

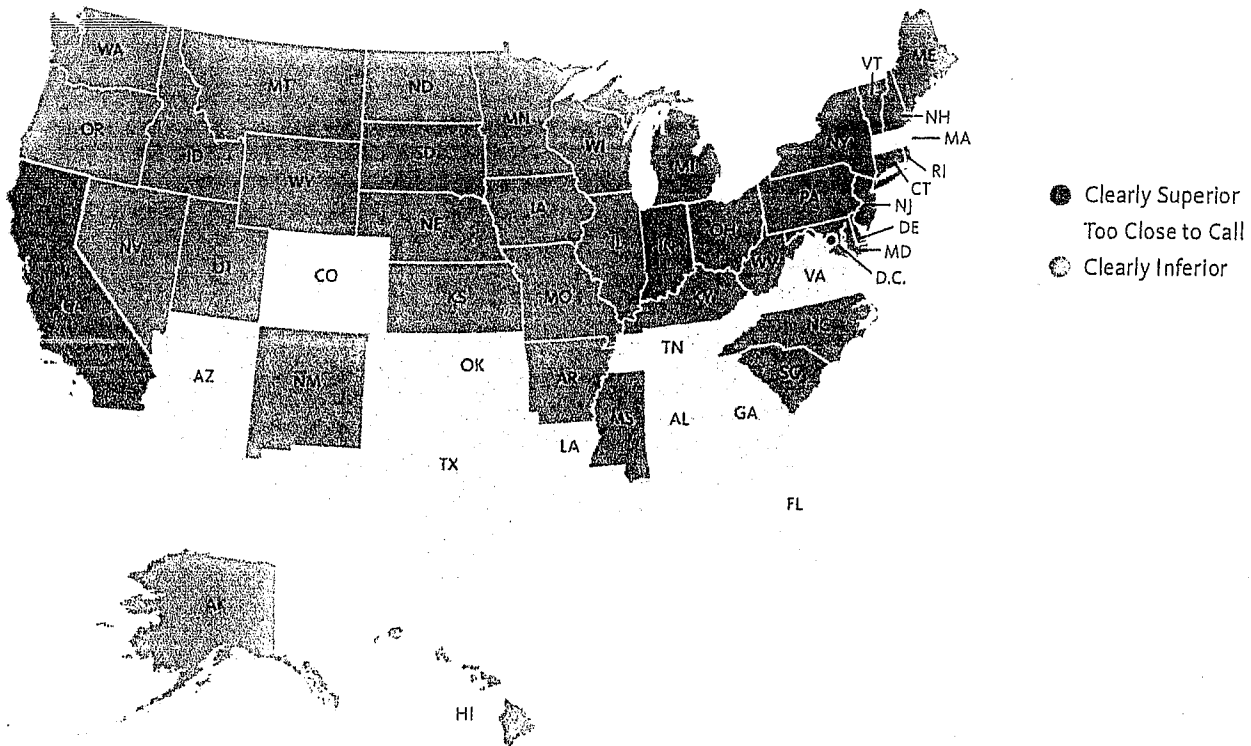
Executive Summary

This review of state English language arts (ELA) and mathematics standards is the latest in a series of Fordham evaluations dating back to 1997. It comes at a critical juncture, as states across the land consider adoption of the Common Core State Standards. (At press time, roughly half of states had already done so.)

Here are our major findings:

- » Based on our criteria, the Common Core standards are clearly superior to those currently in use in thirty-nine states in math and thirty-seven states in English. For thirty-three states, the Common Core is superior in *both* math and reading.
- » However, three jurisdictions boast ELA standards that are clearly superior to the Common Core: California, the District of Columbia, and Indiana. Another eleven states have ELA standards that are in the same league as the Common Core (or “too close to call”).
- » Eleven states plus the District of Columbia have math standards in the “too close to call” category, meaning that, overall, they are at least as clear and rigorous as the Common Core standards.

Figure 1: State English Language Arts Standards Compared to the Common Core



Senate Ways and Means Committee

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Figure 2: State Mathematics Standards Compared to the Common Core

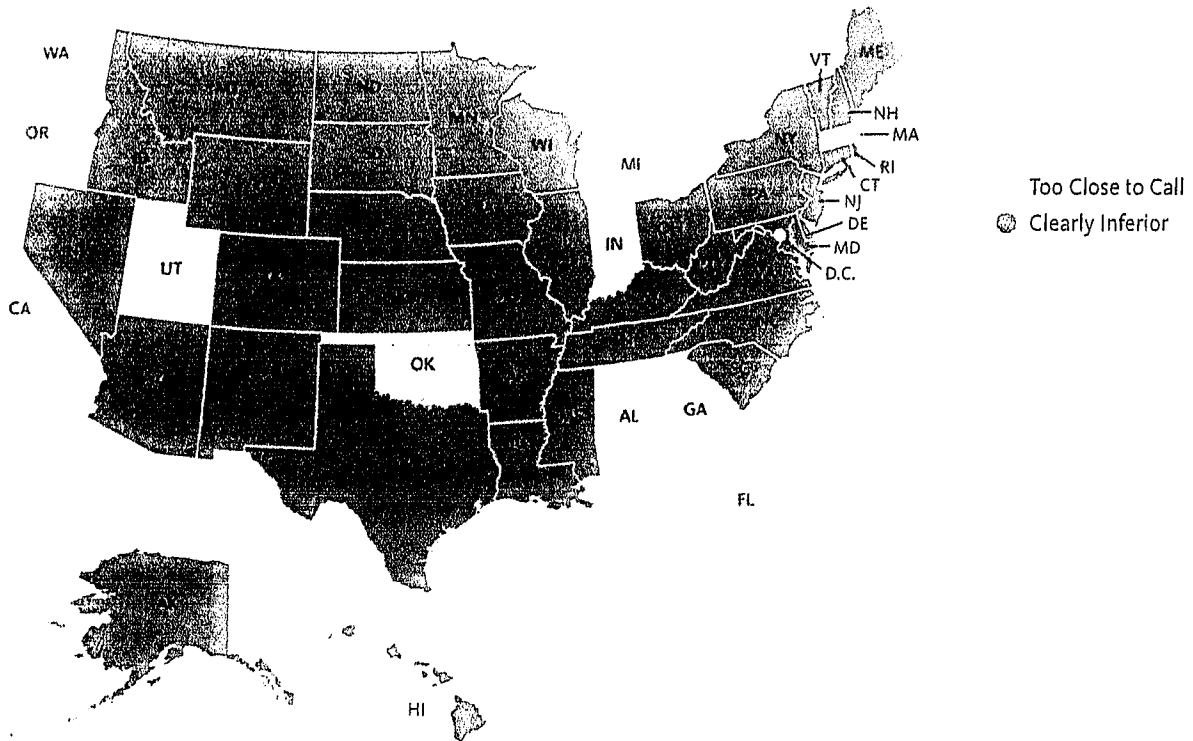


Table 1: State English Language Arts and Mathematics Standards Compared to the Common Core

State	English Language Arts	Math
Alabama	Too Close to Call	Too Close to Call
Alaska	Clearly Inferior	Clearly Inferior
Arizona	Too Close to Call	Clearly Inferior
Arkansas	Clearly Inferior	Clearly Inferior
California	Clearly Superior	Too Close to Call
Colorado	Too Close to Call	Clearly Inferior
Connecticut	Clearly Inferior	Clearly Inferior
Delaware	Clearly Inferior	Clearly Inferior
District of Columbia	Clearly Superior	Too Close to Call
Florida	Too Close to Call	Too Close to Call
Georgia	Too Close to Call	Too Close to Call
Hawaii	Clearly Inferior	Clearly Inferior
Idaho	Clearly Inferior	Clearly Inferior
Illinois	Clearly Inferior	Clearly Inferior
Indiana	Clearly Superior	Too Close to Call
Iowa	Clearly Inferior	Clearly Inferior
Kansas	Clearly Inferior	Clearly Inferior
Kentucky	Clearly Inferior	Clearly Inferior
Louisiana	Too Close to Call	Clearly Inferior

Maine	☉ Clearly Inferior	☉ Clearly Inferior
Maryland	☉ Clearly Inferior	☉ Clearly Inferior
Massachusetts	☹ Too Close to Call	☹ Too Close to Call
Michigan	☉ Clearly Inferior	☹ Too Close to Call
Minnesota	☉ Clearly Inferior	☉ Clearly Inferior
Mississippi	☉ Clearly Inferior	☉ Clearly Inferior
Missouri	☉ Clearly Inferior	☉ Clearly Inferior
Montana	☉ Clearly Inferior	☉ Clearly Inferior
Nebraska	☉ Clearly Inferior	☉ Clearly Inferior
Nevada	☉ Clearly Inferior	☉ Clearly Inferior
New Hampshire	☉ Clearly Inferior	☉ Clearly Inferior
New Jersey	☉ Clearly Inferior	☉ Clearly Inferior
New Mexico	☉ Clearly Inferior	☉ Clearly Inferior
New York	☉ Clearly Inferior	☉ Clearly Inferior
North Carolina	☉ Clearly Inferior	☉ Clearly Inferior
North Dakota	☉ Clearly Inferior	☉ Clearly Inferior
Ohio	☉ Clearly Inferior	☉ Clearly Inferior
Oklahoma	☹ Too Close to Call	☹ Too Close to Call
Oregon	☉ Clearly Inferior	☹ Too Close to Call
Pennsylvania	☉ Clearly Inferior	☉ Clearly Inferior
Rhode Island	☉ Clearly Inferior	☉ Clearly Inferior
South Carolina	☉ Clearly Inferior	☉ Clearly Inferior
South Dakota	☉ Clearly Inferior	☉ Clearly Inferior
Tennessee	☹ Too Close to Call	☉ Clearly Inferior
Texas	☹ Too Close to Call	☉ Clearly Inferior
Utah	☉ Clearly Inferior	☹ Too Close to Call
Vermont	☉ Clearly Inferior	☉ Clearly Inferior
Virginia	☹ Too Close to Call	☉ Clearly Inferior
Washington	☉ Clearly Inferior	☹ Too Close to Call
West Virginia	☉ Clearly Inferior	☉ Clearly Inferior
Wisconsin	☉ Clearly Inferior	☉ Clearly Inferior
Wyoming	☉ Clearly Inferior	☉ Clearly Inferior

- » The Common Core ELA standards, which earned a B-plus in our review, are particularly strong when it comes to providing useful and explicit guidance about the quality and complexity of reading and writing that should be expected of students each year, including providing annotated samples of student writing. On the other hand, those states with “clearly superior” standards tend to treat both literary and non-literary texts with more systematic detail, addressing the specific genres, sub-genres, and characteristics of both text types.
- » The Common Core mathematics standards, which received an A-minus from our reviewers, set arithmetic as a clear priority in the elementary grades and develop the often-difficult subject of fractions with clear and careful guidance. On the other hand, compared to many of the “close call” states, the presentation of high school content is disjointed and mathematical coherence suffers.
- » Several states made great improvements to their math standards since we last reviewed them in 2005. However, similar progress was generally not visible for ELA. (In 2005, we reported the opposite: States had made greater improvements to their ELA standards, but not their math standards, since 2000.)

Table 2: Grades for State English Language Arts Standards, 2005 and 2010^A

Alabama	B	A
Alaska	F	D
Arizona	B	B
Arkansas	D	C
California	A	A
Colorado	B+	C
Connecticut	D	F
Delaware	F	C
District of Columbia	A	C
Florida	B	C
Georgia	B+	B
Hawaii	C	C
Idaho	C	B
Illinois	D	B
Indiana	A	A
Iowa	F	N/A ^B
Kansas	C	C
Kentucky	D	C
Louisiana	B+	A
Maine	C	C
Maryland	C	C
Massachusetts	A-	A
Michigan	D	D
Minnesota	C	B
Mississippi	D	B
Missouri	D	C
Montana	F	F
Nebraska	F	C
Nevada	C	B
New Hampshire	C	B
New Jersey	C	C
New Mexico	C	D
New York	C	B
North Carolina	D	B
North Dakota	D	C
Ohio	C	C
Oklahoma	B+	C
Oregon	C	B
Pennsylvania	D	C
Rhode Island	D	C
South Carolina	D	B
South Dakota	C	B
Tennessee	A-	D
Texas	A-	B

Utah	C	C
Vermont	D	C
Virginia	B+	B
Washington	C	F
West Virginia	D	C
Wisconsin	D	C
Wyoming	D	F

^A Please see the *Foreword* and *Appendix C* for a discussion of how our criteria changed from 2005 to 2010. This complicates any comparison over time.

^B Iowa adopted its first set of state standards in ELA and math in 2007.

Table 3: Grades for State Mathematics Standards, 2005 and 2010^A

Alabama	B+	B
Alaska	D	D
Arizona	B	C
Arkansas	C	F
California	A	A
Colorado	C	D
Connecticut	D	F
Delaware	B	F
District of Columbia	A	D
Florida	A	F
Georgia	A-	B
Hawaii	C	F
Idaho	B	D
Illinois	D	C
Indiana	A	A
Iowa	C	N/A ^B
Kansas	F	F
Kentucky	D	C
Louisiana	C	C
Maine	C	D
Maryland	D	C
Massachusetts	B+	A
Michigan	A-	C
Minnesota	B	D
Mississippi	C	D
Missouri	D	F
Montana	F	D
Nebraska	C	D
Nevada	C	C
New Hampshire	D	F
New Jersey	C	D
New Mexico	C	B

New York	B	C
North Carolina	D	C
North Dakota	C	C
Ohio	C	D
Oklahoma	B+	C
Oregon	B+	D
Pennsylvania	F	D
Rhode Island	D	F
South Carolina	C	D
South Dakota	C	C
Tennessee	C	D
Texas	C	C
Utah	A-	D
Vermont	F	D
Virginia	C	C
Washington	A	F
West Virginia	B	C
Wisconsin	F	D
Wyoming	F	F

^A Please see the *Foreword* and *Appendix C* for a discussion of how our criteria changed from 2005 to 2010. This complicates any comparison over time.

^B Iowa adopted its first set of state standards in ELA and math in 2007.

Kansas • English Language Arts

DOCUMENTS REVIEWED¹

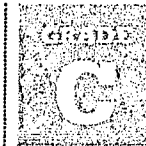
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Overview

The Kansas ELA standards cover much of the essential content of a college-preparatory curriculum. Unfortunately, they contain some critical flaws of organization, notably the lack of grade-specific standards for high school as well as for the speaking, listening, media, and viewing standards. What's more, even when grade-specific standards are provided, many are repetitive or too vague to provide adequate guidance to teachers, curriculum developers, or assessment writers about what critical content students need to master each year to be prepared for what lies ahead.



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

General Organization

Kansas has two standards for reading (reading and literature) and two for writing (writing and research). Each of the four is broken into benchmarks that are also common across all grade levels, K-12.

For grades K-8, the benchmarks are then broken down into grade-specific “knowledge-base indicators.” These are supplemented with instructional examples that, according to the state, describe “student activities that would fulfill the benchmark and indicator requirements.”

In grades 9-12, the benchmarks are also broken down into knowledge-base indicators, but these provide no grade-specific guidance.

Besides the reading and writing standards, which are assessed by the Kansas state assessment system, the state provides seven curricular standards for listening, viewing, speaking, and “other related areas.” Standards 1-5 are listed as standards for grades K-5 and standards 6-7 are designated for grades 6-12.

Similar to reading and writing, these seven standards are broken into benchmarks and “knowledge-specific indicators.” These indicators, however, are broken into proficiency levels (basic, intermediate, proficient, and advanced) rather than grade levels. (No guidance is provided regarding when students should progress from one proficiency level to the next.)

Clarity and Specificity

The clarity and specificity of the Kansas ELA standards is inconsistent at best. Some indicators are very clearly written and provide excellent guidance about the progression of rigor expected from grade to grade. For example, benchmark 1 (“The student uses literary concepts to respond to a text”) provides very clear scaffolding, as shown with the examples from grades 3, 6, and 8 below:

Identifies and describes characters' physical traits, basic personality traits, and actions (grade 3)

Describes different aspects of major and minor characters (e.g., their physical traits, personality traits, feelings, actions, motives) and explains how those aspects influence characters' interactions with other characters and elements of the plot, including resolution of the major conflict (grade 6)

Describes different aspects of characters (e.g., their physical traits, personality traits, feelings, actions, motives) and analyzes how major characters are developed (e.g., through their thoughts, words, speech patterns, actions) and how they change over time (grade 8)

Unfortunately, the indicators for grades K-2 and 9-12 of the same benchmark are too nebulous to be useful. Take, for example, the following indicator for grades K-2:

Identifies and discusses character(s) in literature (K-2)

The difference in clarity and specificity even within this one benchmark is striking, but similar problems can be found throughout the document.

The inconsistency in the grade-specific indicators, coupled with the fact that *no* grade-specific guidance is available for grades 9-12 in reading and writing or for any grade in listening, speaking, and viewing, leave the overall clarity and specificity of the Kansas ELA standards lacking—and Kansas teachers without the clear guidance they need to plan a rigorous and thorough K-12 ELA curriculum. Consequently, Kansas earns one point out of three for Clarity and Specificity. (See *Common Grading Metric*, Appendix A.)

Content and Rigor

Content Strengths

The Kansas ELA standards delineate most of the appropriate content and, in some cases, a strong progression of increasing rigor is developed across grade levels. For example, the state has done a thorough job of detailing the content of both early reading and vocabulary.

Kansas also supplies a very detailed and focused progression of vocabulary content and skills, with a clear development from grade to grade. Students at grade 4, for example, are expected to use word structure—compound words, roots, prefixes, and suffixes—to determine word meanings, while students at grade 8 use structural analysis—knowledge of Greek, Latin, and Anglo-Saxon roots, prefixes, and suffixes—to understand complex words and content-area vocabulary.

In addition, the vocabulary standards commendably require students to use appropriate context clues, as shown by the standard below, and to employ dictionaries to understand connotation and denotation of unfamiliar words.

Determines the meaning of unknown words or phrases using context clues (e.g., definitions, restatements, examples, descriptions) from sentences or paragraphs (grade 3)

Despite the lack of grade-specific indicators in high school, the speaking, listening, viewing, and media production expectations are more detailed than in many state standards.

Content Weaknesses

The Kansas ELA standards are undermined by several critical failings. First, apart from a passing reference in the “instructional examples” of American literature that should be read in social studies classes, the standards fail to reference foundational American literature.

Second, the standards fail to provide any guidance about what grade-appropriate reading looks like across grade levels. In order to ensure that students across the state are exposed to equally rigorous literature and a diversity of both literary and non-literary texts, Kansas should provide either a list of suggested texts that are appropriate for each grade level, or at least examples within the indicators of texts that would be appropriate to use when teaching particular standards.

The writing standards also suffer from two critical deficiencies. First, while they do specify the genres that students should study across grade levels, the indicators fall far short of outlining the content that students must master to

become proficient writers. For example, the genre-specific indicators for persuasive writing in high school include the following:

- Writes a cohesive piece that includes
 1. an introduction that engages the reader
 2. an appropriate body that reinforces the writer's position through the logical placement of evidence
 3. a conclusion that reinforces the thesis statement and original position (grades 9-12)
- Selects vocabulary and figurative language that conveys a particular tone and personality (e.g., humor, suspense, cynicism, sarcasm, originality, liveliness) (grades 9-12)
- Incorporates words that are precise, suitable for persuasive writing, and create imagery (e.g., specific nouns, powerful verbs, vivid modifiers) (grades 9-12)

Some of the content of these standards is inappropriate for persuasive writing, and other content can be broadly applied across genres. Standards for persuasive writing in high school should more clearly delineate the explicit characteristics of this essential genre.

There is also scant focus on evaluation and revision of writing. Much value would be added by including writing rubrics and exemplars that more clearly outline the level of rigor expected across grade levels.

Research writing exists as a standard only in grades 9-12. This standard should be scaffolded down into grades K-8.

Finally, across all grade levels and standards, the state-supplied instructional examples represent a missed opportunity to embed more examples of student work, rubrics, sample texts, text excerpts, and/or names of authors or works. Instead, these examples merely provide sample activities that teachers could use to teach particular standards in the classroom. Given that the state has failed to clearly articulate student outcomes, particularly in the area of writing, this diversion into pedagogy is unhelpful.

Take together, more than 20 percent of the critical content is missing from the standards, and so they can earn no higher than four points out of seven for Content and Rigor. (See *Common Grading Metric*, Appendix A.)

The Bottom Line

With their grade of C, Kansas'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 Sunflower State has in place today.

1 Since our last evaluation, the *State of State English Standards 2005*, Kansas's standards have changed minimally. The reading standards have not changed. The writing standards, which were in draft form when we conducted our review in 2005, are now final. In 2010, we also did not review supplemental material (like their "writing trainers database"). Even with these minor changes in material reviewed, Kansas's grade did not change: The state earned a C in 2005 and a C in 2010. The complete 2005 review can be found here: http://www.edexcellence.net/detail/news.cfm?news_id=337&pubsubid=1043#1043.

11-9

Kansas • Mathematics

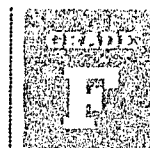
DOCUMENTS REVIEWED¹

Kansas: *Curricular Standards for Mathematics*. July 2003.

Accessed from: <http://www.ksde.org/LinkClick.aspx?fileticket=9Of%2f53hRla8%3d&tabid=141&mid=5783>

Overview

Kansas's standards are poorly organized and completely overwhelming. (The K-12 standards document is 348 pages long.) There are serious problems with both elementary and high school.



Clarity and Specificity: 1/3

Content and Rigor: 1/7

Total State Score: 2/10

(Common Core Grade: A-)

General Organization

Kansas's standards are organized by grade level into four content strands, each of which is divided into topics called "Benchmarks." The Benchmarks are presented with parallel sets of "Knowledge Base" and "Application" indicators, both of which will be referred to here as standards. There are also frequent "Teacher Notes" and other additional material.

The high school material follows the same organization, but only one set of standards is provided for grades 9-10 (and nothing for grades 11-12).

Clarity and Specificity

The sheer volume of the standards makes them difficult to navigate. The parallel structure of the Knowledge and Application indicators is not clear or explained, and they are often similar enough that the standards are unnecessarily repetitive. An example of this is provided in the following standards:

The student finds perimeter and area of two-dimensional composite figures of circles, squares, rectangles, and triangles (grade 7)

The student solves real-world problems by finding perimeter and area of two-dimensional composite figures of squares, rectangles, and triangles (grade 7)

The standards sometimes include examples and sample problems, which is an excellent feature. In addition, there are some strong, clearly stated standards such as in the following standard:

The student determines if a given point lies on the graph of a given line or parabola without graphing and justifies the answer (grades 9-10)

However, many standards are not clear. For example, the following are too broadly stated to be clear or measurable:

The student selects a mathematical model that is more useful than other mathematical models in a given situation (grade 2)

The student uses one or more mathematical models to show the relationship between two or more things (grade 6)

Other examples of poorly stated standards arise with the use of the word “identify,” which appears often. It is unclear what students are actually expected to be able to do, such as with these fourth- and fifth-grade standards:

The student identifies multiplication and division fact families (grade 4)

The student identifies integers and gives real-world problems where integers are used (2.4.K1a), e.g., making a T-table of the temperature each hour over a twelve-hour period in which the temperature at the beginning is 10 degrees and then decreases 2 degrees per hour (grade 5)

Despite some strengths, such as the use of sample problems, Kansas’s standards are overwhelming and repetitive. They offer “limited guidance to users,” and receive one point out of three for Clarity and Specificity. (See *Common Grading Metric*, Appendix A.)

Content and Rigor

Content Priorities

There are no explicit priorities, and given both the excessive number of standards and the repetitiveness of the parallel structure, this is unfortunate. In elementary grades, only about 30 percent of the standards are devoted to arithmetic, which does not sufficiently prioritize it.

Content Strengths

As mentioned above, there are many individual standards that are clear, specific, and detail important content. In addition, the example problems that are provided alongside many of the standards are an excellent addition. Linear equations are also developed nicely from grade 5 through high school.

Content Weaknesses

The development of arithmetic is weak and instant recall of number facts is not explicitly required.

The coverage of whole-number addition and subtraction is also inadequate. Fluency with standard algorithms is not specified. One second-grade standard mentions that problems may be solved “by using the traditional algorithm.” The Teacher Notes clarify the role of standard algorithms as follows:

This is not to suggest...that children should be discouraged from using a standard algorithm if that is their choice (grade 2)

It appears that Kansas officially leaves the decision about whether to use important content up to the students. Worse, since teaching the standard algorithms is not specified, students may not even learn them, so choosing to use them is not an option. This leaves students entirely dependent on their own ad-hoc—and unreliable—computation methods.

The development of multiplication and division is similarly inadequate. In the continued development of arithmetic, common denominators are never mentioned.

Technology is unnecessarily introduced into the standards starting in first grade and continuing through tenth:

The student computes with efficiency and accuracy using various computational methods including mental math, paper and pencil, concrete objects, and appropriate technology (grades 1-10)

Technology, presumably calculators for computing, is not appropriate for the early grades and computing with concrete objects is not appropriate for high school.

The high school standards are missing much essential content. For geometry, the only mention of proof is:

The student understands the concepts of and develops a formal or informal proof through understanding of the difference between a statement verified by proof (theorem) and a statement supported by examples (high school)

There is no indication that students should see proofs of specific theorems. Quadratic equations are solved by factoring or by using the quadratic formula, but there is no mention of completing the square or deriving the quadratic formula. The only thorough analysis of the graph of a quadratic equation is restricted to equations of the form ax^2+c .

Most of the STEM-ready content is not mentioned, including logarithms, trigonometry, and complex numbers.

Kansas's standards are weak in both elementary school and high school. Arithmetic is neither prioritized nor developed properly. High school mathematics is incomplete and is missing much of the essential content. These numerous problems result in a Content and Rigor score of one point out of seven. (See *Common Grading Metric*, Appendix A.)

The Bottom Line

With their grade of F, Kansas'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 Sunflower State has in place today.

¹ Kansas's academic standards have not changed since Fordham's last evaluation, the *State of State Math Standards 2005*. However, the evaluation criteria that we used to judge the 2010 standards have been substantially revised and improved since 2005. (See Appendix C for a complete explanation of changes in criteria.) Even through this new lens, Kansas's math grade remained an F. The complete 2005 review can be found here: http://www.edexcellence.net/detail/news.cfm?news_id=338&pubsubid=1158#1158.