methods and procedures are not specified. For example, the following standards and sample performance assessments from third and fourth grades track the expectation for addition and subtraction:

> Use a variety of strategies to solve problems involving addition and subtraction of two- and three-digit numbers.
>
> The student: Shows how to add (or subtract) using one strategy, then shows how to add (or subtract) a different set of numbers using a different strategy (e.g., adds multiples of ten mentally [20 + 70 = 90] then adds the ones mentally [6 + 2 = 8] to arrive at the sum of 98 when adding 26 + 72) (grade 3)
>
> Select and use appropriate strategies and/or tools (e.g., mental math, calculators, paper/pencil, standard algorithms) for computing whole numbers.
>
> The student: Chooses the method he or she wants to use to compute whole numbers and explains whether the chosen method was the most appropriate method, or if another method would have been more appropriate to use (grade 4)

The sample performance assessment for the third-grade standard specifies that students should be able to do the same problem two different ways, but fails to specify the use of the standard algorithms. The fourth-grade standard culminates the development of addition and subtraction. And while standard algorithms are mentioned, their use is not specified. Worse, the SPA that accompanies the fourth-grade standard allows students to forego standard procedures altogether and instead use a calculator to perform computations. The standard algorithms, then, are given the same status in computing whole numbers as any other method, including using alternative algorithms or even a calculator.

Whole-number multiplication and division has a similar thread with the same culminating fourth-grade standard. Thus, students may be completely reliant on a calculator to perform whole-number arithmetic. This failure to demand fluency in using standard algorithms leaves students at a severe disadvantage as they move on to more difficult topics.

Such problems persist in the further development of arithmetic. Fluency and standard procedures are not required, and a "variety of strategies" is included. Common denominators and standard procedures are never mentioned for fractions, as in this fifth-grade standard and SPA:

> Use a variety of strategies to multiply and divide fractions.
>
> The student: Shows how to multiply (or divide) fractions using one strategy, then shows how to multiply (or divide) using a different strategy (grade 5)

There are some weaknesses in high school also. The geometry course mentions proof, but there is no mention of axioms or postulates. The Pythagorean Theorem, and other standard theorems of Geometry, are used, but not proven.

Hawaii's standards are strong in places, but the development of arithmetic is weak. Arithmetic is not prioritized, and foundational whole-number arithmetic is covered inadequately. Students are not required to be fluent with standard algorithms, and calculators are specified as a method that students may choose to use to solve problems. These serious problems result in a Content and Rigor score of three points out of seven (see *Common Grading Metric*, Appendix A).

The Bottom Line

With their grade of C, Hawaii'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 Aloha State has in place today.