

# Delaware • English Language Arts

## DOCUMENTS REVIEWED<sup>1</sup>

*English Language Arts Content Standards*. August 2006.

Accessed from: [http://www.doe.k12.de.us/infosuites/staff/ci/content\\_areas/ela.shtml](http://www.doe.k12.de.us/infosuites/staff/ci/content_areas/ela.shtml)

## Overview

This voluminous and nearly incomprehensible document contains good content in spots, but it is buried beneath a barrage of repetitive and bloated statements that consistently prioritize process and personal proclivities over results and objective learning. Its hopelessly confusing organization and constant repetition of expectations make it impossible to glean effective guidance for students and teachers.



Clarity and Specificity: 0/3

Content and Rigor: 2/7

**Total State Score: 2/10**

(Common Core Grade: B+)

## General Organization

Delaware presents four ELA standards:

- Standard 1—Students will use written and oral English appropriate for various purposes and audiences
- Standard 2—Students will construct, examine, and extend the meaning of literary, informative, and technical texts through listening, reading, and viewing
- Standard 3—Students will access, organize, and evaluate information gained through listening, reading, and viewing
- Standard 4—Students will use literary knowledge accessed through print and visual media to connect self to society and culture

Each standard is divided into unnamed categories, and numerous categories are identified for each standard. Seventy-seven categories, for example, are listed for Standard 2—with comparable numbers of categories assigned to the other standards. Each category then contains dozens of grade-level expectations for K-12.

## Clarity and Specificity

The organization of Delaware's ELA standards is almost impossible to follow. At every level—standard, category, and grade-level expectations—they are vague, providing scant guidance about what, precisely, students should know and be able to do. Here is a smattering across the levels:

Standard 2—Students will construct, examine, and extend the meaning of literary, informative, and technical texts through listening, reading, and viewing (overarching standard)

Students will be able to critically analyze and evaluate information and messages presented through print by (b) formulating and expressing opinions (category for all grade spans)

Compare personal experiences and knowledge of the world (text-to-world connections) to make and support judgments about concepts in:

- Literary text (e.g., character's actions, morals of narratives or poems)
- Nonfiction (grade 7)

Nowhere among these statements is a clear student outcome described. The grade-level expectations, which we might

expect to be the most specific, are often vague and repetitive. A typical expectation is:

| Create meaning from a variety of media (grades 4-12)

Worse, it is repeated verbatim every year from fourth to twelfth grade.

Other times, the expectations are simply incomprehensible, as in this one repeated verbatim, grades 5-12:

| Listen to and critique opposing interpretations of the same reading and consider how these opinions were formed through classroom dialogue and independent writing (grades 5-12)

The Delaware standards need a serious revision to identify and streamline any good content and reformulate it into a comprehensible framework that teachers could actually follow—and know when students have met them. It fails to do this, and thus earns zero points out of three for Clarity and Specificity. (See *Common Grading Metric*, Appendix A.)

## Content and Rigor

### *Content Strengths*

Some good vocabulary content can be found within the reading and written and oral English strands. In particular, despite their heavy emphasis on context clues and other strategies in the early grades, the standards address word analysis and etymology in the upper grades.

The reading standards beyond the earliest grades outline some specific content, though it is very difficult to find. The following standard, for example, calls out specific text structures:

| Identify text structures in informative/technical texts (e.g., sequence/chronological order, classification, simple definition, simple process, description, comparison, problem/solution, simple cause/effect) (grades 3-4)

Expectations for persuasive, informative, and expressive writing are generally thorough, as in this multi-part grade 5 standard:

- Present reasons in a logical order (e.g., weakest to strongest argument, strongest to weakest argument)
- Organize writing by selecting text structures that strengthen the argument
- Develop an introduction, which is separate from the body, that presents a simple thesis and
  - takes a clear position
  - clarifies the issue
  - provides necessary background
- Use transition words/phrases that show order (e.g., in conclusion) or relationships (e.g., on the other hand)
- Develop a conclusion that begins to move beyond summary (e.g., “call to action” or “next step”) (grade 5)

Standards for group discussions are addressed, as are those for active listening. Conventions are adequately addressed as well, in standards both for oral and written language. Research standards are included, and, despite heavy repetition, are thorough.

### *Content Weaknesses*

Delaware’s coverage of essential phonics, phonemic awareness, and fluency content and skills is inadequate. In addition, the Delaware standards require that students read a variety of genres from many cultures, but contain no requirement that American literature be studied.

Text complexity is defined in a graphic that illustrates the range of lexiles at which students should be reading. The graphic further notes that certain characteristics of text, such as setting, can make the text more difficult. If, for example, the setting is “distant” or “unfamiliar,” the text will be more difficult than if the setting were familiar. On its face, that may make sense, but in reality, a text with a familiar setting could still be quite difficult if the syntax, vocabulary, and themes were complex.

In addition, the reading standards focus almost exclusively on students’ personal reflections and “personal connections” to texts, as demonstrated in these standards, which are repeated verbatim across grades 3-12:

Find and explain personal connections to the topics, events, characters, actions, ideas or information in the text (grades 3-12)

Sympathize with the experiences and feelings of fictional characters based on age, gender, nationalities, races, cultures, and/or disabilities (grades 3-7)

Read stories and relate characters’ experiences to shape own decisions by asking questions:

- I felt like that character when I...
- If that happened to me, I would...
- I can relate to that character because one time...(grades 2-12)

Delaware also fails to prioritize which genres should be emphasized at which grades. Too many genres and writing products are expected at every grade level, and the state provides little guidance (rubrics, sample writing, etc.) to clarify expectations for products across grades.

Standards for oral presentation do not include specific targets for analysis, and no rubrics are provided for their evaluation. Finally, media standards are given short shrift, as in the following standard, which also repeats with little variation across many grades:

Use various forms of technology

- word processing
- presentation programs
- digital cameras
- scanners
- multimedia

[...]to formulate writing and/or communicate knowledge of products (grades 5-12)

What appears here is unmeasurable and doesn’t hold students accountable for anything specific.

A few areas of strength save the Delaware standards from being utterly unhelpful, but at least 65 percent of important content remains missing, giving Delaware two points out of seven for Content and Rigor. (See *Common Grading Metric*, Appendix A.)

### **The Bottom Line**

With their grade of F, Delaware’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 Diamond State has in place today.

<sup>1</sup> For this analysis, the August 2006 documents were reviewed. In January 2010, Delaware began a round of organizational revisions, the goal of which is to categorize and prioritize each standard. At time of publication, only the draft 2010 standards were available on the Delaware Department of Education website, so the link provided directs readers to this slightly modified version. Note, however, that while we did not consider these draft priority revisions in our analysis, the substance of these standards has not changed since 2006.

# Delaware • Mathematics

## DOCUMENTS REVIEWED

*Math Grade Level Expectations, Kindergarten through 8th Grade.* April 2010.

Accessed from: [http://www.doe.k12.de.us/infosuites/staff/ci/content\\_areas/math.shtml](http://www.doe.k12.de.us/infosuites/staff/ci/content_areas/math.shtml)

*Math Grade Level Expectations, 9th through 12th Grade.* April 2010.

Accessed from: [http://www.doe.k12.de.us/infosuites/staff/ci/content\\_areas/math.shtml](http://www.doe.k12.de.us/infosuites/staff/ci/content_areas/math.shtml)

## Overview

Delaware’s K-8 standards are well organized and easy to read. They offer explicit guidance on priorities, and arithmetic in elementary school is both prioritized and developed reasonably well, but with some problems. High school material is not as well organized or clear, and some essential content is missing or lacking detail.



Clarity and Specificity: 2/3

Content and Rigor: 5/7

**Total State Score: 7/10**

(Common Core Grade: A-)

## General Organization

The K-12 standards are organized into four content strands, including “Numeric Reasoning” and “Algebraic Reasoning.” Grade-level standards are organized by topics within the strands. In addition, process standards are presented separately from content standards. All standards are explicitly prioritized by a code: E, I, or C, standing for Essential, Important, and Compact, respectively.

## Clarity and Specificity

The K-8 standards are well presented and organized. Statements are concise and quite clear:

Connect skip counting to multiplication (grade 3)

Compare integers on the number line (grade 7)

However, many of the standards lack adequate detail, making it difficult to interpret a standard’s intent, as in the following:

Record mathematical thinking (i.e., invented notation) (grade 1)

Model problem situations with objects and use representations such as graphs, tables or equations to draw conclusion (grade 5)

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

The high school standards often lack detail and are unclear. Worse, some make no mathematical sense:

Perform addition, subtraction, and multiplication on irrational expressions (grade 11)

Analyze linear, quadratic, exponential, periodic, trigonometric, or inverse relationships in graphs using best-fit lines and curves (regression lines and curve fitting) (grade 11)

In addition to their vagueness, standards on specific topics—such as exponential or quadratic functions—are not presented together, but are scattered throughout the four content strands.

In K-8, the standards are generally clear. In high school, however, the standards are poorly sequenced, and many standards are unclear and vague. They “do not quite provide a complete guide to users” and receive a Clarity and Specificity score of two points out of three. (See *Common Grading Metric*, Appendix A.)

## Content and Rigor

### *Content Priorities*

Delaware systematically prioritizes its standards by specifying which standards are essential in each grade. Each standard is explicitly coded as E, I, or C, standing for Essential, Important, and Compact, respectively. In elementary school, arithmetic is appropriately emphasized: Half of all Essential standards across appropriate elementary grades are devoted to arithmetic.

### *Content Strengths*

Whole-number arithmetic is started off well with:

- Master addition and subtraction facts up to 20 (grade 3)
- Master multiplication facts and the related division facts up to the 10s tables (grade 4)

The continued development of arithmetic has some strengths. For example, there are explicit expectations that are not always found in state standards:

- Multiply fractions by whole numbers and explain the result (grade 6)
- Explain the role of place value in adding and subtracting decimals (grade 6)
- Justify the placement of the decimal point in the solution to a multiplication or division problem (grade 7)

In high school, there are some rigorous standards, such as:

- Determine symbolically the equation of a line given combinations of point, slope, and intercept information (grade 9)
- Convert between equivalent forms of linear functions (grade 9)
- Use algebraic techniques to identify the vertex and intercepts for quadratic functions (grade 11)

It is problematic, however, that of the eight standards quoted in this section, four of them are not labeled as Essential.

### *Content Weaknesses*

Whole-number arithmetic has some good development and expectations, but fails to specify fluency and the use of standard methods. For example, for addition and subtraction:

- Add and subtract numbers up to 100 efficiently and explain the strategies used (grade 3)
- Add and subtract larger numbers (e.g., three digits + two digits) and explain how the operation works (grade 4)

The development of fractions is also problematic. Fraction multiplication standards incorporate multiple strategies and models rather than a single, standard procedure:

- Multiply fractions by other fractions using physical models, ratio/rate tables, and arrays (grade 6)
- Use a variety of strategies to add, subtract, multiply, and divide fractions (grade 6)

Worse, the only standard for multiplying fractions that is labeled Essential is this first, which focuses on using models rather than computation.

Calculators are introduced prematurely in grade 3.

There are also weaknesses in the development of decimals. Addition and subtraction of decimals is not explicated directly, but covered as in the following standards:

Add and subtract decimals using models (grade 5)

Explain the role of place value in adding and subtracting decimals (grade 6)

High school geometry neglects many key elements. Proof is addressed in the process standards, but without mention of the axioms or postulates required for proof. Standard theorems—such as the Pythagorean Theorem—are not proven, and compass and straight edge constructions are absent.

The development of linear equations is missing some details such as finding the equation of a line between two points.

As stated above, the standards set appropriate expectations for students learning quadratic equations. However, the development of quadratic equation standards is not particularly coherent, and expectations are often far too broad. For example, max/min problems are not addressed alongside quadratics in the standards, and although imaginary numbers are introduced, complex roots of quadratic equations are not covered.

In addition, much of the STEM content is not covered. Trigonometry is introduced but not developed—for example, the standards are silent on inverse trigonometric functions and polar coordinates.

Delaware’s K-8 standards are sometimes strong. Arithmetic is prioritized and developed reasonably well, but with some problems. The high school material is not as clear and is missing some of the essential content. These “critical shortcomings” result in a Content and Rigor score of five points out of seven. (See *Common Grading Metric*, Appendix A.)

### **The Bottom Line**

With their grade of B, Delaware’s mathematics standards are decent, while those developed by the Common Core State Standards Initiative earn an impressive A-minus. The CCSS math standards are superior to what the Diamond State has in place today.