

Better than Common Core: Florida's New K-12 Standards Raise the Bar

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FOREWORD

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In February 2020, the state of Florida published its new K-12 educational standards in English language arts (ELA) and mathematics, as promised by Governor Ron DeSantis a year earlier. DeSantis promised that the new standards will be a real departure from the Common Core State Standards (CCSS) that swept the nation in 2010 with only cursory review and without any serious validation, and the new Florida standards, dubbed B.E.S.T. for Benchmarks for Excellent Student Thinking, deliver on his promise.¹

The Fordham Institute has regularly reviewed state standards since at least 1998, but it ceased much of this activity in 2010 with the appearance of the CCSS. In 2018 the Fordham Institute decided to publish an abbreviated review of only 14 state standards (and CCSS), a review of states who supposedly moved away from—or never adopted—the CCSS.² For this 2018 review Fordham completely replaced its team of long-time reviewers and modified the evaluation criteria to effectively use the CCSS as a model standard and deducted points for anything that the CCSS

had—or claimed to have—and was missing in the other standards. Why the CCSS were chosen as a reference model is unclear, as at the time, there was a widespread public disapproval of the CCSS, and the 2017 National Assessment of Educational Progress (NAEP) results indicated that nationwide student achievement stopped growing, likely as the result of the nationwide adoption of the CCSS.³

In June 2020 the Fordham Institute published a review of Florida's B.E.S.T. standards using the Common Core criteria. Somewhat unsurprisingly, the Fordham review found the Florida standards to be “weak.” Not only did the Fordham Institute dock points for anything that differed from the CCSS, but the reviewers also were long-time CCSS advocates themselves, who, over the years, published numerous articles and opinion pieces praising the CCSS—despite its deleterious effects on student achievement in the 2019 NAEP.

The Independent Institute decided to commission its own review of Florida's B.E.S.T. standards, in which the evaluation would be performed on the basis of research and empirical evidence rather than on the basis of alignment with CCSS. This document is the result of that evaluation.

OVERVIEW

The ELA review was performed by David Steiner with Ashley Berner, respectively the executive director and deputy director of the Johns Hopkins Institute for Education Policy. The mathematics review was done by R. James Milgram, an emeritus professor of mathematics

at Stanford University and the main author of the 1997 California Mathematics Standards that were rated—by the Fordham Institute no less—as the best in the nation and above the CCSS in quality before Fordham switched its reviewers to a team of CCSS advocates.

Our ELA team found the Florida B.E.S.T. standards to be “the strongest standard in ELA currently in use in the United States,” and that with “modest additions and clarifications, the Florida standards can stand as a new model for the country.”

This clearly differs from the Fordham report, which found the ELA standards were “weak.” The ELA review analyzed Fordham’s claims as to the supposed weakness of the B.E.S.T. standards and found the claims lacking because of misreading, misunderstandings, and the application of incorrect evaluation criteria. One can find the details in the review, but here we will address a few highlights of their findings.

Disciplinary literacy. The expectation that English teachers will be able to develop understanding and “specialized ability to read history, science, or technical materials in appropriate and sophisticated ways” has been introduced for the first time ever by CCSS fiat—and without any research support showing that English teachers are capable of supporting “sophisticated reading” of scientific or technical material.

Similarly, the expectation that science and technology teachers will suddenly become able to support English literacy development in their students boggles the mind with its naiveté. In fact, this element of the CCSS has met with resistance from schools and teachers and implementation has rarely been attempted. Yet Fordham reviewers used the absence of this wrongheaded and empirically unsupported CCSS imposition as one of their key reasons for docking points from the B.E.S.T. standards.

Listening standards: Fordham reviewers argue that the B.E.S.T. standards “omitted altogether” standards for “listening abilities or of the ability to take part in discussions.”

Our reviewers found the following text—“[u]se appropriate collaborative techniques and active listening skills when engaging in discussions for a variety of situations”—on page 147 of the Florida standards (something that the Fordham reviewers somehow missed) followed by grade-band-specific clarifications of the expectations. One wonders how carefully the Fordham reviewers actually read the Florida standards.

“Job is unfinished” critique: The Fordham review makes a big deal of the supposedly too-short, one-year standards’ development schedule, arguing that, perhaps, the “rushed schedule” is responsible for what they see as some brevity and omissions in the B.E.S.T. standards. Although it is true that a body of standards is never perfect and can always bear some future improvements, the implied slander that Florida did a rush or incomplete job is tendentious. The CCSS were developed in a much shorter period of nine months⁴ and with a single—and scathing—public review, as compared to multiple rounds of public review of the Florida standards. As a result, the CCSS ended up missing significant content in mathematics and included errors in ELA.⁵ It also ignored handwriting development, or memorization and recitation of poems, songs, or fragments of significant historical documents. Yet the Fordham Institute treats the CCSS as exemplary, and anything else is only measured against the CCSS. In fact, this tendentious attempt to criticize the Florida standards as a sloppy rush job is doubly wrongheaded given that the 1997 highly acclaimed—by Fordham Institute itself—California Content Standards in ELA and mathematics were also developed within about one year.

In mathematics, our reviewer (the key author of the 1997 California math standards “best in the nation,” per the Fordham Institute), found the Florida B.E.S.T. standards to be “exemplary” and “among the best I have ever reviewed for any state in the country.”

The B.E.S.T. mathematics standards were found to have “clarity,” “attention to proper instruction,” and “careful and usually challenging examples.” They “require knowledge of the actual standards involved,

and not general tricks or looking for things like key words” for clues to solutions. They are terse, clear, and focused, rather than obese standards having multiple parts, as are often found in the CCSS.

Here are some highlights regarding the specific critique of Florida levelled by the Fordham reviewers:

Conceptual understanding: The Fordham argument is that in Florida’s B.E.S.T. standards “conceptual understanding is sacrificed on the altar of procedural fluency.” The stress on “conceptual understanding” is, indeed, what the CCSS did, just the opposite of what international high-achieving countries like Singapore or Japan do. When Andrew Porter, the dean of the Graduate School of Education at the University of Pennsylvania, compared the CCSS with the expectations of high-achieving countries, he observed:

We also used international benchmarking to judge the quality of the Common Core standards, and the results are surprising both for mathematics and for [English language arts and reading]. Top-achieving countries for which we had content standards put a greater emphasis on “perform procedures” than do the U.S. Common Core standards. High-performing countries’ emphasis on “perform procedures” runs counter to the widespread call in the United States for a greater emphasis on higher order cognitive demand.⁶

Yet in the face of such clear empirical evidence—as well as nationwide backlash by parents and many teachers against a focus on “understanding” (which most often translates into demands for a linguistically complex verbal explanation rather than facility with actual procedures)—the Fordham reviewers stick to their preconception that “conceptual understanding is sacrificed,” not to mention the linguistic disadvantage such focus on verbosity presents to English language learners (ELLs).⁷

Not so, says Prof. Milgram. Such standards “do absolutely nothing in terms of helping elementary school students learn the age-appropriate but

crucial methods for mathematical problem-solving that they should be learning in the lower grades.”

Focus on problem-solving: “Problem-solving” is the mantra of math educators since, at least, the 1989 National Council of Teachers of Mathematics (NCTM) standards, which de-emphasized facility with procedural skills and focused instead on verbal communication regarding math, collaboration with peers, and problem-solving.⁸ By now we see the effect of this shift, in which students are judged by how much they talk and write about a problem, rather than by the accuracy of their solution. Yet the problem-solving mantra is meaningless in mathematics for those students that can’t actually solve the underlying math, no matter how much they write about it.

Our review finds that Florida’s B.E.S.T. standards correctly focus on clear goals for procedural fluency appropriate for much of the K-12 curriculum, rather than empty and inappropriate “problem-solving” skills.

High school content: The Fordham reviewers complain that the Florida B.E.S.T. standards for high school define only the content of two courses—Algebra I and Geometry—and leave the other two years of high school mathematics “not by themselves sufficient, providing a large list of topics organized by strand from which courses must be created.” What the Fordham reviewers seem to have forgotten is that the CCSS—their ideal model, which was awarded an impressive nine out of ten on their scale—had zero courses defined for high school, and its list of high school topics omitted large chunks of typical content that is not missing in the Florida standards.

Another complaint of the Fordham reviewers is that the “Algebra I course is so full that it will be very challenging to teach it.” This is actually true if one compares the Florida expectations with CCSS-based Algebra I courses that leave our students years behind compared to our international counterparts. This is also reflected in Fordham’s critique in which “the Florida B.E.S.T. standards are sometimes fast paced at the elementary level.” Likely true, when compared to the snail-paced CCSS.⁹

In conclusion, it seems that the Fordham Institute recruited a team of CCSS advocates to use improper evaluation criteria to review the Florida B.E.S.T. standards. Their review assumes that CCSS is “perfect” and any divergence from CCSS features, whether or not supported by empirical evidence from the United States or overseas, justifies docking points from Florida’s standards. The tendentiousness of the Fordham review is clearly apparent when the reviewers complain even about features that are absent in the CCSS, such as high school course definition or pre-K standards, not to mention the large amount of math content missing in the CCSS.

Having said that, we end where we have started: a body of standards is never perfect and can always bear some future improvements. The Florida B.E.S.T. standards, while being the best in the country per our review, certainly can—and likely will—be improved upon when ancillary material for teacher training is developed and some trivial language issues are cleaned up.

1) REVIEW OF FLORIDA’S B.E.S.T. ELA STANDARDS

David M. Steiner, Professor of Education and Executive Director of the John Hopkins Institute for Education Policy; with

Ashley Rogers Berner, Associate Professor of Education and Deputy Director of the Johns Hopkins Institute for Education Policy

On January 31, 2019, Florida’s newly elected Governor Ron DeSantis issued Executive Order 19-32, which called for new English language arts (ELA) and math standards.¹⁰ In Spring 2020, the Florida Department of Education (FDOE) released its Benchmarks for Excellent Student Thinking (B.E.S.T.) standards.¹¹

We were commissioned to conduct a thorough and independent review of the B.E.S.T. ELA standards in light of 1) the relevant research about student learning; 2) our team’s experience in designing and evaluating ELA and social stud-

ies materials in systems around the United States; and 3) our longstanding study of the curricula and assessments that support high-performing school systems around the world.

The fundamental goals of learning standards are mission critical: Florida’s theory about the purpose of education goes directly to *what it means to be an educated person*. The B.E.S.T. ELA document opens with Frederick Douglass’s understanding of the purpose of education (*Blessings of Liberty and Education*, 1894):

Education ... means emancipation. It means light and liberty. It means the uplifting of the soul of man into the glorious light of truth. The light by which men can only be made free. To deny education to any people is one of the greatest crimes against human nature. It is easy to deny them the means of freedom and the rightful pursuit of happiness and to defeat the very end of their being (5).

The B.E.S.T. standards’ Introduction notes, in response:

Florida’s B.E.S.T. standards encourage educators to act on Douglass’s reminder of the ultimate purpose of education. His words confirm that education must be enlightening, noble, and good. He speaks from a tradition that holds education in the highest regard. The Latin root of the word *education* is *educare*, which means “to bring forth, to bring up.” Douglass understood that education is the way to bring forth our greatest capacities. Knowledge is the pathway to liberty, which is a fundamental value guaranteed by our government (5).

The Introduction further connects this deeper goal to the ELA standards, namely: “The implementation of these standards will encourage

schools, districts, and educators to adopt and build a rich, deep, and meaningful curriculum that ‘uplifts the soul’” (5). It then describes educators in vocational terms: their “true calling” is “educating the hearts, souls, and minds of their students” (5).

Fundamentals matter in terms not only of ends, but also of (subject-specific) means. How, exactly, are teachers to make the above vision possible, in an ELA classroom? Here, too, the state offers concrete guidance for teachers and parents that carries theory into classroom practices.

One could take issue with FDOE’s articulated theory of ELA education. It could be critiqued from a pragmatic perspective (Is it focused enough on preparing students for a shifting job market?) or a theoretical perspective (Does it ignore important reading theories, such as the “new historicism” that puts more emphasis on the contexts in which works are written?).

However, based on our research on top-performing countries and on reading programs that show efficacy in the United States, and on the core educational rationale for the humanities themselves, we applaud Florida for its decision to focus on the goal of reading to support the learning growth and human development of its students.

One could also take issue with the B.E.S.T. standards’ (often-inferred) core conception of the teacher; certainly, some theories of education offer a different view of teaching ELA, with the main focus on honing in on certain imputed skills, such as “find the main idea.” Once again, we commend Florida’s approach, in which the teacher enables literature to bring knowledge—of the human condition and the world—to its students.

We believe that the state is unique in supporting this approach with a remarkably coherent vision—and an explicit and sequenced strategy for achieving it. We find this both refreshing and long overdue.

In our judgment, the Florida B.E.S.T. ELA standards come closer to best practice than do

those of any other state or country. They should ultimately be evaluated with an international perspective, rather than that of the Common Core State Standards (CCSS) alone.

No standards are perfect, even where reviewers—based on the strongest evidence—support the basic design. The following report sets out the B.E.S.T. standards’ strong and, in some cases, unique contributions to the field, suggests changes that would render them still more robust, and responds to a recent report that evaluates the B.E.S.T. standards against a set of rubrics that appear to be based on the CCSS. For the sake of simplicity, we refer to Florida’s B.E.S.T. ELA standards as “B.E.S.T. standards” throughout the review.

STRENGTHS

Strength 1: First-Order Focus on Knowledge-Building

Florida is noteworthy for its insistence that knowledge-building is the foundation of learning. Indeed, the state embeds this core principle into statute, extending it not only to curriculum, but also to teacher preparation programs and in-service trainings.¹² The governing 219-page document references “background knowledge” more than forty times, stating simply that “literacy is not achievable merely through a skills-based approach,” but, rather, “depends more on relevant background knowledge than on mastery of reading strategies. Critical thinking cannot be separated from the object of that thinking. We cannot think deeply, creatively, or critically about a subject if we have little knowledge of it” (6). What is more, this literary knowledge-building is to connect with other subjects in order to produce, in the end, a “robust curriculum” that includes “a full appreciation of history, art, music, and other disciplines that were sidelined in favor of a focus on abstract reading strategies” (6).

The focus on knowledge-building draws directly from the research of E. D. Hirsch, Dan

Willingham, and Jeanne Chall, among other scholars, and popularized recently by Natalie Wexler.¹³ This research base shows that learning to read and then reading to learn do not occur organically or naturally, or even by applying the skills of decoding and inference, but rather by amassing concrete, voluminous background knowledge about the world and the human condition once basic phonics and phonemic awareness have been achieved.

The necessity of background knowledge in understanding vocabulary rightly appears at every grade level. In first and second grades, for instance, we find:

First Grade – 1.V.1.3: Identify and use picture clues, context clues, word relationships, reference materials, and/or background knowledge to determine the meaning of unknown words. *Background Clarification:* Instruction for this benchmark should include text read-alouds and think-alouds aimed at building and activating background knowledge (40).

Second Grade – 2.V.1.3: Identify and use context clues, word relationships, reference materials, and/or background knowledge to determine the meaning of unknown words. *Background Clarification:* Instruction for this benchmark should include text read-alouds and think-alouds aimed at building and activating background knowledge. Review of words learned in this way is critical to building background knowledge and related vocabulary (48).

The same principle is echoed across the grades.

Background knowledge also appears in the B.E.S.T. standards' rubrics for text complexity, which include scoring guidelines for "Student-Centered" after those for "Quantitative" and "Qualitative":

Low Complexity	Mid Complexity	High Complexity
Student-centered		
Students can fully understand the text without specific background knowledge.	Students with limited background knowledge may understand the text, but some levels of meaning may be impeded by lack of prior exposure.	For students to fully understand the text, they must have background knowledge of the topic.

Text Complexity Rubric (excerpt), *Florida's B.E.S.T. Standards: ELA*, Appendix B, p. 150

The B.E.S.T. standards also carry background knowledge into their requirement that the ELA curriculum includes texts that build students' civics knowledge. The introduction to this section states:

Florida is committed to helping students build background knowledge, so much so that it is codified in statute. ... These civic-focused texts are the source of building background knowledge and vocabulary in the lower grades and a rich study in rhetoric, reasoning, and argumentation in the upper grades (168).

Thus, we find Peter Spier's classic *Star-Spangled Banner* in K and first grade, the text of *The Gettysburg Address* in fourth/fifth, the major civil rights Supreme Court cases in middle school, and Abraham Lincoln's *Second Inaugural* and the Florida Constitution in high school (168–171). These texts are intended to prepare for, and then reinforce, what Florida's students learn in their social studies courses, which are assessed for stakes.¹⁴

We know of no other state that elevates the body of research about background knowledge so explicitly and so consistently.

If supported with meaningful professional development, the result will constitute a holistic system built of mutually reinforcing components, reflecting international best practices.¹⁵

Strength 2: Coherence

Florida’s approach to the standards is part of an explicit, comprehensive approach to education. The FDOE’s memorandum to school superintendents (February 2020) on the timeline indicates the B.E.S.T. standards’ integration with the adoption of instructional materials, curriculum implementation (including professional development), and new statewide assessments.¹⁶ With the exception of Massachusetts in its 1993 reform act¹⁷ and the partial exception of Louisiana’s (current) pilot assessment in ELA and social studies,¹⁸ the B.E.S.T. standards mark the first time that we have seen a state committed to integrating these four key elements of education into a coherent whole for all of its public school students.

One component of Florida’s approach that ties together classroom, materials, educators, and student assessments is the introduction, in ninth grade, of “universal themes.” The B.E.S.T. standards explain a universal theme as “an idea that applies to anyone, anywhere, regardless of cultural differences.” They continue:

Examples include but are not limited to an individual’s struggle toward understanding, awareness, and/or spiritual enlightenment; the tension between the ideal and the real; the conflict between human beings and advancements in technology/science; the impact of the past on the present; the inevitability of fate; the struggle for equality; and the loss of innocence (125).

Such an approach invites students into the larger questions that have preoccupied human beings throughout history, that animate the great works of literature, and that are of keen interest to adolescents. This framework also offers a through-line between texts, units, and even grades, which allows classroom conversations to deepen. Finally, it opens the door to more meaningful assessments that ask students to connect ideas across time and place—a signature feature of assessments in high-performing systems.

Strength 3: Instructional Guidance

The B.E.S.T. standards are not dry and abstract principles; they are coupled with concrete guidance for educators (“Benchmark Clarification”). The state views this guidance as *part of* the standards, rather than ancillary to them.

Why is this right and important?

It is important, because as RAND’s survey of a nationally representative sample of ELA teachers found, merely providing standards to teachers is of limited efficacy. In fact, “ELA teachers reported that their students engaged less in several standards-aligned practices in 2017 than in 2016.” Specifically, with respect to key aspects of their practice in relationship to the Common Core State Standards (CCSS), teachers’ reports indicated a drift away from standards-required actions:

ELA teachers were less likely to regard the use of complex texts as aligned with their standards [emphasis in the original text]. The survey asked teachers to indicate which approaches for selecting texts were aligned with their state’s standards for ELA, as well as which reading approach was most aligned with their standards. While the use of complex texts is emphasized in most state standards, [we found that] significantly fewer ELA teachers indicated that “assigning complex texts that all students in a class are required to read” was aligned with their standards in 2017 than had in 2016 (37 percent versus 48 percent); the majority of teachers regarded “selecting texts for individual students based on their reading level” as aligned with their standards (73 percent in 2016 versus 68 percent in 2017). The percentage of teachers of less-vulnerable students who chose “assigning complex texts” also declined significantly from 2016 to 2017.¹⁹

Given this, Florida’s translation of what each concept means in clear terms, and with appropriate examples, makes it more likely that the standards will be deployed in the classroom.

There are at least four ways in which the B.E.S.T. standards connect these dots.

First, by placing clarifications directly after each standard. For instance, the kindergarten standard K.R.2.4., “Explain the difference between opinions and facts about a topic,” is followed by two Benchmark Clarifications and an example:

- *Clarification 1:* Students will explain which statements are fact and which are opinions within a text.
- *Clarification 2:* Students will orally explain that facts are things that a person knows about something that can be proven true or false. Students will orally explain that opinions are what a person thinks about something, often related to feelings or beliefs. Opinions cannot be proven true or false.
 - *Example:* “Dogs need food and water to survive” is a fact. It can be proven to be true. “Dogs are the best pets” is an opinion. It’s what someone may think, but it can’t be proven (28).

Or, a writing standard that appears in many grades, “With guidance and support from adults [or not, as the grades progress], improve drawing and writing, as needed, by planning, revising, and editing,” is immediately followed by this clarification:

“As needed” refers to the fact that sometimes instruction will focus on a specific skill or part of the process. For example, a lesson may focus on planning. In those instances, only the planning step would be focused on. By the end of the year, students should have ample opportunities to engage in planning, revising, and editing.

Such guidance could help teachers focus on what matters; it sets reasonable limits on what could possibly be expected or required in every lesson.

Another first-grade standard (1.F.1.4.) states, “Read grade-level texts with accuracy, automaticity, and appropriate prosody or expression.” This is followed by five clarifications of what this might look like in a first-grade classroom (36). Another first-grade standard (1.R.1.2.), “Identify and explain the moral of a story,” is given the following clarification:

This benchmark introduces the moral of a story as a precursor to the theme in second grade. A moral is the lesson of a story. During instruction, let students know that not all stories have a lesson by referring to stories read that did not have a moral or a lesson (36).

Such instructional guidelines seem to us innovative, clear, and additive.

One of our favorite examples comes from second grade. The clarification for standard 2.R.1.4., “Identify rhyme schemes in poems,” illustrates very practically how students recognize and annotate rhyme schemes, using two nursery rhymes (44). A classroom instructor need not leaf through pages, or search online elsewhere, for samples; they are at the ready. This cannot help but bolster novice educators’ confidence.

Benchmark Clarifications:

Clarification 1: Students will mark rhyme scheme and recognize rhyme scheme notation. Rhyme scheme notation uses capital letters, starting with A to mark the end of each line, repeating the letter for each line in the poem that rhymes with that line and progressing through the alphabet for each new end rhyme. Lines designated with the same letter all rhyme with each other.

Examples:

I never saw a Purple Cow,	A
I never hope to see one;	B
But I can tell you, anyhow,	A
I'd rather see than be one	B
—Gelett Burgess	

Little Miss Muffet	A
Sat on a tuffet,	A
Eating her curds and whey;	B
Along came a spider	C
Who sat down beside her	C
And frightened Miss Muffet away.	B
—Traditional Nursery Rhyme	

Benchmark Clarification, *Florida's B.E.S.T. Standards: ELA*, “ELA.2.R.1 Reading Prose and Poetry,” p. 44

Second, by linking standards to what happened in earlier grades and what will happen in later ones. For instance, a fourth-grade standard (4.C.1.2), “Write personal or fictional narratives using a logical sequence of events and demonstrating an effective use of techniques such as descriptions and transitional words and phrases,” locates students’ learning progression in the Benchmark Clarification:

Students were introduced to dialogue in third grade. Although it is not mentioned specifically in this benchmark, students should continue to practice the technique and receive instruction in it. Dialogue is included for mastery in the fifth-grade benchmark (62).

Third, by helping teachers bring more depth and nuance in the classroom. One fourth-grade standard (4.C.4.1.), “Conduct research to answer a question, organizing information about the topic, using multiple valid sources,” clarifies that “while the benchmark does require that students consult multiple sources, there is no requirement that they use every source they consult. Part of the skill in researching is

discernment—being able to tell which information is relevant and which sources are trustworthy enough to include” (64).

The above guidance shows the state’s understanding of what it can be like for teachers to interpret standards. “Do they have to use every source?” is a natural question, particularly for first-year teachers. The state removes that anxiety and sets the educator’s mind on the higher goal: discriminating between strong and weak sources and between those that make one’s point perfectly and those that are off the mark. How many state standards talk about “discernment”? This, in our view, gestures towards what Douglass meant in 1834.

The instructional guidance also pushes for rigor. A seventh-grade standard (7.R.1.2), “Compare two or more themes and their development throughout a literary text,” clarifies that “theme is not a one- or two-word topic, but a complete thought that communicates the author’s message” (86). Or, when a tenth-grade standard (10.R.1.1) states, “Analyze how key elements enhance or add layers of meaning and/or style in a literary text,” educators find immediately which four layers to look for:

Layer 1 literal level, what the words actually mean; Layer 2 mood, those feelings that are evoked in the reader; Layer 3 tone, the author’s attitude; Layer 4 author’s purpose or interpretation of author’s purpose (114).

Fourth, by elaborating the standards with user-friendly charts and appendices. In every grade, we find charts that show which standards each sample text supports. Or, having set out the literary periods that high school students should encounter, the state provides descriptive charts that characterize each period and note the authors associated with it (165–67).

The B.E.S.T. standards, in other words, have been constructed with the classroom in mind. The coupling of abstract standards and explanatory guidance seems to us a meaningful step forward in the world of state standards.

Strength 4: Design

The B.E.S.T. standards' architecture follows a “begin with the end in mind” design; its framers back-mapped the desired outcomes, in both knowledge and skills, from twelfth grade back to kindergarten. We have not seen this in other ELA standards.

Additionally, the B.E.S.T. standards indicate clearly which concepts are added at each grade level, in each “vertical progression.”

For example, the Poetry standard shows the progression of learning, from “identify[ing] rhyme in a poem” in kindergarten to “evaluate[ing] works of major poets in their historical context” in senior year (14):

R.1.4 Poetry	
ELA.12.R.1.4	Evaluate works of major poets in their historical context.
ELA.11.R.1.4	Analyze ways in which poetry reflects themes and issues of its time period.
ELA.10.R.1.4	Analyze how authors create multiple layers of meaning and/or ambiguity in a poem.
ELA.9.R.1.4	Analyze the characters, structures, and themes of epic poetry.
ELA.8.R.1.4	Analyze structure, sound, imagery, and figurative language in poetry.
ELA.7.R.1.4	Analyze the impact of various poetic forms on meaning and style.
ELA.6.R.1.4	Describe the impact of various poetic forms on meaning and style.
ELA.5.R.1.4	Explain how figurative language and other poetic elements work together in a poem.
ELA.4.R.1.4	Explain how rhyme and structure create meaning in a poem.
ELA.3.R.1.4	Identify types of poems: free verse, rhymed verse, haiku, and limerick.
ELA.2.R.1.4	Identify rhyme schemes in poems.
ELA.1.R.1.4	Identify stanzas and line breaks in poems.
ELA.K.R.1.4	Identify rhyme in a poem.

Reading Standards table (excerpt), *Florida's B.E.S.T. Standards: ELA*, “Spiraled Standards in a Vertical Progression,” p. 14 (bolding in original)

The purpose here is to “help with vertical planning within a district or school system” and “provide a framework for teachers to enable scaffolds for students who may need remediation” (13).

RECOMMENDATIONS FOR IMPROVEMENT

The B.E.S.T. standards are very strong but, as indicated above, can usefully be made still stronger. There are at least two major ways in which they could be improved.

Recommendation 1: Clarify Whether Texts Are Mandatory or Suggested

We could not tell from the B.E.S.T. standards to what extent the listed texts needed to be read. It is clear that no teacher could deliver *all* the texts in a given year; there are far too many. But how to choose? On what basis? And what are the consequences for assessments? The state needs to be more explicit about what is expected in terms of teachers' choosing some rough percentage of these texts, or some rough percentage of time spent with these texts, during each grade.

Recommendation 2: Consider a Constrained Choice for Literary Periods

As it stands, it appears that high school teachers may choose texts from any of nine different literary periods. This introduces potential downsides, namely:

- If teachers can choose, in any given year, from nine different periods, then any given student might miss several periods entirely or encounter them repeatedly (depending on what their teachers selected).
- Students miss out on the chance to encounter ELA and social studies texts in an integrated way. Such opportunities are invaluable for situating texts into context.
- Assessments lose a critical component in this framework. If literary periods were sequenced, assessments could follow suit much more readily.

There is no ideal way to approach which literary periods should be studied in which year. However, narrowing the field somewhat, and tying literary periods loosely to students' coursework in social studies where possible, could support the systematic acquisition of background knowledge.

Recommendation 3: Make a Number of Modest Changes That Will Strengthen the Standards

As indicated below, we agree with a small number of relatively easy fixes—most especially in filling in a few lacunae and expanding the development of multimedia skills.

RESPONSE TO THE FORDHAM REPORT

In June 2020, the Thomas B. Fordham Institute released *The State of the Sunshine State Standards: Florida's B.E.S.T. Edition*, authored by Solomon Friedberg, Tim Shanahan, Francis (Skip) Fennell, Douglas Fisher, and Roger Howe.²⁰ This team brings substantial experience to the work, having conducted previous reviews of earlier state standards. Because Shanahan and Fisher led the ELA review, we refer to the ELA team as Shanahan & Fisher. For the purpose of our review, we do not rehearse all of their points—positive and negative—but, rather, focus on where we think their judgments are helpful or, by contrast, distracting and perhaps not fully informed by the Florida materials.

Points of Agreement with Shanahan & Fisher

- **Multimedia.** We concur with Shanahan & Fisher's recommendations that the standards include more explicit support for students' multimedia capabilities, by explicitly "requiring that they [students] be able to interpret multimedia-, digital-, or technology-based information."²¹
- **List of texts.** As indicated above, we agree that the state should be more specific about the intended use of the listed texts. Florida does note that the texts are "samples," so they are clearly not all required reading, but more guidance would be useful.
- **Modest revisions to progressions.** A *modest number* of progressions should be reviewed for sequencing and redundant repetitions. We reject the idea that this is in any way a major issue—see below.

We do not believe that taking these changes onboard need be time-consuming, nor do we believe they diminish, fundamentally, the inherent quality of the B.E.S.T. standards.

Evaluation of Shanahan & Fisher's Other Criticisms

Our review differs from Shanahan & Fisher in substantive ways, however. Below, we explain why we do not share six of their criticisms.

Criticism 1: *The B.E.S.T. standards should be graded as "weak."* We reject this grading and thus the rubric (with its weightings) used to produce it. Shanahan & Fischer note that the B.E.S.T. standards "do a fine job of emphasizing the development of the ability to read and interpret literary and informational texts in grades K-12."²² They add that the standards, in their strong focus on the need to read grade-level texts, bolster this focus with "up-to-date information concerning quantitative and qualitative expectations of reading performance across the grades" and "do a good job of emphasizing the teaching of foundational skills in reading and writing."²³

Frankly, we would be delighted to find other ELA standards about which these three key statements could be made with as much justification. Arguing that any set of ELA standards about which this can be said are "weak" is akin to a restaurant critic saying that while the food and ambiance was excellent, the tap water had no ice. There is one more substantive criticism

that Shanahan & Fischer make about the lack of support for “disciplinary learning” that would be substantive—but as we indicate below, we regard this criticism as misplaced.

Criticism 2: *The B.E.S.T. standards contain no oral presentation and evaluation rubrics.* We believe this criticism is simply mistaken. From pages 188 through 195, that is exactly what the B.E.S.T. standards lay out in detail.

Criticism 3: *The B.E.S.T. standards do not adequately support students’ collaboration or discussion.* Shanahan & Fisher state, “Florida students will be expected to make oral presentations but not to develop the skills to contribute to a conversation, discussion, or debate. Even more puzzling is the omission of any standard for the ability to listen effectively or critically.”²⁴

We believe this criticism is somewhat mistaken. On page 147 of the B.E.S.T. standards, Expectation ELA K12.EE.4.1, “Use appropriate collaborative techniques and active listening skills when engaging in discussions for a variety of situations,” is followed by grade-band-specific clarifications of the expectations. At most, one could ask for more specificity in terms of skill level—but we find considerable content in the B.E.S.T. standards on oral skills.

Criticism 4: *The B.E.S.T. standards do not specify learning outcomes.* Shanahan & Fisher do not believe the standards provide concrete learning outcomes. They note, for example, that “the writing standards sometimes emphasize processes or instructional activities rather than measurable learning outcomes.”²⁵ Note first that this is a vague critique; do Shanahan & Fisher mean that in at least two (or ten, or fifty) instances, they can’t find any learning outcomes specified for a required activity—or rather that such outcomes are not *emphasized*?

What is evident is that Florida’s standards lay out forty-six distinct writing convention goals, by grade level (196–97). First-grade students are to master the skill of capitalizing proper nouns, while eighth graders are to master the use of voice and mood in verb use. Perhaps the critique

is that, in some cases, teachers need more guidance on how to evaluate student success in meeting these outcome goals. But surely this is a task for assessments, both within curriculum and at the state level?

Perhaps Shanahan & Fisher do not see the outcomes, because (as in the case of oral presentation) they are not examining the whole document.

Criticism 5: *The B.E.S.T. standards do not support disciplinary literacy.* Here are Shanahan & Fischer:

First, the standards fail to include any disciplinary literacy requirements. Research has shown that reading and writing in science, mathematics, history, and literature are unique or highly specialized in their purposes, skills or strategies, linguistic demands, text formatting, and other features. Accordingly, college- and career-ready students must be able to do more than exhibit the general reading skills enumerated in the Florida standards. Although these standards provide a reasonable delineation of literary reading (particularly with regard to poetry) and of general informational text reading, they omit entirely the idea of developing any of the specialized reading skills for dealing with texts in science, mathematics, and history or of any of their subspecialties such as biology or geography. The theory underlying these standards seems to be that readers should be able to make sense of any kind of text equally well, ignoring the burgeoning research showing important differences across disciplines.²⁶

Apparently, they hold that not including “specialized reading skills ... in science, mathematics ... biology or geography” was an explicit failure on the part of the Florida ELA standards writers, who had adhered to an obviously flawed theory. But there is no evidence at all to support this attribution of intent. Two obvious explanations are much closer to hand.

First, simply put, ELA shouldn't be responsible for all of those other literacies: as is the case for science, for example (see the Next-Generation Science Standards), ELA deserves its own domain, while realizing that it can appropriately include written material in related genres such as civics and philosophy.

Since the CCSS ELA standards are, by implication, highly rated for their gestures toward other disciplines, it is worth pausing for a moment to look at what is actually there. In fact, we lack any solid evidence that ELA standards, when it came to embracing science and technology, have had any substantive national impact on the behavior of science teachers. Did those standards writers really expect science teachers to become ELA teachers by default? What gives to the creators of ELA standards the right to claim the epistemological or pedagogical territory of other disciplines? In fact, the very language CCSS uses is, arguably, extremely awkward. Take the instruction to science teachers in the ELA standards on science and technology for middle school: "Analyze the author's **purpose** in providing an explanation, describing a procedure, or discussing an experiment in a text" [emphasis added].²⁷ Actually, perhaps not: ascribing intentionality to the authors of a chemistry textbook is not an intellectually defensible or pedagogically plausible demand on chemistry teachers.

But there is a second, more obvious reason why the B.E.S.T. standards authors didn't include discipline-focused reading standards: Florida already has them, in detail. See the state's "Literacy for Learning in the Content Areas."²⁸ If one consults the standards table for Science and Technical Subjects, one finds that these standards are actually more detailed than those in the CCSS, and come with useful teacher-supporting materials that include sample texts, evaluation rubrics, and sample questions.

The most generous reading of Shanahan & Fischer's critique is either that they were not aware of these standards, or that they would argue that these subject-matter standards should have been explicitly referenced in the ELA standards.

In our view, the hope that teachers in other disciplines will be motivated to take on reading standards projected from ELA, as opposed to those that are integral to their own disciplines, is unlikely to be realized at any scale. The better way to proceed is to work with the standards-setting bodies in those disciplines to ensure that they include relevant and integrated reading standards if and when they are truly applicable.

We accept that the civics/social studies case is *sui generis*. Many major documents, for example, are of both literary and historical importance, and the standards for reading them carefully will overlap. Such overlap is recognized in the Louisiana Pilot Assessment in which students take an assessment that integrates content from both the ELA and social studies curriculum.

Criticism 6: *The B.E.S.T. standards do not support evaluative judgment.* In our view, this is, if merited, the most serious criticism from Shanahan & Fischer: "Students will certainly learn to comprehend what they read, but any kind of critical or evaluative analysis of what they read is barely apparent."²⁹ (The authors note that this is not true in the case of "reading arguments.")

But the criticism is not merited. It is simply inaccurate. See, for example, the twelfth-grade reading standard, "Evaluate how key elements enhance or add layers of meaning and/or style in a literary text and explain the functional significance of those elements in interpreting the text" (13); or this ninth-grade reading standard (of *Antigone* by Jean Anouilh), "Evaluate the support an author uses to develop the central idea throughout a text" (111); or, in the case of the poem "O Captain, My Captain," "Evaluate an author's use of rhetoric in text" (113).

But there is a more important point here. What would it possibly mean for a tenth grader to produce an "evaluative analysis" (to use Shanahan & Fischer's language) of *Macbeth*, which is on the tenth-grade Florida list, or for a slightly older student to critically evaluate *Crime and Punishment*? Florida recommends outstanding

literature and poetry and rightly asks for careful, close reading and a reasonable understanding of such works. It does not ask young students to tell us if they think *Macbeth* is a convincing play about fate, predestination, and ambition; it asks, as it should, that students and teachers work together to analyze what the play portrays about those inexhaustibly rich themes. That is why the B.E.S.T. standards are right to place greater attention to “evaluation” on informational texts, where issues of appropriate empirical support for an argument, or failures of argumentative structure, are rightly worth learning to critique.

CONCLUSION

It is clear from Fordham’s review of the Florida B.E.S.T. standards that the CCSS are the benchmark against which all other standards are compared. The CCSS are the only ELA standard of the fifteen standards evaluated to receive a rating of “strong”—with a nine out of ten. This is not the place, clearly, to articulate an evaluation of the CCSS. But since Shanahan & Fischer used the same scoring rubrics to evaluate the B.E.S.T. standards, the results, in our view, suggest two provisional conclusions that are not mutually exclusive. It is possible, as we suggest, that their review was not complete due to insufficient attention to the full B.E.S.T. standards document and other Florida state material, and/or that the rubrics used by Fordham’s reviewers for the evaluation of the previous standards (including the CCSS) require revision.

In its essential elements, the B.E.S.T. standards are the strongest in ELA currently in use in the United States. We would need to re-review the earlier, pre-CCSS Massachusetts standards before judging relative merit; that is now an academic point. With modest additions and clarifications, the Florida standards can stand as a new model for the country. Our hope is that the state’s rightly ambitious outline for what comes next—including support for curriculum and assessments that are linked to these standards—will be realized. Only through such an integration will the state ensure

that the many pieces of an education model are truly coherent, and that all the key stakeholders, most importantly students and teachers, are rightly supported to achieve the strongest academic outcomes.

2) REVIEW OF FLORIDA’S B.E.S.T. MATH STANDARDS

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Let us start our evaluation of the new Florida mathematics standards by looking at a number of representative standards from grades two and six in the document, since these are, in retrospect, the two key grades in which the most critical mathematical concepts and techniques covered in K-12 are first introduced and/or developed.

In fact, the standards that I display below are involved with some of the most important, even critical, mathematical material that students have to learn in K-8 if they hope to work in any area that requires mathematics.

What the reader needs to observe is, above all, each standard’s laser-like focus on the stated mathematical topic, without bringing in any extraneous material. After each statement, there are almost always a number of examples of problems and applications of the standard that are challenging but doable, followed by *Benchmark Clarifications* that present the key objectives and proven age- and grade-appropriate limits on the topics that need to be covered.

What is most unusual here is that each of these appears to align most closely with the research tied to the recommended instruction for the standards and the K-8 curricula of the mathematics courses being taught in the world’s highest-achieving countries.

Model Examples

The succeeding shows selected examples of critical mathematical concepts that are effectively covered by Florida’s Benchmarks for Excellent Student Thinking (B.E.S.T.) standards.³⁰

Sample second-grade math standards:

MA.2.NSO.1.2

Compose and decompose three-digit numbers in multiple ways using hundreds, tens, and ones. Demonstrate each composition or decomposition with objects, drawings, and expressions or equations.

Example: The number 241 can be expressed as 2 hundreds + 4 tens + 1 one or 24 tens + 1 one or as 241 ones.

MA.2.NSO.2.3

Add two whole numbers with sums up to 100 with procedural reliability. Subtract a whole number from a whole number, each no larger than 100, with procedural reliability. Example: The sum $41 + 23$ can be found by using a number line and “jumping up” by two tens and then by three ones to “land” at 64.

Example: The difference $87 - 25$ can be found by subtracting 20 from 80 to get 60 and then 5 from 7 to get 2. Then add $60 + 2$ to obtain 62.

Benchmark Clarifications:

CLARIFICATION 1: Instruction focuses on helping a student choose a method they can use reliably.

Develop an understanding of fractions.

MA.2.FR.1.2

Partition rectangles into two, three, or four equal-sized parts in two different ways showing that equal-sized parts of the same whole may have different shapes.

Example: A square cake can be cut into four

equal-sized rectangular pieces or into four equal-sized triangular pieces.

MA.2.AR.2.2

Determine the unknown whole number in an addition or subtraction equation, relating three or four whole numbers, with the unknown in any position.

Example: Determine the unknown in the equation $45 + \square = 23 + 46$.

Benchmark Clarifications:

CLARIFICATION 1: Instruction extends the development of algebraic thinking skills where the symbolic representation of the unknown uses any symbol other than a letter.

CLARIFICATION 2: Problems include having the unknown on either side of the equal sign.

CLARIFICATION 3: Addition and subtraction are limited to sums up to 100 and related differences.

Sample sixth-grade standards:

MA.6.NSO.1

Extend knowledge of numbers to negative numbers and develop an understanding of absolute value.

MA.6.NSO.1.1

Extend previous understanding of numbers to define rational numbers. Plot, order, and compare rational numbers.

Benchmark Clarifications:

CLARIFICATION 1: Within this benchmark, the expectation is to plot, order, and compare positive and negative rational

numbers when given in the same form and to plot, order, and compare positive rational numbers when given in different forms (fraction, decimal, percentage).

CLARIFICATION 2: Within this benchmark, the expectation is to use symbols ($<$, $>$ or $=$).

MA.6.NSO.2.2

Extend previous understanding of multiplication and division to compute products and quotients of positive fractions by positive fractions, including mixed numbers, with procedural fluency.

Benchmark Clarifications:

CLARIFICATION 1: Instruction focuses on making connections between visual models, the relationship between multiplication and division, reciprocals, and algorithms.

MA.6.NSO.2.3

Solve multistep real-world problems involving any of the four operations with positive multidigit decimals or positive fractions, including mixed numbers.

Benchmark Clarifications:

CLARIFICATION 1: Within this benchmark, it is not the expectation to include both decimals and fractions within a single problem.

MA.6.NSO.3.1

Given a mathematical or real-world context, find the greatest common factor and least common multiple of two whole numbers.

Example: Middleton Middle School's band has an upcoming winter concert [that] will have several performances. The bandleader would like to divide the students into concert

groups with the same number of flute players, the same number of clarinet players, and the same number of violin players in each group. There are a total of 15 students who play the flute, 27 students who play the clarinet, and 12 students who play the violin. How many separate groups can be formed?

Example: Adam works out every 8 days and Susan works out every 12 days. If both Adam and Susan work out today, how many days until they work out on the same day again?

Benchmark Clarifications:

CLARIFICATION 1: Within this benchmark, expectations include finding the greatest common factor within 1,000 and least common multiple with factors to 25.

CLARIFICATION 2: Instruction includes finding the greatest common factor of the numerator and denominator of a fraction to simplify the fraction.

MA.6.AR.3.4

Apply ratio relationships to solve mathematical and real-world problems involving percentages using the relationship between two quantities.

Example: Gerald is trying to gain muscle and needs to consume more protein every day. If he has a protein shake that contains 32 grams and the entire shake is 340 grams, what percentage of the entire shake is protein? What is the ratio between grams of protein and grams of non-protein?

Benchmark Clarifications:

CLARIFICATION 1: Instruction includes the comparison of part/(whole) to percent/100 in order to determine the percent, the part, or the whole.

MA.6.AR.3.5

Solve mathematical and real-world problems involving ratios, rates, and unit rates, including comparisons, mixtures, ratios of lengths, and conversions within the same measurement system.

Benchmark Clarifications:

CLARIFICATION 1: Instruction includes the use of tables, tape diagrams, and number lines.

MA.6.GR.2.2

Solve mathematical and real-world problems involving the area of quadrilaterals and composite figures by decomposing them into triangles or rectangles.

Benchmark Clarifications:

CLARIFICATION 1: Problem types include finding area of composite shapes and determining missing dimensions.

CLARIFICATION 2: Within this benchmark, the expectation is to know from memory a formula for the area of a rectangle and triangle.

CLARIFICATION 3: Dimensions are limited to positive rational numbers.

Comments on the above Standards

In my view, all of these new Florida standards are exemplary. Indeed, I find almost all of these K-8 Florida mathematics standards to be among the best I have ever reviewed for any state in this country.

Again, note their clarity and the attention to proper instruction in the clarifications in particular. Also note the careful and usually chal-

lenging examples that are present, not only in these selected examples, but also throughout the standards.

The examples are not arbitrary or random. Instead, they focus attention on the best and most effective ways of teaching the key aspects of mathematical problem-solving in the early grades. As I stated in the introduction, these Florida standards and their supporting material closely mirror the approaches in the most successful international programs in which extremely clear discussions of the key topics are always combined with challenging, but not overwhelming, problems that are entirely relevant to student learning and understanding of the material involved in the specific standards.

These problems require knowledge of the actual concepts in the individual standards involved—and not “general tricks” or looking for things like “keywords” that might give clues as to how a student could be able to resolve the problem in a superficial way that does not lead to learning—and understanding of the actual mathematics that students crucially need to learn.

Compare the standards above to the corresponding Common Core standards, for example, this one for addition and subtraction in second grade:

Represent and solve problems involving addition and subtraction.

1. Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.

I have known children who were brought to tears by the standard above. What on earth are “involving situations of adding to, taking from, putting together, taking apart, and comparing”

doing in a standard for teaching children? I can see having something like this in the objectives of a math methods course for weakly prepared pre-service teachers. But it is entirely inappropriate for actual second graders.

Moreover, standards like the one above—and there are many in the Common Core—do absolutely nothing in terms of helping elementary school students learn the age-appropriate but crucial methods for mathematical problem-solving that they should be learning in the lower grades. When I would ask people supporting the Common Core what the kinds of standards like the one above do to support student learning of mathematical problem-solving, they would get up, look worshipfully at the ceiling, and say “Polya.” Then, depending on the circumstances, I would either excuse myself and walk away, or explain that Polya had been my colleague at Stanford for nearly fifteen years until his death at the age of ninety-six. Moreover, my father, one of the leading mathematicians of the twentieth century, had used Polya’s and Szegő’s books to teach me advanced material in mathematics when I was in high school and college, and I was and am intimately familiar with Polya’s work. It has absolutely nothing to do with problem-solving by elementary school students! Instead, it is focused on teaching these crucial skills to some of the best college-level math majors in the world—the students Polya had worked with at the Eidgenössische Technische Hochschule (ETH) in Switzerland and at Stanford. In this context it is very effective. But for poorly prepared pre-service teachers and children in grades K-8, it is entirely inappropriate.

Consequently, I find the criticisms of these standards leveled by the Fordham Institute reviewers—almost exclusively that these Florida standards do not teach mathematical problem-solving—incomprehensible. This is doubly strange when we take account of the fact that one of the members of that group is a top-level research mathematician.

NOTES

1. This is no small thing, as, during recent years, more than twenty states, including Alaska, Arizona, Florida, Indiana, New York, Tennessee, and Utah all either rebranded their CCSS or pretended to rewrite them, while leaving the main elements of the CCSS intact. This was done when the public sentiment turned against the CCSS in the mid-2010s and was explicitly intended to fool the public into believing that those states were actually abandoning the CCSS. The Florida B.E.S.T. Standards are available at: <http://www.fldoe.org/standardsreview/index.shtml>
2. Out of those fourteen states, only three—Nebraska, Texas, and Virginia—did not adopt the CCSS, yet even they were heavily influenced by the standards. All other states had a fake “rewrite” of the CCSS that essentially preserved them with minor word changes.
3. Since 2010, the Fordham Institute has received over \$7 million from the Bill & Melinda Gates Foundation to promote the CCSS. Perhaps that has something to do with the selection of the CCSS as a reference model. The 2019 NAEP results showed further decline in U.S. student achievement, with the CCSS being the most likely cause.
4. The CCSS published its initial Career- and College-Readiness (CCR) standards (for end of high school) in September 2009, but they were met with a scathing critique that caused the CCSS authors to quietly rewrite those standards.
5. Such as expecting students to distinguish long vowels from short ones in kindergarten.
6. Andrew Porter et al., “Common Core Standards: The New U.S. Intended Curriculum,” *Educational Researcher* 40, no. 3 (2011): 103.
7. Katharine Beals and Barry Garelick, “Explaining Your Math: Unnecessary at Best, Encumbering at Worst,” *The Atlantic*, November 11, 2015, <https://www.theatlantic.com/education/archive/2015/11/math-showing-work/414924/>.

8. National Council of Teachers of Mathematics (NCTM) Curriculum and Evaluation Standards, 1989.
9. Sandra Stotsky and Ze'ev Wurman, "Common Core's Standards Still Don't Make the Grade," Pioneer Institute White Paper, no. 65, July 2010, Appendix B, <https://pioneerinstitute.org/download/common-cores-standards-still-dont-make-the-grade/>.
10. Office of the Governor, "Executive Order Number 19-32" (State of Florida, 2019), <http://www.fldoe.org/core/fileparse.php/5660/urlt/StandardsRecommendationsPacket.pdf>.
11. Florida's B.E.S.T. Standards, "Florida's B.E.S.T. Standards: English Language Arts" (Florida Department of Education, 2020), <http://www.fldoe.org/core/fileparse.php/18736/urlt/ELAStandards.pdf>. Because this document is the subject of this report, we reference it by page number throughout.
12. For example, The Florida Legislature, "Just Read, Florida! Office," 1001.215 Title XLVIII § (2019), http://www.leg.state.fl.us/statutes/index.cfm?App_mode=Display_Statute&URL=1000-1099/1001/Sections/1001.215.html.
13. Jeanne S. Chall, "The Influence of Previous Knowledge on Reading Ability," *Educational Research Bulletin* 26, no. 9 (1947): 225–46; E. D. Hirsch, *The Knowledge Deficit: Closing the Shocking Education Gap for American Children* (Boston: Houghton Mifflin, 2016), <http://www.hmhco.com/shop/books/The-Knowledge-Deficit/9780618872251>; Daniel Willingham, "How Knowledge Helps," *American Educator* 30, no. 1 (Spring 2006): 30; Daniel Willingham, "What Type of Learning Is Most Natural?," Daniel Willingham, 2013, <http://www.danielwillingham.com/1/post/2013/06/what-type-of-learning-is-most-natural.html>; Natalie Wexler, "Why American Students Haven't Gotten Better at Reading in 20 Years," *The Atlantic*, April 13, 2018, <https://www.theatlantic.com/education/archive/2018/04/-american-students-reading/557915/>.
14. The FDOE requires middle-school students to pass an end-of-course (EOC) civics assessment and, in tenth grade, an EOC U.S. history assessment.
15. See, for instance, Marc Tucker, *Surpassing Shanghai: An Agenda for American Education Built on the World's Leading Systems* (Cambridge, MA: Harvard Education Press, 2011), https://www.amazon.com/Surpassing-Shanghai-American-Education-Leading/dp/1612501036/ref=sr_1_1?keywords=surpassing+shanghai&qid=1557680566&s=gateway&sr=8-1. Or Amy von Heyking, "Alberta, Canada: How Curriculum and Assessments Work in a Plural School System" (Baltimore: Johns Hopkins Institute for Education Policy, June 2019), <http://edpolicy.education.jhu.edu/wp-content/uploads/2019/06/Alberta-Brief.pdf>.
16. Jacob Oliva, "Memorandum to School District Superintendents on the Adoption and Implementation of the B.E.S.T. Standards" (Tallahassee, FL: Florida Department of Education, February 13, 2020), <http://www.fldoe.org/standardsreview/>.
17. For summary of the alignment process and its positive consequences in Massachusetts, see Ashley Berner, *Pluralism and American Public Education: No One Way to School* (New York: Palgrave MacMillan, 2017), 108, <http://www.palgrave.com/us/book/9781137502230>; and Chiefs for Change, "Hiding in Plain Sight: Leveraging Curriculum to Improve Student Learning" (Chiefs for Change, August 2017), <http://chiefsforchange.org/policy-paper/4830/>.
18. John White, "States Don't Measure What Kids Actually Know. That Needs to Change," *The Hill*, April 3, 2018, <http://thehill.com/opinion/education/381285-states-dont-measure-what-kids-actually-know-that-needs-to-change>.
19. Julia H. Kaufman et al., "What Teachers Know and Do in the Common Core Era: Findings from the 2015–2017 American Teacher Panel," Product Page (Santa

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20. Solomon Friedberg et al., “The State of the Sunshine State’s Standards: The Florida B.E.S.T. Edition” (Thomas B. Fordham Institute, June 2020), <https://fordhaminstitute.org/national/research/state-sunshine-states-standards-florida-best-edition>.
 21. Friedberg et al., “The State of the Sunshine State’s Standards,” 12.
 22. Friedberg et al., “The State of the Sunshine State’s Standards,” 10.
 23. Friedberg et.al., “The State of the Sunshine State’s Standards,” 10, 11.
 24. Friedberg et al., “The State of the Sunshine State’s Standards,” 12.
 25. Friedberg et al., “The State of the Sunshine State’s Standards,” 14.
 26. Friedberg et al., “The State of the Sunshine State’s Standards,” 16.
 27. Common Core State Standards, “English Language Arts Standards » Science & Technical Subjects » Grade 6-8 » 6 | Common Core State Standards Initiative,” Common Core State Standards Initiative, N/A, <http://www.corestandards.org/ELA-Literacy/RST/6-8/6/>.
 28. Florida Department of Education, “Literacy in the Content Areas Toolkits,” www.fldoe.org, February 19, 2019, <http://www.fldoe.org/academics/standards/subject-areas/literacy/toolkits.stml>.
 29. Friedberg et al., “The State of the Sunshine State’s Standards,” 18.
 30. Note that this follows the coding scheme of the B.E.S.T. standards. Each item is represented alphanumerically to signify the subject of mathematics (“MA”), grade, strand, standard, and benchmark. “Grade” is used to indicate kindergarten through twelfth grade. “Strand” refers to a specific subgroup of standards, such as number sense and operation. “Standard” designates a general criteria for a grade, whereas “benchmark” is a specific grade-level expectation that falls under the category of a particular standard.

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