How much and how soon should we expect any federal or state education policy to improve student learning? The answer likely depends on the demands that the policy places on those who are expected to implement it and their capacity for change to meet those demands. The Common Core State Standards have been judged by many to be more challenging and ambitious than previous state standards (Porter et al., 2011; Shanahan, 2013; Brown and Kappes, 2012; Schmidt and Houang, 2012). Since the Common Core State Standards were developed and launched by a group of state school chiefs and governors in 2009, nearly all states have voluntarily adopted them. While some states have since made changes to their standards, analyses suggest that most of these states have retained standards closely aligned with key tenets of the Common Core (Korn, Gamboa, and Polikoff, 2016; Achieve, 2017; Norton, Ash, and Ballinger, 2017). Furthermore, most states that never adopted the Common Core State Standards...
Standards also emphasize important content and ideas that are part of the Common Core.1

The shift to more-ambitious state standards aligned with the Common Core across the United States requires corresponding changes among a multitude of stakeholders—from state departments of education and school administrators to external partners, such as textbook publishers and professional development providers—whose work is connected to classroom instruction. Standards-based reforms also place demands on teachers to change how they think about teaching and working with students in classrooms every day. In acknowledgment of the need for these changes, the Common Core State Standards Initiative has provided an overview of the key instructional shifts required for adopting the Common Core (Common Core State Standards Initiative [CCSSI], undated-a and undated-b).

Since the Common Core and similar standards have been adopted across many states, researchers and the media have tried to measure or speculate on their impact. Critics of the Common Core have used declines and stagnant scores on the National Assessment of Educational Progress (NAEP) since 2013, as well as such international assessments as the Program for International Student Assessment (PISA), to suggest that the Common Core has not improved student achievement (e.g., Phelps, 2018).

We posit that there are numerous reasons why new state standards aligned with the Common Core may not yet result in gains in student achievement across the United States.

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1 For example, the Alaska State Standards include the Standards for Mathematical Practice, which are part of the Common Core (see, for example, Alaska Department of Education & Early Development [2012]). The Texas Essential Knowledge and Skills for Mathematics include “process standards” that “describe ways students are expected to engage in content,” language similar to what is included in the Standards for Mathematical Practice within the Common Core State Standards (Texas Education Agency, 2012).
students’ higher-order thinking skills, Doorey and Polikoff’s findings imply that gains on NAEP may not reflect some of the more-advanced critical thinking skills students could be gathering through their exposure to the Common Core.

A second reason why the Common Core may not yet be driving student achievement gains is that it may be far too early to measure change. While the Common Core and similar state standards were adopted in some states in 2011–2012, those standards were not implemented in other states until 2014–2015, including in California, the most-populous U.S. state. Furthermore, even if state standards that aligned with the Common Core were supposed to be “fully implemented” by 2014–2015 in most states, other aspects of the education system also need to change for student achievement and learning to rise. At least some leaders and teachers will have to make changes to how they view and evaluate good instruction in order to be more aligned with what the standards demand. Such change is not about making simple fixes, and it depends on educators’ knowledge about content, standards, and pedagogy, as well as their willingness to do things differently, even if they have been teaching the same way for decades. In addition, to make the major instructional shifts required by the Common Core, teachers need access to such resources as high-quality, standards-aligned instructional materials to guide and support their teaching (Steiner, 2017). Textbook publishers have been very slow to make the changes demanded by new standards, and districts have been slow to adopt those materials (Herold and Molnar, 2014; Heitin, 2015; Polikoff, 2015), which likely has had repercussions on forward progress of standards-based reforms.

If the Common Core does lead to change in what students learn, then changes in what teachers know and do would likely be evident before learning changes occur. The RAND Corporation’s American Teacher Panel (ATP) was designed to capture teachers’ perceptions on major education policies and programs, as well as how teachers’ work shifts in response to those policies. Teachers who agreed to serve on the panel have been surveyed on a regular basis. RAND researchers have surveyed ATP participants about their knowledge of standards and their standards-aligned practices from 2015 to 2017. In this report, we examine changes in teachers’ knowledge and practices, with a focus on responses from the same mathematics and English language arts (ELA) teachers over time in regard to

- use of instructional materials for mathematics and ELA classroom instruction
- knowledge of state standards for mathematics and ELA
- standards-aligned instructional practices.

To measure what teachers know and do, we focused specifically on key aspects of the Common Core that are present in nearly all state standards for mathematics and ELA. The next page provides an overview of those key aspects of state standards that we attempted to capture through our survey measures.

This report identifies some changes in teachers’ knowledge and practices based on analyses of the same teachers’ responses to surveys fielded in 2015, 2016, and 2017. The findings are limited in several ways. One limitation is that we made some adjustments to many survey items about teachers’ knowledge and practices after the administration of the 2015 survey. Because of these alterations, we could only measure change in teachers’ responses from 2016 to 2017—rather than from 2015 to 2017—about their knowledge and instruction. In addition, it is possible that an observed change is a result of teachers’ familiarity with survey items from one
Aspects of the Common Core Measured in American Teacher Panel Survey

While the CCSSI website notes that only 41 states have formally adopted the Common Core (CCSSI, undated-d), research indicates that nearly all states have embedded several key ideas from the Common Core into their state standards (Korn, Gamboa, and Polikoff, 2016; Achieve, 2017; Norton, Ash, and Ballinger, 2017). According to our informal scan, 35 states explicitly note on their state websites that their standards are based on the Common Core. But even states that have not explicitly cited the Common Core's influence retain many key ideas from the Common Core in their standards. For ELA, those two key ideas are the following:

- **Use of complex texts written at or above students' grade level.** The Common Core emphasizes that students should spend the majority of their instructional time reading “complex texts” written at or above their grade level. At the time of our surveys, most states had standards for text complexity. In Achieve’s (2017) analyses of all states that initially adopted the Common Core and then changed their standards, Achieve found that only three states did not have standards for text complexity: South Carolina, Missouri, and Oklahoma. The Common Core’s standard related to complex texts departs from the common practice of teaching reading through use of “leveled readers”—texts written at students’ individual reading level.* In our own scan of standards in non–Common Core states, only Virginia discussed use of texts at students’ individual reading level within their ELA standards.

- **Text-focused instruction.** Most state standards ask students to closely read and analyze a range of different texts. According to Achieve’s review (2017), all states that have changed their standards from the Common Core still emphasize using evidence from texts to make justifications and conclusions. Our scan of standards in non–Common Core states similarly indicates that those states emphasize using evidence from texts to make justifications and conclusions.

For mathematics, the key aspects of standards we measured included the following:

- **Mathematics topics addressed at each grade level.** Several reviews of state standards have noted that most state standards include major mathematics content included in the Common Core, although some of those states have additional standards or have slightly modified the language of the Common Core (Korn, Gamboa, and Polikoff, 2016; Achieve, 2017; Norton, Ash, and Ballinger, 2017). The Common Core emphasizes that teachers should focus on fewer topics at each grade level than did previous standards, and that content should progressively build on previously learned concepts and skills as grade levels progress (CCSSI, undated-a).

- **Balanced focus on three aspects of rigor.** The Common Core identifies three aspects of rigor that teachers should address in equal measure to develop students’ mathematical proficiency: students’ conceptual understanding, their procedural skill and fluency, and application to real-world contexts (CCSSI, undated-a). According to Achieve (2017), nearly all states that have formally revised their standards to be different from the Common Core note that teachers should address different aspects of rigor.

- **Standards for Mathematical Practice.** In addition to content standards, the Common Core includes eight Standards for Mathematical Practice (or “process standards”) that teachers should strive to develop in their students. Examples of these practices include making sense of problems, constructing viable arguments, and critiquing the reasoning of others (CCSSI, undated-c). According to Achieve (2017) and our informal review of state standards, all but a handful of states note that teachers should address Standards for Mathematical Practice.

The survey items drawn upon for the research and analysis in this report addressed these key ideas to gather information about teachers’ understanding of their standards and their standards-aligned practice. We describe item development and measurement in more detail in the Methods section of this report.

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* According to our own and other research, most teachers rely on leveled readers to some degree to teach reading (Kaufman et al., 2018; Griffith and Duffett, 2018). Research is mixed on whether leveled readers improve reading more or less than complex texts. Although leveled readers are frequently used by teachers across grade levels, Fisher and Frey’s (2014) research review concluded, “We could not find any compelling studies suggesting that leveled texts beyond the primary years resulted in significant achievement gains” (p. 348). In addition, several studies have tracked improvements in reading achievement among students reading texts above their grade level (Morgan, Wilcox, and Eldredge, 2000; Stahl and Heubach, 2004). Many researchers have emphasized that more research is necessary to assess the effects of text difficulty on reading improvement (Kuhn and Stahl, 2003; Compton, Appleton, and Hosp, 2004; O’Connor, Swanson, and Geraghty, 2010). We know little about how and why teachers assign leveled readings to students.
involved both modeling selection probabilities (i.e., the chance that a particular individual was contacted for inclusion into the ATP) and response probabilities (i.e., given that they were selected, the probability that they responded to our survey). Variables taken into account in the weighting included teacher background (e.g., gender, professional experience) and school-level characteristics (e.g., school size, level, urbanicity, socioeconomic status).  

American Teacher Panel Survey Data

For each of the three areas—use of materials, teacher knowledge, and teacher practices—we describe the survey items we developed or included in our surveys to examine teachers’ responses in 2017 and the change in teachers’ responses. As noted earlier, we sometimes measured change by looking at differences in teachers’ responses from 2015 to 2017. However, given some changes in survey content from 2015 to 2017, we sometimes examined change from 2016 to 2017. To examine change in teachers’ responses, we only looked at subsamples of teachers who responded to either the 2015 and 2017 surveys or the 2016 and 2017 surveys. Appendix A presents the specific items and surveys we drew upon to examine changes in teachers’ knowledge and practices, and we summarize those items briefly here as well. While we developed some of the items included in each survey, we also adapted many items from other surveys, including surveys from Student Achievement Partners (undated) and Shanahan and Duffett (2013).

Change in Teachers’ Use of Instructional Materials for Mathematics and ELA

To assess change in the use of instructional materials, we examined mathematics and ELA teachers’ responses to questions on their use of
specific published textbooks in their instruction. The instructional materials included in our survey were the most commonly used materials according to data provided to us through a survey fielded by Student Achievement Partners. We asked about the same published instructional materials in each year, although a few new materials were added for the 2016 and 2017 surveys. Additionally, the order of materials we asked about in the 2015 survey was slightly different than the order in 2016 (although the order remained the same from 2016 to 2017); in our findings, we note whether shifts in the order of materials may have had implications when applicable.

To examine change in use of online materials, we drew upon survey data from 2015 and 2017; items about online materials were not included in the 2016 survey.

Change in Teachers’ Knowledge About Their State Standards

To measure teachers’ understanding of their state standards, we selected survey items that were intended to capture the major instructional shifts for mathematics and ELA (CCSSI, undated-a), as well as questions about standards content and approaches. Many of these items were adapted from surveys developed by Student Achievement Partners (undated) and Shanahan and Duffett (2013). Based on some reliability and validity evidence gathered after the 2015 ATP survey administration, some of the original items included in the 2015 survey to illuminate teachers’ knowledge about their state standards were revised in 2016. Therefore, our analyses for teacher knowledge mostly focus on changes from 2016 to 2017.

Changes in Teachers’ Instructional Practices

To measure teachers’ instructional practices, we included survey items asking teachers to estimate the frequency with which their students engaged in certain disciplinary practices endorsed in the standards. For mathematics, for example, we asked teachers the extent to which their students engaged in many of the Standards for Mathematical Practice (CCSSI, undated-c), which are part of the Common Core (e.g., “making sense of problems and persevering in solving them,” “constructing viable arguments and critiquing the reasoning of others”). For ELA, we asked about practices that are closely aligned with the anchor standards for speaking, reading, writing, and listening (e.g., “use evidence from a text to make inferences or support conclusions,” “participate in a range of conversations and collaborations with diverse partners”). As with teacher knowledge, our analyses of change in teacher practices focus on changes from 2016 to 2017.

Teacher Sample

The ATP includes a nationally representative sample of teachers randomly selected from K–12 public schools throughout the United States. Table 1 provides an overview of the sample and respondents, as well as response rates, for each survey administration. Response rates for our surveys are consistent with those typically achieved in surveys of this kind and are higher than that achieved by many longitudinal panels.4

We drew on a subset of each total sample in our analysis of change in teachers’ responses. Specifically, while we briefly examined responses of ELA and mathematics teachers in 2017, we focused on examining changes in those responses for the same teachers who responded to our survey in either 2015 and 2017 or 2016 and 2017. Table 2 provides background information about these two different samples, including Ns for those samples and their

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4 With the emergence of web-based surveys, response rates have been in decline. Nulty (2008) found that responses to web-based surveys ranged between 20 and 47 percent. Similarly, a meta-study of 68 surveys in 49 studies by Cook, Heath, and Thompson (2000) found an average 40-percent response rate among national survey studies.
We designated a teacher as serving a high-vulnerability student population if the teacher’s students were in the top quartile within each sample for at least two of the following: school percentage of FRL, classroom percentage of English language learners (ELL), and classroom percentage participating in an Individualized Education Program (IEP). A teacher serving students in the top quartile for one of the three characteristics was designated as teaching students of medium vulnerability. All other teachers were considered to be teaching low-vulnerability students. We included a single vulnerability variable with three levels in our analysis because FRL, ELL, and IEP are closely related to one another and because we wanted to make comparisons among teachers in groups of roughly comparable size in a small number of categories. We have used this vulnerability variable in several previous reports based on the same survey data (Kaufman et al., 2018; Opfer et al., 2018).

Lastly, we designated a teacher as being in a state with direct reference or no direct reference to the Common Core. We considered a state to be a direct reference if its department of education website indicated that its state standards were the Common Core or if it provided links or webpages devoted to resources that were explicitly noted as aligned to the Common Core. Based on our scan of state department of education websites, we considered the following 17 states as having no direct reference to the Common Core: Alaska, Florida, Georgia, Indiana, Louisiana, Michigan, Minnesota (for mathematics only), Missouri, Nebraska, New Jersey, Oklahoma, Pennsylvania, South Carolina, Tennessee, Texas, Virginia, and West Virginia; the remaining states and the District of Columbia are considered as directly referencing the Common Core.

We conducted some initial sensitivity testing comparing the weighted characteristics of the teachers who responded to both the 2015 and 2017 surveys (Sample I) and the 2016 and 2017 surveys (Sample II) with those who responded only to the 2017 survey. We used independent t-tests to compare the means of the Samples I and II with those who responded only to the 2017 survey. On average, teachers in Sample I who responded to both the 2015 and 2017 survey taught more IEP students than those who did not take both surveys (difference of 4.5 percentage points, \( p < 0.05 \)). On average, teachers in Sample II who responded to both the 2016 and 2017 survey were from schools with more students receiving FRL than teachers who did not take both surveys (difference of 7 percentage points, \( p < 0.05 \)). These small differences in the demographic variables tested were the only significant discrepancies we identified between Sample I or Sample II and the teachers who took only the 2017 survey. This evidence suggests that our findings about changes in teachers’ knowledge and practices are generally representative for our tested demographic variables, except in percentage of IEP for Sample I and percentage of FRL in Sample II. In addition, we provide nationally representative data about teachers’ responses to our 2017 survey.

Analysis

To assess change, we first restricted our sample to teachers who had taken the survey during both time periods, as noted in Table 2. Regardless of the change sample, we used the 2017 set of weights for all analyses. Using a jointly representative weighted sample (cross-sectional weight) is ideal. However, we were unable to create these sets of weights for these analyses because of our restricted access to some demographic variables. Given these limitations in our analysis, these findings should be regarded as initial and exploratory. In future work, we want to explore analysis using a jointly representative weighted sample.

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5 Teachers’ vulnerability characterization in each sample was similar to how they would have been characterized using vulnerability data for the entire 2017 sample. Specifically, of the sample of teachers who responded to both the 2015 and 2017 survey, 96 percent had the same vulnerability characterization as in the 2017 sample. Of the sample of teachers who responded to both the 2016 and 2017 survey, 93 percent had the same vulnerability characterization.

6 We compared samples looking at the following demographics: school-level percentage of FRL, minority student population, and school urbanicity, as well as teacher-level self-reported data about the total number of students taught, percentage of those students who are ELLs, and percentage with IEPs (excluding gifted students).
To analyze the magnitude of change, we produced survey-weighted means for each survey year and took the difference of the two estimates. We used one-sample t-tests to examine changes overall and for all subgroups available for our analysis, as summarized in Table 2, including vulnerability group (high, medium, and low), locality (urban or rural), and whether the state directly referenced the Common Core in their K–12 content standards for mathematics and ELA. Because the analysis in this report is considered exploratory, we do not adjust for multiple comparisons to ensure that we draw attention to a limited number of possible change trends. In addition, throughout our analyses, we are more concerned with the magnitude of change, as opposed to statistical significance.  

### Findings

#### How Did Teachers’ Use of Instructional Materials Change?

In this section, we first discuss the published and online materials that teachers reported using for their instruction in 2017, and then consider changes in material use from 2015 to 2017. We did not observe much change in teachers’ use of published textbooks.

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7 The next logical step to formally test these trends while accounting for potential confounding variables would be regression analyses. Not only would these analyses be able to pinpoint whether overall change was happening while accounting for various demographic variables, but they would indicate whether certain subpopulations may be shifting their responses. However, given the survey design limitations, we are not confident in the estimates and standard errors produced by regression models and thus do not present them here. Future analyses could confirm some of the trends shared in this report.
On the other hand, we did observe some change in teachers’ use of online materials from 2015 to 2017. Specifically, teachers’ use of online materials grew for certain types of standards-aligned and content-specific materials but decreased somewhat for more-general resources, such as Google. Overall, teachers did not appear to be using many published textbooks aligned with newer standards, even though the Common Core has raised the bar for what students should know and do.

Teachers’ Use of Published Textbooks for Their Instruction in 2017 Looked Similar to Use in Previous Years

Before looking at the change in teachers’ responses about their instructional materials, we examined mathematics and ELA teachers’ overall responses to the question in the 2017 survey: “Please indicate which instructional resources you have drawn upon regularly (i.e., once a week or more) for your [mathematics or ELA] classroom lessons this year (2016–17).” Appendix B provides descriptive data about teachers’ responses in 2017. In mathematics, EngageNY.org materials continued to be the most-used materials for mathematics, as we noted in previous reports based on 2015 and 2016 survey results (Opfer, Kaufman, and Thompson, 2016; Opfer et al., 2018). Other commonly used materials included Envision Math, Go Math, Glencoe Math (for secondary teachers), and Everyday Math. As in past years, leveled readers remained the most commonly used material for ELA, followed by trade books, as well as specific leveled reader series, including Reading A–Z, Accelerated Reader, and RAZ-Kids.

In our prior research based on findings from the spring 2016 survey (Opfer et al., 2018), teachers reported using few materials that were vetted and judged to be aligned with the Common Core and similar state standards. This is still the case, based on 2017 survey results. Of the top materials that mathematics teachers indicated using in 2017, only Eureka Math and EngageNY.org (which includes a free online version of Eureka Math) have been judged by EdReports.org as closely aligned with the Common Core; EdReports.org is an independent nonprofit that conducts reviews of ELA and mathematics instructional materials to determine their alignment with the Common Core. Similarly, of the top materials that ELA teachers reported using in 2017, only EngageNY.org has been judged by EdReports.org as closely aligned with the Common Core. However, because EdReports.org has not reviewed all the top materials that teachers reported using, it is possible that some reported materials do indeed align with Common Core. Another caveat is that we did not ask teachers to identify the edition of materials they were using. Thus, teachers could be using an edition not reviewed by EdReports.org or vice versa (a teacher might not have been using the edition that EdReports.org reviewed).

Overall, teachers did not appear to be using many published textbooks aligned with newer standards, even though the Common Core has raised the bar for what students should know and do.

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8 Expert panels of teachers work with EdReports.org to assess the extent to which curricula meet expectations in categories aligned with the Common Core, including focus, coherence, and rigor with content in mathematical practices. We only designated materials as closely aligned if EdReports.org judged them as “meeting expectations” in the main category of their review (e.g., for mathematics, focus and coherence, and rigor in mathematical practices).

9 For example, in mathematics, EdReports.org has not reviewed the algebra textbooks that teachers reported using. Among the top published materials that ELA teachers reported using, EdReports.org has only reviewed Journeys, Reading Wonders, and Collections; the other materials either have not yet been reviewed or were not considered by EdReports.org as constituting curricula (i.e., trade books or leveled readers do not include teacher lessons or comprehensive sets of ELA activities to be used over the course of a school year).
In the 2015 survey, we also asked teachers what materials they were using for their instruction, although we asked them a slightly different question than in the 2017 survey. Specifically, we asked, “Which [mathematics or ELA] curricula/programs are you using this year (2014–15)? Indicate whether you are using the curricula/programs as primary or support materials.” We compared the materials that teachers indicated as their “primary” materials in 2015 with those materials that teachers indicated using “regularly (once a week or more)” in 2017. While this comparison is not perfect, it focuses on the materials that teachers regard as most central to their instruction in both years.

As noted in Figure 1, we observed no significant change in the same mathematics teachers’ reports of what they used in 2015 than in 2017, which at least suggests that the materials that teachers regarded as primary ones in 2015 were still ones they used regularly in 2017. We observed no significant change in teachers’ reports of what they used “regularly” (once a week or more) between 2016 to 2017.

For ELA, the story was slightly different. Teachers’ reports of their use of leveled readers—texts written at students’ individual reading levels—increased from 2015 to 2017 (Figure 2). Among the teachers who responded to our survey in 2015 and 2017, 17 percent indicated that they used leveled readers as their primary materials in 2015, compared with 31 percent who reported using them regularly in 2017. Changes in survey design from 2015 to 2017 may explain some of the rise in leveled reader use, although the changes do not fully explain such a large increase.10

We observed a few trends in the use of leveled readers among teachers of different subgroups. The rise in leveled readers was particularly large among teachers of students with medium vulnerability (teachers who served students in the top quartile for one of the following: percentage of ELLs, percentage of students with IEP, or school percentage with FRL). In contrast, the rise in leveled reader use was not as large for teachers of high or low-vulnerability students, partially because teachers of those students used leveled readers more than medium-vulnerability students in 2015. We also observed a borderline-significant increase in use of leveled readers from 2015 to 2017 among teachers in states that directly referenced the Common Core (p < 0.10), whereas there was a significant increase (p < 0.01) among teachers in states that did not directly reference the Common Core (see Table 3). It is possible that the emphasis on the Common Core in some states may have discouraged teachers from using leveled readers, which makes sense given that the Common Core emphasizes the use of grade-level texts and does not make any statements encouraging teachers to use reading materials at students’ individual reading levels. We also observed a significant increase in leveled reader use among urban teachers, although we did not observe those increases among rural ones.

Use of Many Online Materials Changed from 2015 to 2017, Including an Increase in Use of Content-Focused, Standards-Aligned Online Materials

In addition to asking teachers what published textbooks they used, teachers were also asked which online materials they used regularly in 2016–2017. As in our previous research (Opfer, Kaufman, and Thompson, 2016), Teacherspayteachers.com and Pinterest.com topped the list. More than one-half of all mathematics and ELA teachers reported using Teacherspayteachers.com, and between one-third and one-half of mathematics and ELA teachers indicated using Pinterest.com (see Figure B.3 in Appendix B for descriptive results in 2017).

We compared teachers’ responses about what they used “regularly (once a week or more)” in 2017 with what they indicated using “2–3 times a week” or “daily” in 2015, since we did not ask about use once a week or more in 2015. If we compared the number of teachers using a particular material two to three times a week or more in 2015 with use just once a week or more in 2017, we might expect lower

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10 Specifically, each year that we administered our survey, we asked teachers about a long list of published textbooks. In 2015, leveled readers were at the bottom of that list. In 2017, they were near the top. The position of leveled readers in our survey may be related to the change in teachers’ responses. That said, trade books were at the bottom of the list in 2015 and also near the top in 2017. However, we observed no significant change in use of trade books, which suggests that the increase in use of leveled readers is real.
Including AchievetheCore.org, ReadWorks.org, NewsELA.com, and ReadWriteThink.org (see Figure 4). In addition, the use of Google—a more general resource—declined significantly in both mathematics and ELA teachers’ reports. In contrast to growth in use of some standards-aligned and content-specific resources, mathematics and ELA teachers also reported more use of TeachersPayTeachers.com—a more general resource with lesson plans that are not vetted for quality or alignment with standards.

We observed more increases in the use of standards-aligned materials and content-specific materials among teachers in states directly referencing the Common Core than we did among those in states that did not. For example, in mathematics, teachers in states directly referencing
**FIGURE 2**
ELA Teachers Using Each Published Material as a “Primary Material” in 2015 Compared with Use “Regularly” (Once a Week or More) in 2017 (N = 442)

![Bar chart showing the percentage of ELA teachers using each published material as a “primary material” in 2015 compared with use “regularly” (once a week or more) in 2017.](chart)

**NOTES:** The 2017 survey item for which these responses were provided was: “Please indicate which instructional resources you have drawn upon regularly (i.e., once a week or more) for your ELA classroom lessons this year (2016–17). Check all that apply.” The 2015 survey item for which these responses were provided was: “Which [mathematics or ELA] curricula/programs are you using this year (2014–15)? Indicate whether you are using the curricula/programs as primary or support materials.” Asterisks indicate significant difference between the same teachers’ responses in 2015 and 2017, **p < 0.01, *p < 0.05.**

**TABLE 3**
Change in ELA Teachers’ Use of Leveled Readers as a “Primary Material” in 2015 Compared with Use “Regularly” (Once a Week or More) in 2017, by Subgroup

<table>
<thead>
<tr>
<th>Subgroup</th>
<th>Total Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural teachers</td>
<td>+4%</td>
</tr>
<tr>
<td>Urban teachers</td>
<td>+16%**</td>
</tr>
<tr>
<td>Teachers in states directly referencing the Common Core</td>
<td>+8%</td>
</tr>
<tr>
<td>Teachers in states not directly referencing the Common Core</td>
<td>+20%**</td>
</tr>
<tr>
<td>Teachers of high-vulnerability students</td>
<td>+12%</td>
</tr>
<tr>
<td>Teachers of medium-vulnerability students</td>
<td>+20%**</td>
</tr>
<tr>
<td>Teachers of low-vulnerability students</td>
<td>+11%</td>
</tr>
</tbody>
</table>

**NOTE:** Asterisks indicate significant difference between the same teachers’ responses in 2015 and 2017, **p < 0.01.**
the Common Core reported significantly more use of corestandards.org, illustrativemathematics.org, and learnzillion.org in 2017 than in 2015, whereas those in states not directly referencing the Common Core did not. Similarly, in ELA, teachers in states directly referencing the Common Core reported significantly more use of achievethecore.org, Newsela.com, and readworks.org, whereas those in other states did not report significantly more use of those websites.

Tables 4 and 5 contrast differences in online material use among key subgroups (e.g., teachers serving urban versus rural students and those serving low versus high-vulnerability students). As noted in the tables, use of standards-aligned and content-specific materials (i.e., significant increases in khanacademy.org, corestandards.org, readworks.org, readwritethink.org, Newsela.com) did not increase significantly for teachers of high-vulnerability students. That said, we observed a number of nonsignificant increases in the use of some standards-aligned and content-specific materials among mathematics teachers of high-vulnerability students (e.g., increases by 10 or more percentage points in the mathematics teachers of high-vulnerability students who indicated using corestandards.org, illuminations.nctm.org, K-5mathteachingresources.org, and khanacademy.org). We did not observe such substantive increases in the use of standards-aligned and content-specific online materials among ELA teachers of high-vulnerability students. This raises the question of whether students of those teachers were receiving as...
much standards-aligned instruction as their less-vulnerable peers. However, the smaller sample size of teachers serving high-vulnerability students could also play a role in the precision of our estimates, which could drive a lack of statistical significance.

Similarly, there was no significant increase in use of standards-aligned and content-specific materials among rural ELA teachers. That said, rural mathematics teachers reported significantly more use of some standards-aligned and content-specific resources, including CoreStandards.org and KhanAcademy.org. It may be that, compared with ELA materials, standards-aligned online instructional materials and websites for mathematics are more well-known to both rural and urban teachers.

Taken together, these data suggest little to no uptick in teachers’ use of textbook materials closely aligned with the Common Core and most state standards, which might imply that districts and schools have not moved to adopt textbooks more aligned with the Common Core during the period between 2015 and 2016. However, given the increases in the use of more standards-aligned and content-specific online materials, we might surmise that teachers—and/or those supporting teachers—sought online resources to supplement their published texts and fill gaps in standards alignment.
How Did Teachers’ Knowledge of Their State Standards Change?

Mathematics Teachers’ Knowledge of Their Mathematics Standards Appeared to Change Little

We did not observe significant change in teachers’ knowledge of their mathematics standards from 2016 to 2017 (the only period for which we can make a comparison). All items measuring teachers’ knowledge were the same in our 2016 and 2017 surveys. To assess teachers’ knowledge of their standards, we first asked teachers at each grade level to identify which of four mathematics topics at grade level were aligned with their state standards. Two of these standards were taken from the Common Core. Two “distractor” standards were typically selected from two grade levels above or below the targeted grade. Teachers who successfully selected the two correct standards for a given grade level that they taught and none of the distractor standards or the “I don’t know” response were designated as “correct.” All other teachers were classified as “not correct.” If teachers taught at more than one grade level, they responded to this question for each grade level they taught.

As noted in Table 6, teachers’ ability to select the correct standards and nothing else increased from 2016 to 2017 for teachers in seven of nine grades, as well as for geometry teachers. Those positive changes were marginally significant for third- and fifth-grade teachers (p < 0.10); small sample size likely limited our ability to detect significant changes. We did not observe any significant changes by grade level in each subgroup. We also calculated the percentage of all mathematics teachers who chose the correct standards.
topics and nothing else for at least one grade level they taught and examined change from 2016 to 2017 for that variable. While the percentage of teachers who did respond correctly for at least one grade level increased from 35 percent in 2016 to 41 percent in 2017, that change was not significant.

To investigate teachers’ knowledge of their mathematics standards, we also asked them to order two sets of standards from low to high grade level. On average, 23 percent of the teachers we surveyed were able to correctly order both sets of standards from low to high grade level, whereas 70 percent were able to correctly order at least one set from low to high grade level. Lastly, to ascertain their knowledge of mathematics standards, we asked teachers to identify the “aspect of rigor” targeted by specific standards at or around their grade level, with those aspects including conceptual understanding, procedural skill or fluency, and/or application to real-world contexts. On average, about 50 percent of teachers were able to identify the intended aspect of rigor targeted by specific standards. We did not observe any clear trends in the percentages of teachers who responded to those items in ways that aligned more or less with the Common Core in 2016 versus 2017.

**ELA Teachers Were Less Likely to Regard Use of Complex Texts as Aligned with Their Standards in 2017 Than in 2016**

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. The choices for these items were adapted from Shanahan and Duffett (2013). As in past surveys, the majority of teachers regarded “selecting texts for individual students based on their reading level” as aligned with their standards, whereas only a little more than one-quarter of elementary teachers regarded “use of complex texts that all students are required to read” as aligned. About one-half of secondary teachers thought that assignment of complex texts was aligned with their standards. For more details on these descriptive findings, see Figure B.4 in Appendix B.
While most teacher responses to this question did not significantly change from 2016 to 2017, there were significant changes for one of the responses: 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 (Figure 5). Interestingly, the percentage of teachers in states directly referencing the Common Core who chose “selecting texts for individual students based on their reading level” significantly declined from 2016 to 2017 (Table 7). In contrast, among teachers in states that did not explicitly reference the Common Core, we observed a slight rise in responses that “selecting texts for individual students based on their reading level” was aligned with their standards. These results suggest that states are focused on the Common Core may be sending messages to teachers that use of leveled readers is not an approach clearly aligned with their standards. The percentage of teachers of less-vulnerable students who chose “assigning complex texts” declined significantly from 2016 to 2017. The lack of a significant decline in that response among teachers of high-vulnerability students could be because of higher variation in those teachers’ responses and their smaller sample size. In addition, we saw significant drops in the choice of “assigning complex texts” for urban teachers but not rural ones.

In each year that we administered our survey, we also asked ELA teachers which reading approach was aligned with their standards, including an approach focused on teaching texts and teaching skills through texts, versus focusing on reading skills first and then teaching students to apply those skills to specific texts. The former is intended to be more aligned with the Common Core and most state standards, given the Common Core emphasis on text-focused instruction (Shanahan, 2013).

As in past surveys, the vast majority of teachers, particularly at the elementary level, indicated that...
We also asked teachers a range of additional questions about their approaches to reading instruction and alignment of those approaches with their state standards. However, we did not observe any major changes in all teachers’ responses to those items. Our findings continue to suggest—as in past RAND reports based on our 2015 and 2016 surveys—that majorities of ELA teachers are not familiar with the reading approaches aligned with their standards.

Their state standards were most aligned with a focus on teaching reading skills first, then applying them to texts, rather than the other way around. See Figure B.4 in Appendix B for the overall 2017 results. We asked this same question, using the same wording, in 2015, 2016, and 2017. Overall, teachers’ responses from 2015 to 2017 and 2016 to 2017 did not change (see Figure 6), nor did they change significantly for any subgroups in our analysis.

We also asked teachers a range of additional questions about their approaches to reading instruction and alignment of those approaches with their state standards. However, we did not observe any major changes in all teachers’ responses to those items. Our findings continue to suggest—as in past RAND reports based on our 2015 and 2016 surveys—that majorities of ELA teachers are not familiar with the reading approaches aligned with their standards.
Mathematics Teachers’ Reports of Standards-Aligned Student Practices Changed Little Overall, Although Those Practices Dropped Significantly for Teachers Serving Less-Vulnerable Students

The survey instructed mathematics teachers to consider a lesson they taught over the past week that was similar to most lessons they teach over the course of the year. We asked, “For that lesson, how often did your students engage in the following practices during class?” Teachers rated their students on a four-point scale from “not at all” to “to a great extent.” As in 2016, more than one-third of all mathematics teachers who responded to the 2017 survey reported student engagement in practices aligned with the Common Core that included “use mathematics language and symbols appropriately,” “make sense of problems and persevere in solving them,” and “explain and justify their work.” Lower percentages of teachers, however, reported that their students engaged in these practices.

How Did Teachers’ Instructional Practices Change?

As with teacher knowledge, differences in survey items meant that we could only compare teachers’ reports of students’ practices in 2016 with 2017; all wording for items measuring practices were the same in our 2016 and 2017 surveys. We found some significant changes in teachers’ reports of practices from 2016 to 2017, and many of these changes represent decreases in standards-aligned practices.

It is possible that the survey items do not address all aspects of teachers’ knowledge of their ELA standards. However, for the brief period that we were able to measure changes in teachers’ knowledge (2016 to 2017), ELA teachers’ knowledge of their standards did not appear to become more aligned with the content and approaches encouraged by the Common Core.

FIGURE 6
English Language Arts Teachers’ Selecting Each Reading Approach as Most Aligned with Their Standards, 2015 to 2017 and 2016 to 2017 (N = 434)

- **Teach particular novels, books, short stories, essays, and poems students should read, and then organize instruction around them, teaching a variety of reading skills and strategies as tools for students to understand text.**
- **Focus on reading skills and strategies first (e.g., main idea, summarizing, author’s purpose), and then organize teaching around them so that students will apply these skills and strategies to any book, short story, essay, or poem they read.**
- **I don’t know.**

Mathematics Teachers’ Reports of Standards-Aligned Student Practices Changed Little Overall, Although Those Practices Dropped Significantly for Teachers Serving Less-Vulnerable Students

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serving high-vulnerability students attended to these practices more closely for reasons tied to accountability. For example, teachers of these students might be under more pressure to improve student test scores and may perceive that standards-aligned practices can support them in doing that. It could also be that teachers of students with lower vulnerability are measuring themselves according to a different bar. For instance, they may have a growing awareness of the importance of standards-aligned practices and feel that they are engaging in these practices to a lesser extent over time. Further research might shed light on the reasons for these differences among teachers with more and fewer vulnerable students. We did not observe any other clear trends in subgroup findings.

We found almost no significant changes in mathematics teachers’ overall responses about their students’ practices. However, as noted in Figure 7, teachers’ mean responses were slightly lower (though not significantly so) in 2017 than in 2016 for almost all practices.

While we saw no major changes in teachers’ responses overall, some differences among subgroups of mathematics teachers emerged. Specifically, there were a number of significant decreases in reports of standards-aligned practices among teachers of low-vulnerability students compared with teachers of high-vulnerability students (Table 8). In contrast, we observed only one decrease in reports of these practices among teachers serving high-vulnerability students from 2016 to 2017. We are not sure what these differences imply. It could be that teachers serving high-vulnerability students attended to these practices more closely for reasons tied to accountability. For example, teachers of these students might be under more pressure to improve student test scores and may perceive that standards-aligned practices can support them in doing that. It could also be that teachers of students with lower vulnerability are measuring themselves according to a different bar. For instance, they may have a growing awareness of the importance of standards-aligned practices and feel that they are engaging in these practices to a lesser extent over time. Further research might shed light on the reasons for these differences among teachers with more and fewer vulnerable students. We did not observe any other clear trends in subgroup findings.


designed to “construct viable arguments and critique the reasoning of others.”

We found almost no significant changes in mathematics teachers’ overall responses about their students’ practices. However, as noted in Figure 7, teachers’ mean responses were slightly lower (though not significantly so) in 2017 than in 2016 for almost all practices.

While we saw no major changes in teachers’ responses overall, some differences among subgroups of mathematics teachers emerged. Specifically, there were a number of significant decreases in reports of standards-aligned practices among teachers of low-vulnerability students compared with teachers of high-vulnerability students (Table 8). In contrast, we observed only one decrease in reports of these practices among teachers serving high-vulnerability students from 2016 to 2017. We are not sure what these differences imply. It could be that teachers serving high-vulnerability students attended to these practices more closely for reasons tied to accountability. For example, teachers of these students might be under more pressure to improve student test scores and may perceive that standards-aligned practices can support them in doing that. It could also be that teachers of students with lower vulnerability are measuring themselves according to a different bar. For instance, they may have a growing awareness of the importance of standards-aligned practices and feel that they are engaging in these practices to a lesser extent over time. Further research might shed light on the reasons for these differences among teachers with more and fewer vulnerable students. We did not observe any other clear trends in subgroup findings.

FIGURE 7
Average Extent to Which Students Engaged in Each Standards-Aligned Practice in a Typical Lesson, According to Mathematics Teacher Reports in 2016 and 2017

<table>
<thead>
<tr>
<th>Practice</th>
<th>2016 Survey</th>
<th>2017 Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use mathematical language and symbols appropriately when communicating about mathematics.*</td>
<td>3.3</td>
<td>3.3</td>
</tr>
<tr>
<td>Make sense of problems and persevere in solving them.</td>
<td>3.2</td>
<td>3.2</td>
</tr>
<tr>
<td>Explain and justify their work.</td>
<td>3.3</td>
<td>3.3</td>
</tr>
<tr>
<td>Apply mathematics to solve problems in real-world contexts.</td>
<td>3.2</td>
<td>3.1</td>
</tr>
<tr>
<td>Use repeated practice to improve their computational skills.</td>
<td>3.0</td>
<td>3.2</td>
</tr>
<tr>
<td>Choose and use appropriate tools when solving a problem.</td>
<td>3.1</td>
<td>2.9</td>
</tr>
<tr>
<td>Look for and make use of structure (e.g., patterns in numbers, shapes or algorithms).</td>
<td>2.8</td>
<td>2.8</td>
</tr>
<tr>
<td>Construct viable arguments and critique the reasoning of others.</td>
<td>2.5</td>
<td>2.6</td>
</tr>
</tbody>
</table>

NOTES: The 2017 and 2016 survey item for which these responses were provided was: “Think about a lesson you taught this past week that is typical of or similar to most lessons you teach over the course of the year. In that lesson, to what extent did your students engage in the following practices during class?” The response scale was 1 = not at all; 2 = to a slight extent; 3 = to a moderate extent; 4 = to a great extent. Asterisk indicates significant difference between the same teachers’ responses in 2016 and 2017, * \( p < 0.05 \).
**TABLE 8**

<table>
<thead>
<tr>
<th>Practice</th>
<th>Rural Teachers</th>
<th>Urban Teachers</th>
<th>Teachers of High-Vulnerability Students</th>
<th>Teachers of Low-Vulnerability Students</th>
<th>Teachers in States Directly Referencing the Common Core</th>
<th>Teachers in States NOT Directly Referencing the Common Core</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construct viable arguments and critique the reasoning of others</td>
<td>+0.2</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>+0.1</td>
<td>+0.1</td>
</tr>
<tr>
<td>Look for and making use of structure</td>
<td>+0.3*</td>
<td>0.0</td>
<td>+0.2</td>
<td>0.0</td>
<td>+0.1</td>
<td>+0.1</td>
</tr>
<tr>
<td>Choose and use appropriate tools when solving a problem</td>
<td>−0.3*</td>
<td>−0.1</td>
<td>−0.2</td>
<td>−0.2</td>
<td>−0.2*</td>
<td>−0.1</td>
</tr>
<tr>
<td>Use repeated practice to improve their computational skills</td>
<td>−0.3</td>
<td>−0.1</td>
<td>0.0</td>
<td>−0.3**</td>
<td>−0.1</td>
<td>−0.2</td>
</tr>
<tr>
<td>Apply mathematics to solve problems in real-world contexts</td>
<td>−0.2</td>
<td>−0.1</td>
<td>+0.2</td>
<td>−0.2*</td>
<td>−0.1</td>
<td>−0.1</td>
</tr>
<tr>
<td>Explain and justify their work</td>
<td>−0.1</td>
<td>−0.1</td>
<td>0.0</td>
<td>−0.2*</td>
<td>−0.1</td>
<td>−0.2</td>
</tr>
<tr>
<td>Make sense of problems and persevere in solving them</td>
<td>−0.1</td>
<td>−0.1</td>
<td>+0.1</td>
<td>−0.2</td>
<td>0.0</td>
<td>−0.2</td>
</tr>
<tr>
<td>Use mathematical language and symbols appropriately when communicating about mathematics</td>
<td>−0.4*</td>
<td>−0.1</td>
<td>+0.3*</td>
<td>−0.3**</td>
<td>0.0</td>
<td>−0.3**</td>
</tr>
</tbody>
</table>

**NOTES:** Average change represents the difference in teachers’ average response regarding the extent to which their students engaged in each practice. The response scale was 1 = not at all, 2 = to a slight extent, 3 = to a moderate extent, and 4 = to a great extent. Asterisks and superscript symbol indicate significant difference between the same teachers’ responses in 2016 and 2017, **p < 0.01, *p < 0.05, ºp < 0.10.

**ELA Teachers Reported Students Engaged Less Frequently in Several Standards-Aligned Practices in 2017 Than in 2016**

We also asked ELA teachers about the extent to which they engaged their students in a set of standards-aligned practices. More than one-third of teachers reported students’ engagement in standards-aligned practices including “use evidence from a text,” “read for accuracy and fluency,” and “read a nonfiction text in the classroom.”

We observed more changes in ELA teachers’ responses about frequency of students’ engagement in standards-aligned practices than we did in responses from mathematics teachers. From 2016 to 2017, teachers’ average responses decreased significantly for several standards-aligned practices, including “know and apply grade-level phonics and word analysis skills in decoding words,” “analyze how two or more texts address similar themes,” “adapt speech to a variety of contexts and communicative tasks,” and “write arguments to support claims in an analysis of substantive topics” (see Figure 8). Teachers’ responses increased significantly, however, for two practices: “participate in a range of conversations and collaborations with various partners” and “read with sufficient accuracy and fluency.”

We did not see many significant drops in standards-aligned practices for ELA teachers of low-vulnerability students, as we saw for mathematics teachers of low-vulnerability students (see Table 9). Furthermore, trends in changes for teachers of lower- and higher-vulnerability students were generally in the same direction, with the exception of a significant rise in reports of students reading for accuracy and fluency among teachers of low-vulnerability students and a nonsignificant decrease among teachers of lower-vulnerability students.
high-vulnerability students. Trends also generally ran in the same direction for teachers of other subgroups, with only one major exception: a significant increase in “connecting literacy instruction to other content” among students of rural teachers (with a nonsignificant drop for urban teachers).

Finally, we asked ELA teachers to estimate the percentage of class time they engaged students in activities involving texts (i.e., small-group discussion or writing about a text), activities involving grade-level texts, and activities involving leveled readers, on a five-point scale from “never use” to “76–100% of a typical lesson.” Figure 9 shows the percentages of elementary and secondary teachers who reported engaging students in each of these activities for more than half of a typical lesson. Use of leveled readers remained the practice most in use in elementary ELA classrooms in the 2016–2017 school year. Secondary ELA teachers reported using a single grade-level text for whole-class reading, writing, and/or discussion and in-class writing assignments in response to or about texts in similar amounts.

We observed decreases in ELA teachers’ reports about student engagement in two activities for...
### TABLE 9
Average Change in Extent to Which Students Engaged in Standards-Aligned Practices in a Typical Lesson According to an English Language Arts Teacher Report in 2016 and 2017, by Subgroup

<table>
<thead>
<tr>
<th>Practice</th>
<th>Rural Teachers</th>
<th>Urban Teachers</th>
<th>Teachers of High-Vulnerability Students</th>
<th>Teachers of Low-Vulnerability Students</th>
<th>Teachers in States Directly Referencing the Common Core</th>
<th>Teachers in States NOT Directly Referencing the Common Core</th>
</tr>
</thead>
<tbody>
<tr>
<td>Read a nonfiction text in the classroom</td>
<td>−0.2</td>
<td>−0.1</td>
<td>0.0</td>
<td>−0.1</td>
<td>−0.1</td>
<td>−0.1</td>
</tr>
<tr>
<td>Connect literacy instruction to other content</td>
<td>+0.4**</td>
<td>−0.1</td>
<td>0.0</td>
<td>+0.1</td>
<td>0.0</td>
<td>−0.1</td>
</tr>
<tr>
<td>Use evidence from a text to make inferences or support conclusions drawn from the text</td>
<td>−0.2</td>
<td>−0.1</td>
<td>−0.2</td>
<td>−0.2</td>
<td>−0.2*</td>
<td>0.0</td>
</tr>
<tr>
<td>Analyze the structure of texts</td>
<td>−0.1</td>
<td>0.0</td>
<td>+0.1</td>
<td>−0.1</td>
<td>−0.1</td>
<td>−0.1</td>
</tr>
<tr>
<td>Analyze how two or more texts address similar themes</td>
<td>0.0</td>
<td>−0.2*</td>
<td>−0.2</td>
<td>−0.1</td>
<td>−0.2</td>
<td>−0.2*</td>
</tr>
<tr>
<td>Write arguments to support claims in an analysis of substantive topics</td>
<td>−0.3º</td>
<td>−0.2º</td>
<td>−0.4º</td>
<td>−0.1</td>
<td>−0.1</td>
<td>−0.3º</td>
</tr>
<tr>
<td>Strengthen writing by planning, revising, editing, rewriting, or trying a new approach</td>
<td>0.0</td>
<td>0.0</td>
<td>−0.1</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Participate in a range of conversations and collaborations with various partners</td>
<td>+0.6**</td>
<td>+0.7**</td>
<td>+0.2</td>
<td>+0.9**</td>
<td>+0.8**</td>
<td>+0.6**</td>
</tr>
<tr>
<td>Adapt speech to a variety of contexts and communicative tasks</td>
<td>−1.1**</td>
<td>−0.7**</td>
<td>−0.8**</td>
<td>−0.8º</td>
<td>−0.8º</td>
<td>−0.6º</td>
</tr>
<tr>
<td>Demonstrate a command of conventions of standard English when writing or speaking</td>
<td>+0.5*</td>
<td>0.0</td>
<td>−0.2</td>
<td>+0.3º</td>
<td>0.0</td>
<td>+0.2</td>
</tr>
<tr>
<td>Use a range of general academic and domain-specific words and phrases sufficient for college and career readiness</td>
<td>+0.3</td>
<td>−0.1</td>
<td>−0.6º</td>
<td>+0.2</td>
<td>0.0</td>
<td>−0.2</td>
</tr>
<tr>
<td>Know and apply grade-level phonics and word analysis skills in decoding words</td>
<td>−0.2</td>
<td>−0.3º</td>
<td>−0.6º</td>
<td>−0.2º</td>
<td>−0.4º</td>
<td>−0.2</td>
</tr>
<tr>
<td>Read with sufficient accuracy and fluency</td>
<td>+0.7**</td>
<td>+0.2</td>
<td>−0.2</td>
<td>+0.4º</td>
<td>+0.2º</td>
<td>+0.3º</td>
</tr>
</tbody>
</table>

**NOTES:** Average change represents the difference in teachers’ average response regarding the extent to which their students engaged in each practice. The response scale was 1 = not at all, 2 = to a slight extent, 3 = to a moderate extent, and 4 = to a great extent. Asterisks and superscript symbol indicate significant difference between the same teachers’ responses in 2016 and 2017. **p < 0.01, *p < 0.05, ºp < 0.10.
Given that the Common Core and similar standards are being implemented in most states across the United States, one might expect to see changes in teachers’ knowledge. However, we saw no clear changes in teachers’ knowledge about their mathematics standards when comparing teachers’ survey responses in 2016 and 2017. For ELA, we found a decrease in teachers’ perceptions that “assigning complex texts that all students in a class are required to read” was aligned with their state standards, despite the fact that the use of complex texts is emphasized in most state standards. However, we measured changes in teacher knowledge over the course of just one year (i.e., change in responses from the 2016 survey to the 2017 survey), so we might have missed changes in teachers’ knowledge that occurred before or after the time period we measured.

Teachers’ use of published textbook materials changed very little over the period examined in this study. Thus, despite the fact that most published textbooks we asked about in our survey were not.

**Conclusions and Implications**

Have the Common Core State Standards changed what U.S. teachers think and do? While these analyses do not provide a definitive answer to that question, they can indicate changes in teachers’ reports about the instructional materials they draw on for their mathematics and ELA instruction, as well as their understanding of their standards and standards-aligned instructional practices.
and low-income students). These findings suggest that teachers who serve our neediest students may not always be aware of or using online materials that support standards-aligned instruction. It could also be that online materials that we asked about in our survey do not necessarily address the needs of the most-vulnerable students; teachers of these needier students may be seeking support elsewhere.

We saw no changes in standards-aligned practices among all mathematics teachers, and we saw few changes when comparing responses among all ELA teachers. However, the changes we found suggest that some teachers may be engaging students in fewer standards-aligned practices now than in previous years. For mathematics, in particular, teachers serving less-vulnerable students reported using significantly fewer standards-aligned practices in 2017 than in 2016, whereas we did not see these significant decreases among those serving more-vulnerable students. That said, teachers’ self-reports about students’ engagement in various practices

### TABLE 10
Change in Percentage of English Language Arts Teachers Reporting Student Engagement in Each Activity for More than Half of a Typical Lesson from 2016 to 2017, by Subgroup

<table>
<thead>
<tr>
<th>Practice</th>
<th>Rural Teachers</th>
<th>Urban Teachers</th>
<th>Teachers of High-Vulnerability Students</th>
<th>Teachers of Low-Vulnerability Students</th>
<th>Teachers in States Directly Referencing the Common Core</th>
<th>Teachers in States NOT Directly Referencing the Common Core</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of a single grade-level text for whole-class reading, writing, and/or discussion</td>
<td>–9%</td>
<td>–6%</td>
<td>–10%</td>
<td>–6%</td>
<td>–11%*</td>
<td>0%</td>
</tr>
<tr>
<td>Use of leveled readers in similar-ability in-class reading groups</td>
<td>+5%</td>
<td>–8%*</td>
<td>–3%</td>
<td>–1%</td>
<td>+2%</td>
<td>–14%*</td>
</tr>
<tr>
<td>Use of leveled readers to support struggling students in place of the grade-level text that other students are reading in class</td>
<td>+4%</td>
<td>–4%</td>
<td>–7%</td>
<td>–2%</td>
<td>–3%</td>
<td>–2%</td>
</tr>
<tr>
<td>Student groups to discuss a text or respond to questions about a text</td>
<td>–14%</td>
<td>–15%**</td>
<td>–29%*</td>
<td>–9%</td>
<td>–13%*</td>
<td>–19%*</td>
</tr>
<tr>
<td>In-class writing assignments in response to or about texts</td>
<td>–7%</td>
<td>–9%*</td>
<td>–24%*</td>
<td>–2%</td>
<td>–1%</td>
<td>–17%*</td>
</tr>
<tr>
<td>In-class writing assignments not in response to or about texts</td>
<td>–11%</td>
<td>–2%</td>
<td>–11%</td>
<td>–5%</td>
<td>2%</td>
<td>–9%</td>
</tr>
</tbody>
</table>

**NOTE:** Asterisks indicate significant difference between the same teachers’ responses in 2016 and 2017, **p < 0.01, *p < 0.05, °p < 0.10.**

clearly aligned with the Common Core, teachers did not appear to be shifting toward more use of standards-aligned textbooks. However, teachers’ use of online materials did change over the period of our surveys. Specifically, mathematics and ELA teachers reported using more standards-aligned, content-specific online sources and less use of Google in 2017 than in 2015. On one hand, these findings suggest that teachers are seeking online materials to help them address state standards within their content area. On the other hand, Teacherspayteachers.com—a lesson repository that is not vetted for quality or standards-alignment—saw a large uptick in use, and more than one-half of the ELA and mathematics teachers in our sample reported using the site “regularly” (once a week or more) for their instruction. In addition, increases in use of standards-aligned and content-specific materials were not even; such increases were not as clearly present among teachers of the most-vulnerable students (i.e., ELLs, students with IEPs,
should be interpreted with caution, given what we know about the accuracy of teacher self-reports. Specifically, teachers providing high-quality, standards-aligned instruction may under-report those standards-aligned practices in surveys, and teachers with lower-quality instruction may overestimate the quality of that instruction (Spillane and Zeuli, 1998; Mayer, 1999; Kaufman, Stein, and Junker, 2016).

Much more research is needed to understand how the Common Core and similar standards may be changing teachers’ practices and, as a result, changing what students learn. Nonetheless, even over the short period in which this study measured change, we found some interesting results that led us to offer the following recommendations for policymakers and practitioners:

1. **Continue to innovate and provide standards-aligned materials for teachers online.**
   Teachers are increasingly turning to the internet for materials. Anyone who wants to get good, standards-aligned content in teachers’ hands should consider how to do so through online venues. In addition, the large growth in use of Teacherspayteachers.com suggests that teachers seek insights from other teachers. Policymakers, practitioners, and vendors might consider ways to improve such repositories as Teacherspayteachers.com to incorporate standards-aligned and high-quality materials. Stakeholders could also caution against using materials that do not align with standards.

2. **Ensure that high-quality, standards-aligned content is available to teachers serving more-vulnerable students.** Our research suggests that some teachers serving more-vulnerable students and those in rural areas may not be using standards-aligned, content-specific online content at the rates of their peers serving less-vulnerable students. These findings could imply differential access to high-quality materials or fewer existing online materials to meet the needs of teachers serving needier students. In either scenario, these survey data suggest a need for initiatives or funding that could support teachers at vulnerable schools in accessing or drawing on high-quality online materials.

3. **Provide more support for teachers to engage students with grade-level texts and support reading approaches that are aligned with their standards.** This is one area where we saw a slight decrease in teachers’ understanding of their standards. Teachers were less likely to indicate that “assigning complex texts that all students in a class are required to read” was aligned with their standards in 2017 than they were in 2016. Furthermore, a majority of teachers still appeared to believe that their standards were aligned with “selecting texts for individual students based on their reading level.” This runs counter to the evidence: Few standards that we have reviewed emphasized leveled readers or selecting texts for individual students based on their reading level. These results suggest, first, that teachers need more information about the approaches for selecting texts that are aligned with their standards. Second, given the potential rise in use of leveled readers, teachers likely need much more support to engage students with grade-level texts (Kaufman et al. 2018;
Griffith and Duffett, 2018). In addition, more research is needed to understand whether teachers are using leveled readers in ways that are aligned with their standards. For example, Liben and Liben (2016) suggest that teachers give students opportunities to engage in guided or independent reading with texts of their choice (including leveled readers) outside of instructional time. It may be that teachers are using leveled readers more for that purpose.

4. **Support teachers to engage students in text-focused practices.** In our 2017 survey, as well as in previous surveys, ELA teachers reported that they are asking students to engage in close reading by using evidence from texts to make inferences and using nonfiction texts. However, only one-third or fewer teachers indicated that “teaching particular texts first and organizing instruction around them” was an approach most aligned with their standards. Instead, the majority of teachers indicated that teaching reading skills first, then applying them to texts later, was a reading approach most aligned with their standards. These findings imply that teachers may not be focusing on texts as much as is indicated by their reports about their practices, and they may need more support from school leaders and professional development providers to do so, although more research is necessary to understand the nature of teachers’ text-focused instruction in the classroom.

5. **Continue to support teachers’ standards-aligned mathematics instruction.** We saw little change in teachers’ mathematics instruction, including no change in teachers’ knowledge and little change in standards-aligned practices. For example, our findings across multiple surveys, including our most recent one in 2017, indicate that mathematics teachers tend to identify too many grade-level topics as aligned with their standards, and they cannot always identify the order in which standards should be taught. These findings suggest there is more work to be done to support and encourage teachers’ standards-aligned practices in mathematics through continued coaching and professional development, as well as development and dissemination of high-quality, standards-aligned materials.

Lastly, there is a need for much more research to consider whether teachers’ instruction is changing over time, and—potentially—in response to the Common Core State Standards. Given the great variation in implementation of the Common Core across states, research in individual states may be more informative for pinpointing changes to teachers’ instruction and the state policies that may be supporting those changes. We also know that change is a long-term process. High-quality implementation of such ambitious standards as the Common Core will likely take many years and require the support of countless stakeholders, including states, districts, schools, teachers, developers of curriculum materials, researchers, and multiple other external partners. By working together, and by collecting and analyzing data over time, these stakeholders can shape the system that supports high-quality standards implementation.

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11 Research may provide some direction in this regard. For example, some studies suggest that students can experience reading improvements when engaging with texts up to four grades above their reading level through use of such oral reading strategies as dyad reading, pair reading, echo reading, and repeated reading or listening to an audio recording, as well as possibly using the growing number of text-to-speech reading applications on the market (e.g., Brown et al., 2017; Shanahan, 2005). Griffith and Duffett (2018) have also suggested that teachers ask text-dependent questions that serve as “bread crumbs” (i.e., guidance) to support students’ comprehension, as well as scaffolding text sets organized around a particular topic.
## Appendix A. Survey Items Compared for Longitudinal Analyses in This Report

### Published Instructional Materials Survey Items

<table>
<thead>
<tr>
<th>Year</th>
<th>Description</th>
<th>Response Scale</th>
<th>What is compared?</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>Which [mathematics/ELA] curricula/programs are you using this year (2014–15)?</td>
<td>Indicate whether you are using the curricula/programs as primary or support materials.</td>
<td>2015 and 2017: the materials that teachers indicated using as “primary materials” AND those that teachers said they used regularly</td>
</tr>
<tr>
<td></td>
<td>[List of instructional materials with response scale: Primary Material/Support Material]</td>
<td></td>
<td>2016 and 2017: the materials that teachers indicated using “often (once a week or more)” or “daily or almost daily” AND those that teachers said they used regularly</td>
</tr>
<tr>
<td>2016</td>
<td>Please indicate the frequency with which you draw upon the following instructional materials for your [mathematics/ELA] classroom lessons this year (2015–16), including those you or your district have developed.</td>
<td>[List of instructional materials with response scale: Never use this source or never heard of it/Rarely (1x per month or less)/Occasionally (2–3x per month)/Often (1–2x per week)/Daily or almost daily (3–5x per week)]</td>
<td>2016 and 2017: the materials that teachers indicated using as “primary materials” AND those that teachers said they used regularly</td>
</tr>
<tr>
<td>2017</td>
<td>Please indicate which instructional resources you have drawn upon regularly (i.e., once a week or more) for your [mathematics/ELA] classroom lessons this year (2016–17).</td>
<td>[List of instructional materials with check boxes for teachers to indicate if they have used them regularly]</td>
<td>2016 and 2017: the materials that teachers indicated using “often (once a week or more)” or “daily or almost daily” AND those that teachers said they used regularly</td>
</tr>
</tbody>
</table>

### Online Instructional Material Survey Items

<table>
<thead>
<tr>
<th>Year</th>
<th>Description</th>
<th>Response Scale</th>
<th>What is compared?</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>In a typical month, how frequently do you consult the following online resources for ideas and/or materials to integrate into your instruction?</td>
<td>[List of online instructional materials with response scale: Never use this source or never heard of it/Less than once a month/1–2 times a month/3–4 times a month/2–3 times a week/Daily]</td>
<td>2015 and 2017: the materials that teachers indicated using as 2–3 times a week or daily AND those that teachers said they used regularly</td>
</tr>
<tr>
<td>2016</td>
<td>N/A—Not asked</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td>Please indicate which instructional resources you have drawn upon regularly (i.e., once a week or more) for your [mathematics/ELA] classroom lessons this year (2016–17).</td>
<td>[List of instructional materials with check boxes for teachers to indicate if they have used them regularly]</td>
<td></td>
</tr>
</tbody>
</table>

### Math Knowledge of Content Standards by Grade

<table>
<thead>
<tr>
<th>Year</th>
<th>Description</th>
<th>Response Scale</th>
<th>What is compared?</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>N/A—Not asked</td>
<td></td>
<td>2016 and 2017: the number of teachers that selected only the standards-aligned choices for at least one grade level</td>
</tr>
<tr>
<td>2016</td>
<td>Some versions of content standards emphasize particular topics or work (called “major work” or “standards clusters” in the Common Core State Standards) in each grade. Which of the following major topics are emphasized in each indicated grade, according to your standards for mathematics? Check all that apply for each grade.</td>
<td>[4 options for each grade level K–8, algebra and geometry and an “I don’t know” option]</td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td>Same as 2016</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Math Knowledge: Ordering Standards by Grades

<table>
<thead>
<tr>
<th>Year</th>
<th>Description</th>
<th>Response Scale</th>
<th>What is compared?</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>N/A – Not asked</td>
<td></td>
<td>2016 and 2017: the number of teachers who provided the standards-aligned response in each age group</td>
</tr>
<tr>
<td>2016</td>
<td>The following three standards address measurement and data across three separate grades. Please order these standards according to which would come in the earliest grade to the latest grade.</td>
<td>[Three standards followed and were different for the following sets of grades: K–2, 3–5, 6–8, and 9–12]</td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td>Same as 2016</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Math Knowledge: Selecting Aspects of Rigor Targeted by Standards

<table>
<thead>
<tr>
<th>Year</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>N/A—Not asked in a way that was consistent with 2016 and 2017</td>
</tr>
</tbody>
</table>
| 2016 | Content standards are often intended to address three types of student learning (sometimes called “aspects of rigor” in relation to the Common Core State Standards):  
- Conceptual understanding: students know the meaning behind the math,  
- Procedural skill and fluency: students can quickly and accurately perform operations, and  
- Application: students apply their skills and knowledge in real world situations  
Examine each standard carefully and check which of the above types of learning—or aspects of rigor—you would particularly target in a lesson focused on this standard. [Eight standards followed and were different for the following sets of grades: K–2, 3–5, 6–8, and 9–12] |
| 2017 | Same as 2016 |

What is compared: 2016 and 2017: the number of teachers who provided the intended aspect of rigor for standards in each age group.

### ELA Knowledge on Selecting Texts Based on Standards

<table>
<thead>
<tr>
<th>Year</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>N/A—Not asked in a way that was consistent with 2016 and 2017</td>
</tr>
</tbody>
</table>
| 2016 | Which of the following approaches for selecting texts for reading aligns with your state's English language arts and literacy standards? Check all that apply.  
☐ Using abridged or adapted versions of complex texts for struggling readers  
☐ Assigning complex texts that all students in a class are required to read  
☐ Selecting texts for individual students based on their reading level  
☐ Selecting texts for a class based on qualitative factors like knowledge demands, as well as quantitative factors like word and sentence length  
☐ Other approach (please describe)  
☐ I don't know |
| 2017 | Same as 2016 |

What is compared: 2016 and 2017: The number of teachers who selected each approach.

### ELA Knowledge on Your State's Approach to ELA Standards

<table>
<thead>
<tr>
<th>Year</th>
<th>Description</th>
</tr>
</thead>
</table>
| 2015 | Which best describes the approach of your state's English language arts and literacy standards for teaching English language arts?  
- Teach particular novels, books, short stories, essays, and poems that students should read, and then organize instruction around them, teaching a variety of reading skills and strategies as tools for students to understand text  
- Focus on reading skills and strategies first (e.g., main idea, summarizing, author’s purpose) and then organize teaching around them, so that students will apply these skills and strategies to any book, short story, essay, or poem they read  
- Other approach (please describe):  
- I don't know |
| 2016 | Same as 2015 |
| 2017 | Same as 2015 |

What is compared? 2015 and 2017: The number of teachers who selected each approach.  
2016 and 2017: The number of teachers who selected each approach.
### Math Instructional Practices

<table>
<thead>
<tr>
<th>Year</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>N/A—not asked in a way that was consistent with 2016 and 2017 surveys</td>
</tr>
<tr>
<td>2016</td>
<td>Think about a lesson you taught this past week that is typical of or similar to most lessons you teach over the course of the year. In that lesson, how often did your students engage in the following practices during class? [List of practices with response scale: Not at all/To a slight extent /To a moderate extent /To a great extent]</td>
</tr>
<tr>
<td>2017</td>
<td>Same as 2016</td>
</tr>
</tbody>
</table>

**What is compared?** 2016 and 2017: mean of the scale and those teachers who selected “To a great extent” in both years.

### ELA Instructional Practices

<table>
<thead>
<tr>
<th>Year</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>N/A—not asked in a way that was consistent with 2016 and 2017 surveys</td>
</tr>
<tr>
<td>2016</td>
<td>Think about a lesson you taught this past week that is typical of or similar to most lessons you teach over the course of the year. In that lesson, how often did your students engage in the following practices during class? [List of practices with response scale: Not at all/To a slight extent /To a moderate extent /To a great extent]</td>
</tr>
<tr>
<td>2017</td>
<td>Same as 2016</td>
</tr>
</tbody>
</table>

**What is compared?** 2016 and 2017: mean of the scale and those teachers who selected “To a great extent” in both years.

<table>
<thead>
<tr>
<th>Year</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>Not asked</td>
</tr>
<tr>
<td>2016</td>
<td>In a typical lesson, please respond about the percentage of time you are engaging students in the following activities during class. Percentages do not need to add up to 100, as some items may overlap. [List of activities with response scale: Never use/1–25% of a typical lesson/26–50% of a typical lesson/51–75% of a typical lesson/76–100% of a typical lesson]</td>
</tr>
<tr>
<td>2017</td>
<td>Same as 2016</td>
</tr>
</tbody>
</table>

**What is compared?** 2016 and 2017: mean of the scale and teachers who selected 51–75% or more of a typical lesson in both years.
Appendix B. March 2017 Descriptive Results

FIGURE B.1
Mathematics Teachers Reporting Instructional Materials Used Regularly (i.e., Once a Week or More) for Their Classroom Lessons in the 2016–2017 School Year (N = 618)
FIGURE B.2
English Language Art Teachers Reporting Instructional Materials Used Regularly (i.e., Once a Week or More) for Their Classroom Lessons in the 2016–2017 School Year ($N = 764$)
FIGURE B.3
English Language Arts and Mathematics Teachers Reporting Online Materials Used Regularly (i.e., Once a Week or More) for Their Classroom Lessons in the 2016–2017 School Year (N = 1382)

<table>
<thead>
<tr>
<th>Website</th>
<th>Mathematics teachers</th>
<th>ELA teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacherspayteachers.com</td>
<td>56%</td>
<td>52%</td>
</tr>
<tr>
<td>Google.com</td>
<td>34%</td>
<td>47%</td>
</tr>
<tr>
<td>Pinterest.com</td>
<td>37%</td>
<td>43%</td>
</tr>
<tr>
<td>Readworks.org</td>
<td>0%</td>
<td>25%</td>
</tr>
<tr>
<td>Readwritethink.org</td>
<td>0%</td>
<td>31%</td>
</tr>
<tr>
<td>Newsela.com</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>State department of education website</td>
<td>19%</td>
<td>15%</td>
</tr>
<tr>
<td>Khanacademy.org</td>
<td>27%</td>
<td>11%</td>
</tr>
<tr>
<td>EngageNY.org</td>
<td>18%</td>
<td>10%</td>
</tr>
<tr>
<td>Achievethecore.org</td>
<td>7%</td>
<td>5%</td>
</tr>
<tr>
<td>LearnZillion.com</td>
<td>11%</td>
<td>5%</td>
</tr>
<tr>
<td>Corestandards.org</td>
<td>10%</td>
<td>5%</td>
</tr>
<tr>
<td>Teachingchannel.org</td>
<td>5%</td>
<td>3%</td>
</tr>
<tr>
<td>NCTE.org</td>
<td>0%</td>
<td>4%</td>
</tr>
<tr>
<td>Sharemylesson.com</td>
<td>3%</td>
<td>2%</td>
</tr>
<tr>
<td>Illuminations.nctm.org</td>
<td>11%</td>
<td>0%</td>
</tr>
<tr>
<td>K-5mathteachingresources.com</td>
<td>8%</td>
<td>0%</td>
</tr>
<tr>
<td>Illustrativemathematics.org</td>
<td>8%</td>
<td>0%</td>
</tr>
</tbody>
</table>
FIGURE B.4
English Language Arts Teachers Indicating Which Approaches for Selecting Texts They Perceived as Aligned with Their Standards in 2017 (N = 764)

- Selecting texts for individual students based on their reading level: 81% (Elementary), 56% (Secondary)
- Using abridged or adapted versions of complex texts for struggling readers: 43% (Elementary), 64% (Secondary)
- Assigning complex texts that all students in a class are required to read: 28% (Elementary), 52% (Secondary)
- Selecting texts for a class based on qualitative factors like knowledge demands, as well as quantitative factors like word and sentence length: 27% (Elementary), 47% (Secondary)

FIGURE B.5
English Language Arts Teachers Indicating the Reading Approaches They Perceived as Aligned with Their Standards in 2017 (N = 764)

- Focus on reading skills and strategies first (e.g., main idea, summarizing, author’s purpose), and then organize teaching around them so that students will apply these skills and strategies to any book, short story, essay, or poem they read: 83% (Elementary), 62% (Secondary)
- Teach particular novels, books, short stories, essays, and poems that students should read and then organize instruction around them, teaching a variety of reading skills and strategies as tools for students to understand text: 30% (Elementary), 12% (Secondary)
- I don’t know: 5% (Elementary), 3% (Secondary)
- Other: 2% (Elementary), 3% (Secondary)
FIGURE B.6
Mathematics Teachers Engaging Students in Each Practice “To a Great Extent” in the 2016–2017 School Year (N = 618)

- **Use mathematical language and symbols appropriately when communicating about mathematics.**
  - Elementary teachers: 30%
  - Secondary teachers: 34%

- **Make sense of problems and persevere in solving them.**
  - Elementary teachers: 47%
  - Secondary teachers: 39%

- **Explain and justify their work.**
  - Elementary teachers: 48%
  - Secondary teachers: 38%

- **Use repeated practice to improve their computational skills.**
  - Elementary teachers: 24%
  - Secondary teachers: 32%

- **Apply mathematics to solve problems in real-world contexts.**
  - Elementary teachers: 25%
  - Secondary teachers: 30%

- **Choose and use appropriate tools (e.g., pencil and paper, concrete models, a ruler, software) when solving a problem.**
  - Elementary teachers: 22%
  - Secondary teachers: 23%

- **Look for and make use of structure (e.g., patterns in numbers, shapes or algorithms).**
  - Elementary teachers: 12%
  - Secondary teachers: 14%
FIGURE B.7
English Language Arts Teachers Engaging Students in Each Practice “To a Great Extent” in the 2016–2017 School Year (N = 764)

FIGURE B.8
2017 English Language Arts Teachers Reporting Student Engagement in Each Activity for More than Half of a Typical Lesson (N = 764)
References


CCSSI—See Common Core State Standards Initiative.


Liben, David, and Meredith Liben, “‘Both and’ Literacy Instruction K–5: A Proposed Paradigm Shift for the Common Core State Standards ELA Classroom,” Achieve the Core, website, September 11, 2013. As of September 21, 2017: https://achievethecore.org/page/687/both-and-literacy-instruction


About This Report

In this report, researchers at the RAND Corporation use data from surveys of the American Teacher Panel in 2015, 2016, and 2017 to provide evidence of change in teachers’ knowledge of their state standards and their standards-aligned practices. To ensure geographic representation, panel members were sampled randomly from across the nation. The population for this sample included full-time public school teachers in grades K–12 in all subjects, including teachers of special education students and English-language learners.

This research was undertaken by RAND Education, a unit of the RAND Corporation that conducts research on prekindergarten, K–12th grade, and higher education issues, such as assessment and accountability, choice-based and standards-based school reform, vocational training, and the value of arts education and policy in sustaining and promoting well-rounded communities. This study was sponsored by the Leona M. and Harry B. Helmsley Charitable Trust. For more about RAND Education, visit www.rand.org/education. For more about the RAND American Teacher Panel and how you could take advantage of this resource, see www.rand.org/education/projects/atp-asp.

More information about RAND can be found at www.rand.org. Questions about this report should be directed to Julia_Kaufman@rand.org, and questions about RAND Education should be directed to education@rand.org.

Acknowledgments

The authors thank the American Teacher Panel research team for their assistance with this survey and these data, including David Grant, Michael Robbins, Claude Messan Setodji, and Gerald Hunter. We would also like to thank Morgan Polikoff and Elaine Wang for their careful and comprehensive review of the manuscript. Lastly, we would like to thank the American Teacher Panel teachers for taking time to respond to our surveys and provide their insights.