

# Texas • English Language Arts

## DOCUMENTS REVIEWED

*Texas Essential Knowledge and Skills for English Language Arts and Reading (TEKS) for K-5.* Updated February 2010.  
Accessed from: <http://ritter.tea.state.tx.us/rules/tac/chapter110/ch110a.pdf>

*Texas Essential Knowledge and Skills for English Language Arts and Reading (TEKS) for 6-8.* Updated February 2010.  
Accessed from: <http://ritter.tea.state.tx.us/rules/tac/chapter110/ch110b.pdf>

*Texas Essential Knowledge and Skills for English Language Arts and Reading (TEKS) for English I-IV.* Updated February 2010.  
Accessed from: <http://ritter.tea.state.tx.us/rules/tac/chapter110/ch110c.pdf>

## Overview

The Texas ELA standards are clearly organized, specific, and include nearly all of the essential K-12 content. They provide excellent guidance to teachers in the Lone Star State and help ensure that all students will be held to equally rigorous standards.



Clarity and Specificity: 3/3

Content and Rigor: 6/7

**Total State Score: 9/10**

(Common Core Grade: B+)

## General Organization

The Texas K-8 ELA standards are divided into five strands: Reading, Writing, Research, Listening and Speaking, and Oral and Written Conventions. Each strand is further divided into sub-strands, such as vocabulary development and comprehension of literary text, which are common across several grade levels. (Not all sub-strands are included at every grade level, however.) Finally, the state provides grade-specific standards for each sub-strand.

The high school standards are organized similarly, though they are grouped by course, rather than by grade level.

## Clarity and Specificity

Texas's ELA standards are clearly written, well presented, and logically organized. Most are clear and specific and leave little room for interpretation, such as:

Use a dictionary, a glossary, or a thesaurus (printed or electronic) to determine the meanings, syllabication, pronunciations, alternate word choices, and parts of speech of words (grade 6)

In addition, they frequently include examples to help clarify expectations, such as:

Students understand, make inferences and draw conclusions about the structure and elements of poetry and provide evidence from text to support their understanding. Students are expected to explain how figurative language (e.g., personification, metaphors, similes, hyperbole) contributes to the meaning of a poem (grade 6)

The standards clearly outline what students should know and be able to do from grade to grade and easily merit three points out of three for Clarity and Specificity. (See *Common Grading Metric*, Appendix A.)

## Content and Rigor

### *Content Strengths*

The vast majority of essential K-12 content is covered with depth and rigor. A systematic, detailed progression of expectations for early reading is provided, including rigorous standards devoted to phonics, and phonemic and phonological awareness, including:

Students are expected to:

- a. Orally generate a series of original rhyming words using a variety of phonograms (e.g., -ake, -ant, -ain) and consonant blends (e.g., bl, st, tr);
- b. Distinguish between long- and short-vowel sounds in spoken one-syllable words (e.g., bit/bite);
- c. Recognize the change in a spoken word when a specified phoneme is added, changed, or removed (e.g., /b/l/o/w/ to/g/l/o/w/);
- d. Blend spoken phonemes to form one- and two-syllable words, including consonant blends (e.g., spr);
- e. Isolate initial, medial, and final sounds in one-syllable spoken words; and
- f. Segment spoken one-syllable words of three to five phonemes into individual phonemes (e.g., splat =/s/p/l/a/t/) (grade 1)

Expectations for vocabulary development are similarly rigorous and include standards devoted to etymology, knowledge of roots and affixes, connotation and denotation, figurative language, appropriate use of context clues, and the use of dictionaries and thesauruses to confirm meaning.

Standards for reading are also strong and include expectations that address the comprehension and analysis of literary and non-literary text, including helpful, detailed standards that outline genre-specific content and rhetorical techniques, such as:

Describe conventions in myths and epic tales (e.g., extended simile, the quest, the hero's tasks, circle stories) (grade 7)

Analyze the structure of the central argument in contemporary policy speeches (e.g., argument by cause and effect, analogy, authority) and identify the different types of evidence used to support the argument (grade 7)

Analyze contemporary political debates for such rhetorical and logical fallacies as appeals to commonly held opinions, false dilemmas, appeals to pity, and personal attacks (English I)

Additional standards that address the truth and validity of argument, and recognizing and explaining fallacious reasoning, are also included, such as:

Analyze historical and contemporary political debates for such logical fallacies as non-sequiturs, circular logic, and hasty generalizations (English III)

Writing standards clearly outline the genre-specific content that students should master across grades, and these standards show a clear progression of rigor from one grade to the next, as demonstrated by these examples for writing persuasive pieces:

Students write persuasive texts to influence the attitudes or actions of a specific audience on specific issues. Students are expected to write persuasive essays for appropriate audiences that establish a position and use supporting details (grade 4)

Students are expected to write persuasive essays for appropriate audiences that establish a position and include sound reasoning, detailed and relevant evidence, and consideration of alternatives (grade 5)

Students are expected to write a persuasive essay to the appropriate audience that:

- a. Establishes a clear thesis or position;
- b. Considers and responds to the views of others and anticipates and answers reader concerns and counter-arguments; and
- c. Includes evidence that is logically organized to support the author's viewpoint and that differentiates between fact and opinion (grade 8)

In addition, the standards appropriately prioritize writing genres across grades so that more attention is focused on narrative writing in the early grades and on literary analysis and persuasive writing in middle and high school.

Standards delineating expectations for English conventions are also rigorous and demonstrate clear progression from grade to grade. Similarly, the state includes strong expectations that address the research process. What's more, these standards build from year to year so that, by high school, students should have the capacity to write thoughtful and thorough research papers.

Finally, standards for listening and speaking, analyzing media, and delivering multimedia presentations are also included.

### *Content Weaknesses*

While the Reading standards are clear and rigorous, the state fails to define the quality and complexity of texts that students should be reading each year. Similarly, while the high school standards include occasional and perfunctory nods to the importance of reading important works of American literature (shown below), the state makes no reference to American literature in grades K-8.

Students are expected to relate the characters and text structures of mythic, traditional, and classical literature to 20th and 21st century American novels, plays, or films (English III)

Students understand, make inferences and draw conclusions about the structure and elements of drama and provide evidence from text to support their understanding. Students are expected to analyze the themes and characteristics in different periods of modern American drama (English III)

Texas's clear, rigorous writing standards could be further strengthened by including sample student writing to clarify expectations across grade levels.

On balance, the Texas ELA standards are clear, rigorous, and specific and omit very little essential K-12 content. As such, they earn six points out of seven for Content and Rigor. (See *Common Grading Metric*, Appendix A.)

### **The Bottom Line**

Texas's ELA standards are more clearly written, better presented, and logically organized than the Common Core standards. The Texas standards include expectations that more thoroughly address the comprehension and analysis of literary and non-literary text than Common Core, including helpful, detailed standards that outline genre-specific content and rhetorical techniques. In addition, Texas has prioritized writing genres by grade level.

On the other hand, Common Core appends a list that specifies the quality and complexity of the reading that students should do. In addition, Common Core includes samples of student writing to help clarify writing expectations across grades. Texas would do well to incorporate such guidance into its standards.

# Texas • Mathematics

## DOCUMENTS REVIEWED

*Texas Essential Knowledge and Skills for Mathematics*. August 1, 2006.  
Accessed from: <http://www.tea.state.tx.us/index4.aspx?id=3449>

## Overview

Texas's standards are well presented and easy to read, but they are somewhat minimal and lack specificity. They often seem disjointed and do not sufficiently outline a coherent approach to the mathematical content. The development of arithmetic is stated as a priority, but this priority is not supported within the standards. Despite the lack of specificity and coherence, the high school material is fairly complete, and covers much STEM-ready material.



Clarity and Specificity: 2/3  
Content and Rigor: 4/7  
**Total State Score: 6/10**  
(Common Core Grade: A-)

## General Organization

The K-8 standards are organized into content strands, including Number Operation and Quantitative Reasoning, and Probability and Statistics. Strands are divided into topics, and finally into grade-specific standards.

The high school standards have a similar presentation, but they are organized by course.

## Clarity and Specificity

The standards are well presented and easy to read, and some are clear as stated, such as:

The student is expected to: compare and order two or more containers according to capacity (from holds the most to holds the least) (grade 1)

However, many standards are far too broadly stated, such as:

The student is expected to: identify and describe patterns in a table of related number pairs based on a meaningful problem and extend the table (grade 3)

The student is expected to: use geometric concepts and properties to solve problems in fields such as art and architecture (grade 7)

These standards give little indication of what types of problems students are expected to be able to solve.

The standards lack coherence. Related material often appears artificially separated within the standards. One example can be seen in the following excellent standard, which introduces students to the number line. However, instead of being included with the standards about whole numbers, it is included in the Geometry strand:

The student recognizes that a line can be used to represent a set of numbers and its properties. The student is expected to use whole numbers to locate and name points on a number line (grade 2)

Another example is in high school. Factoring and completing the square are both present, but not under the topic of quadratic functions.

The statements often lack specificity and the sequencing is not clear. 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*

The approach that Texas takes to setting priorities is contradictory. They are set out in the introduction to each grade. For example, the following states that arithmetic development is a high priority:

Within a well-balanced mathematics curriculum, the primary focal points at Grade 3 are multiplying and dividing whole numbers, connecting fraction symbols to fractional quantities, and standardizing language and procedures in geometry and measurement (grade 3)

Unfortunately, this excellent setting of priorities is followed by:

Throughout mathematics in Grades 3-5, students build a foundation of basic understandings in number, operation, and quantitative reasoning; patterns, relationships, and algebraic thinking; geometry and spatial reasoning; measurement; and probability and statistics (grades 3-5)

Thus, it is not clear if arithmetic is a priority or not. Using a count of the standards to determine priorities, only one-third are devoted to arithmetic. The excellent guidance specified by the focal points is not supported by the subsequent statements or by the standards themselves.

### *Content Strengths*

The standards are not overwhelming in number and some material is covered well. The number line is introduced early and carried throughout.

Linear equations are covered nicely with standards such as:

The student is expected to graph and write equations of lines given characteristics such as two points, a point and a slope, or a slope and y-intercept (Algebra I)

High school geometry expects students to be aware of axiomatic systems, enough so they can contrast the structures of Euclidean and non-Euclidean geometry.

Much of the important STEM-ready material is included, such as series, exponential functions, logarithmic functions, and some serious trigonometry, including inverse trigonometric functions and the laws of sines and cosines.

### *Content Weaknesses*

Arithmetic is covered with a minimalist approach. The properties of operations such as associativity, and the inverse nature of addition and subtraction and of multiplication and division, are not covered. Although recall of number facts is in the standards, it is not quick or instant. Automaticity with recalling facts is the basis for future mathematics; students who are still struggling with basic facts are not prepared to move on to the next level of mathematics.

Arithmetic is expected, as in the standard:

The student is expected to use multiplication to solve problems involving whole numbers (no more than three digits times two digits without technology) (grade 5)

Yet, the lack of the standard algorithms and the explicit mention of technology does not support mastery of arithmetic.

The traditional treatment of area is to compute it for rectangles, including finding a formula for the area of a rectangle, and then move on to parallelograms and triangles. However, rectangles are only mentioned in Kindergarten and grade 1 and parallelograms are never mentioned. Triangles are mentioned in Kindergarten and grade 1 and not again until middle school. Despite this missing detail, by grade 5 students are expected to:

[C]onnect models for perimeter, area, and volume with their respective formulas (grade 5)

In addition, in high school geometry, the role of proof is not clear. Proofs of the standard results of geometry are not explicitly mentioned.

Texas's standards are strong in places, particularly in high school. But there are also weaknesses, especially in arithmetic, which is only minimally developed. The stated prioritization of arithmetic is undermined within the document. The coverage of basic geometry at the elementary level is not explicit enough. These important shortcomings 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, Texas'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 Lone Star State has in place today.