



GETTING DOWN — TO FACTS II —

Technical Report

Insights on Standards Implementation in California's Schools

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About: The *Getting Down to Facts* project seeks to create a common evidence base for understanding the current state of California school systems and lay the foundation for substantive conversations about what education policies should be sustained and what might be improved to ensure increased opportunity and success for all students in California in the decades ahead. *Getting Down to Facts II* follows approximately a decade after the first *Getting Down to Facts* effort in 2007. This technical report is one of 36 in the set of *Getting Down to Facts II* studies that cover four main areas related to state education policy: student success, governance, personnel, and funding.

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Policy Analysis for California Education

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WestEd is a nonpartisan, nonprofit research, development, and service agency that works with education and other communities throughout the United States and abroad to promote excellence, achieve equity, and improve learning for children, youth, and adults. WestEd has more than a dozen offices nationwide, from Massachusetts, Vermont, Georgia, and Washington, DC, to Arizona and California, with headquarters in San Francisco.

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“There needs to be time over the summer or some down time where [teachers] are not trying to teach the curriculum and learn it at the same time. There needs to be time allotted for them to actually get to know the materials. Get to plan lessons together, and look at them, and ask questions. That needs to be over a series of weeks. It just can’t happen at the same time that you’re also trying to teach and introduce those things to your students, because you’re the learner and you’re teaching at the same time. It is difficult if you’re trying to roll something out and roll it out with some sense of value and purpose and meaning.”

— California School Principal

I. Introduction

Since 2012, the implementation of revised academic standards, based on the Common Core State Standards, in California has taken place at the same time as concerted efforts to substantially modify the state’s K–12 funding model, implement a significant shift toward local control, and retool summative assessments of student learning with the California Assessment of Student Performance and Progress (CAASPP). The implication — for school districts in California — has been that internal professional learning systems and structures needed to be designed and redesigned to support these major changes. At the core of the redesign efforts has been a most fundamental challenge: How should teachers learn to align their instruction, every day, in every class, in every lesson, for every student with the new subject-matter content and instructional-practice standards?

From the outset, we caution that “implementation” is a loaded word when applied to instructional standards; it may not be the best fit with how standards are integrated. For example, it is neither realistic to study empirically — nor particularly meaningful to ask — whether a particular standard was implemented or not. It is more helpful to ask whether the changes and shifts in how teachers, working within their schools and districts, have gradually aligned and delivered their instruction relative to the standards. Here, we document the ways in which teachers have taken on the challenge of this alignment and how the professional learning systems and structures around them have been redesigned to support the daily work of teaching students in specific and overlapping content areas.¹

In observing how professional learning systems and structures change, recent research suggests that on-the-job collaboration among teaching peers is not only vital to building teachers’ capacity to initiate standards-driven instructional shifts, but also that such collaborations should be focused and inquiry-based (e.g., Darling-Hammond, Hyler, & Gardner, 2017; Johnston & Tsai, 2018). For example, more in-depth lesson study and collaborative analysis of student work can open teachers’ eyes about the degree of instructional shifts

¹ We also acknowledge that teachers differentiate instruction within their classrooms to address their students’ disparate needs and that groups of students (particularly English learners or students with disabilities) encounter the standards in very different ways. Moreover, California’s revised academic standards in different content areas have been adopted on different timelines and represent varying departures from the preceding sets of learning expectations.

required by new college- and career-ready standards, and teachers are more likely to revise their practices when their collaborative work is “focused on designing, adapting, and improving specific instructional plans and students’ work, rather than more superficial discussions of practice” (Stosich, 2016, p. 1725). And given principals’ important role in setting the direction for teacher collaboration, it makes sense to provide training and support for principals to effectively lead the work of teacher teams as well as to learn from the efforts of their administrator peers (Johnston, Kaufman, & Thompson, 2016; Stosich, 2016).

In this paper, we present qualitative data — vignettes — that describe how the professional learning systems and structures have changed for some of California’s educators in recent years: organization of teachers within schools as professional learning hubs, management by school principals of the instructional mission, navigation by curriculum and instruction teams within districts, and models of support by providers including county offices of education (COEs). Key questions include:

1. How have school districts designed and implemented professional learning systems to support teachers through the transition to the new standards?
2. What has been the role of support initiatives for school principals during these years of standards implementation? Are there particular models of support for school leaders that have surfaced that show promise?
3. How have the resources that the California Department of Education (CDE) has built around standards implementation found their way into the field?

This paper presents information from several sources. We have organized the paper around data reporting from several surveys, three case studies of field-based implementation, and the authors’ reflections on a broad set of network structures and technical assistance strategies in California that support standards implementation initiatives. Our conclusions are based on converging results from these different data sources and lead to our providing recommendations for ongoing implementation support across California in the future.

II. Data Sources

Over the past several years, WestEd has been fortunate to be involved in data collection efforts that support the information presented in this paper. Those data include statewide surveys of California teachers and principals on the implementation arc of the state’s English language arts (ELA) and mathematics standards. These data have been collected through formal surveys, focus groups, and document collections. Some of the data have allowed for longitudinal patterns to be studied across common respondents (e.g., as described here in the

Math in Common^{®2} and Leading with Learning³ district case studies); others have focused on particular implementation approaches that have been reported by teachers and principals. As well, our involvement in significant work with the California County Superintendents Educational Services Association (CCSESA) has allowed us to partner with COE teams that span all geographic regions in the state; through that endeavor we have some insights on the variation of implementation across urban and rural parts of California in math and science. In all cases, our partners in this work have been eager to see the results of what we have learned disseminated broadly.

Our most robust set of survey data is the result of work as the California Data Partner on the Gates Foundation's (multistate) Measure to Learn and Improve (MLI) project. In 2016/17, the MLI project partnered with the RAND Corporation to add a set of California-specific standards implementation questions to RAND's ongoing American Teacher Panel (ATP) and American School Leader Panel (ASLP) surveys. Designed to survey the same educators at regular intervals over time, RAND's ATP/ASLP samples were stratified to be representative across grade spans, enrollment, poverty status, and geographic region. Panels of California teachers and principals were surveyed in October 2016 (regarding their experiences during the 2015/16 school year) and in May 2017 (regarding 2016/17).⁴ Those survey data were made available to WestEd, some of which are presented in this paper.

In addition, WestEd's Center for the Future of Teaching and Learning conducted a series of focus groups in fall 2017 with 30 principals across four areas of the state: Yuba City, Fresno, San Francisco, and Long Beach. Selection criteria for the focus groups included the

² Math in Common[®] is a five-year initiative funded by the S. D. Bechtel, Jr. Foundation that supports a formal network of 10 California school districts (Dinuba, Elk Grove, Garden Grove, Long Beach, Oakland, Oceanside, Sacramento City, San Francisco, Sanger, and Santa Ana) as they are implementing the Common Core State Standards in mathematics across grades K–8. WestEd's research evaluating the Math in Common[®] initiative is available online at <https://www.wested.org/project/math-in-common-evaluation/>.

³ WestEd's Leading with Learning project supports teachers, instructional coaches, principals and other site leadership, and district leaders in preschool, elementary school, and middle school to improve teaching and learning around California's *English Language Arts/English Language Development [ELA/ELD] Framework* (Curriculum Framework and Evaluation Criteria Committee, 2015) in the Fresno, Sacramento City, Pajaro Valley, and Oakland school districts. More information about Leading with Learning is available online at <https://leadingwithlearning.wested.org/>.

⁴ The May 2017 ATP included 798 California teachers, of whom 482 (60 percent) responded, while the October 2016 ATP survey received responses from 281 (54 percent) of the 523 sampled California teachers. The May 2017 ASLP included 1,024 California principals, of whom 386 (38 percent) responded, while the October 2016 ASLP survey received responses from 45 (35 percent) of the 130 sampled California principals. (We do not reference the 2016 ASLP results in this paper.) Weighting, which accounts for differential sampling and non-response, was used to produce results representative of the state sample. Weights were based on a model for nonresponse that incorporates characteristics such as teacher subject and school level, region, size, and rate of free and reduced-price lunch eligibility. In turn, the survey results described in this paper have an approximate margin of error of ±6 percent.

representation of several principals within a district, primary and secondary school representation, and variation in tenure with an average of nine years.

III. Findings

As we explore the patterns in professional learning that have developed across California, the perspectives from teachers, principals, and district leaders provide converging insights into how professional learning systems and structures have evolved, practically, to meet the challenges of implementing the new standards.

Teachers

To examine our first question, we turn to the ATP survey data to enable us to not only analyze patterns described by teachers in the 2016/17 school year but also provide some comparison with data from previous years to explore how the last several years have evolved.

How have school districts designed and implemented professional learning systems to support teachers through the transition to the new standards?

- **Improving supports for teachers.** In separate questions on the May 2017 ATP surveys, approximately two out of three California teachers agreed that their training and professional development on the revised California academic standards has been of high quality (67 percent agreed) and that their school or district provides adequate professional learning opportunities to support their school's implementation of state standards (66 percent). Results also reflected teacher satisfaction with the resources being dedicated to standards implementation, with 73 percent of teachers agreeing that their school or district leaders provide them with "adequate resources" and 58 percent indicating that they are provided "adequate time" to support implementation of the California standards. In a parallel question on the prior October 2016 ATP surveys, 51 percent of California teachers reported having adequate time in 2015/16 (Makkonen & Sheffield, 2017).
- **California teachers report engaging in more site-based professional learning with their fellow teachers,** with increasing proportions meeting with or working with peers and observing another teacher's classroom. When asked about their professional learning experiences via the ATP survey, approximately 2–3 percent more California teachers reported meeting with other teachers to discuss state standards and instruction, working with other teachers to develop materials or activities, and reviewing student assessment data with other teachers to make instructional decisions during the 2016/17 school year than during 2015/16. Results indicated that peer observation increased more substantially, with 54 percent of California teachers reporting that they observed another teacher's classroom to get ideas for their own instruction or to offer feedback in 2016/17, up from 45 percent in 2015/16 (Makkonen & Sheffield, 2017).

- Teacher leaders in California support collaboration and influence instructional practice.** On the two most recent ATP surveys (reporting on the 2015/16 and 2016/17 school years), 65 percent of California teachers agreed that their school “cultivates a cadre of teacher leaders” (defined as “teachers who influence instructional practice at your school”) to make progress in implementing state standards. And approximately two out of three California teachers agreed that the teacher leaders at their schools provided effective support for peer collaborations — 68 percent agreed that teacher leaders provided adequate expertise and effective guidance during peer collaborations, and 64 percent agreed that teacher leaders provided materials, tools, or equipment that helped them work together more effectively (Makkonen & Sheffield, 2017).
- California teachers’ professional learning is often delivered via peer collaboration.** On the May 2017 ATP surveys, 82 percent of California teachers agreed that their school convenes grade-level teams, professional learning communities (PLCs), or other teacher teams to support the implementation of state standards.⁵ WestEd’s corroborating research in districts with strong standards implementation plans found that professional learning activities are routinely attended by principals, teachers on special assignment, and district administrators. Most of these activities emphasize planning for, implementing, and reflecting on classroom instructional strategies, with new teaching strategies pilot tested and shaped by teacher feedback (Perry et al., 2017).
- Teachers want time and space to work together to practice improving instruction.** To that end, teachers routinely seek examples of what excellent teaching of the standards looks like (Rentner et al., 2016). Survey data confirm that teachers are in fact collaborating to review and plan instruction. On the May 2017 ATP survey, 60 percent of California teachers indicated that they have sufficient opportunities to collaborate with other teachers, and 65 percent agreed that their school leaders provide opportunities for teachers to discuss understandings of the revised California academic standards across grades and content areas. Other data suggest that local supports for teacher collaboration is increasing as well. Following the 2015/16 school year, only 39 percent of California teachers agreed that their school provided teachers with adequate time in the school day to collaborate with peers, and only 47 percent agreed that their school leaders ensured that teachers have adequate expertise and guidance for collaborations. After the 2016/17 school year, 50 percent and 58 percent of responding California teachers agreed with these same two statements respectively (Makkonen & Sheffield, 2017).

Principals

Data from recent principal surveys and focus groups provide us with an opportunity to not only corroborate the perspectives shared by teachers but also further examine how school

⁵ Some California districts have also engaged in external partnerships with universities to advance standards-driven instructional shifts in classrooms, with partners including the University of California, Irvine math project and open online courses from Stanford University.

leadership enables the professional learning *systems and structure* to evolve practically. Principals generally have positive perceptions of the professional development they have received around the revised state academic standards. In this section, we rely on data from administrators responding to the May 2017 ASLP and Math in Common® district surveys to answer our next question:

What has been the role of support initiatives for school principals during these years of standards implementation? Are there particular models of support for school leaders that have surfaced that show promise?

In the ASLP surveys of California principals in May 2017, the most common professional development activities reported in the past 12 months were conferences/workshops (78 percent), visits to other schools (67 percent), participation in a principal network (61 percent), and formal mentoring or peer coaching (58 percent). ASLP respondents also indicated that the transition to the revised California academic standards had less influence on the content of their 2016/17 professional learning activities than did their professional judgment or student achievement data. (Although the latter is purposefully linked to the standards.)

- **Most principals report their schools are prepared to implement the standards, except those who report needing instructional materials.** Over 90 percent of principals reported in the May 2017 ASLP surveys that their school is either *somewhat* or *very prepared* to put the revised California academic standards into practice (irrespective of their recent professional development activities); California’s elementary principals were slightly more confident of their preparedness than secondary principals. However, the principals who indicated that “higher quality textbooks, curricula and/or instructional materials that align with the new California academic standards” were one of their top five implementation needs more often rated their school as “not at all prepared” to put the standards into practice.
- **Majorities of principals assert that the professional development they receive is adequate.** Regarding the perceived quality and adequacy of professional development for principals, California principals generally appreciate the opportunities in which they are participating. For example, 76 percent of ASLP respondents in May 2017 agreed that their district provides adequate professional learning opportunities to support their school’s implementation of the revised California academic standards, with secondary principals agreeing in a slightly higher proportion than elementary principals. Demonstrating even stronger support, 73 percent of ASLP respondents agreed that “overall, [their principal] training and professional development for the California academic standards have been of high quality.”⁶ We note, at the same time, that it is possible that visiting other schools may expose inadequate professional development. A slightly lower proportion of the California principals who visited other schools in the

⁶ This result aligns with recent national research from the ASLP, which found that school leaders across the United States have generally viewed their on-the-job supports as valuable, particularly when focused on improving teacher instruction (Johnston, Kaufman, & Thompson, 2016).

past 12 months as a professional development activity agreed that their local education agency provides adequate professional development to support their school’s implementation of the revised California academic standards.

- **Administrative tasks still take up the most time for California principals.** In the May 2017 ASLP surveys, California principals were asked to identify how they apportion their time as a principal. California respondents reported spending a higher proportion of their time on administrative tasks (32 percent) than on curriculum- and teaching-related tasks (24 percent), on average.⁷ Interestingly, the amount of time that California principals reported spending on curriculum- and teaching-related tasks did not vary depending on their recent professional development activities. Principals’ perceptions of their preparedness to implement standards were associated with how much time they apportioned to supporting instruction. For example, principals who reported spending 15 percent or less of their time on curriculum- and teaching-related tasks tended to view their schools as less prepared to put the revised California academic standards into practice.
- **Observation time and teacher collaboration are priorities.** When asked on parallel questions to indicate the things they need most to effectively support implementation of the revised California academic standards at their school, two of the top responses among principals on the spring 2017 ASLP and Math in Common[®] surveys were more time to observe teachers teaching in their classroom (ranked first on ASLP, third on Math in Common[®]) and more opportunities for teacher collaboration (second on ASLP, first on Math in Common[®]). The second-most cited need among Math in Common[®] principals was more information on how to use Smarter Balanced assessment results to support teaching and learning. On both surveys, a firmer understanding of the state standards and frameworks was among principals’ lowest-reported needs.

Furthermore, principals who were being mentored more commonly requested more time to observe teachers than access to standards-aligned materials. On the May 2017 ASLP surveys, a higher percentage of California principals who indicated that they participated in mentoring or peer observation and coaching in the past 12 months rated “more time to observe teachers” as a top implementation need, and a lower percentage rated standards-aligned materials as a top need.

WestEd’s fall 2017 focus groups with California principals investigated the role they played in providing support to teachers during these years of standards implementation. Are there particular promising models of support — examples of changes to *professional learning systems and structures* — that these school principals have surfaced for their teachers? We note some of those structures and indicative reflections from the focus group participants:

⁷ A higher proportion of California secondary principals than elementary principals reported spending a significant portion (i.e., 30–70 percent) of their time on curriculum- and teaching-related tasks.

- Principals frequently described how their district engages in **collaborative instructional planning processes around priority/essential standards** and “unpacking” and “drilling down” with teachers on the units, lesson plans, and pacing guides to teach those essential standards in classrooms. Several explained how they have revised their school’s master schedule to enable common planning time for teachers in the same department.

“I think the best thing I can do is get teachers together. They work. They come up with great ideas. They work well as a grade level. Once a week, they meet in a PLC. That’s one thing, an hour- or two-hour thing, that they design themselves. That’s probably the best thing, just keep them together. Give them the data and give them the time, and they can come up with some great things.”

- Principals reported that **district-level curriculum and instruction specialists are supporting them by modeling standards-driven instructional shifts** in their schools. Examples include leading PLCs, observing classrooms, and tracking the pacing of units focused on targeted standards. These district instructional leaders communicate with principals to note gaps and strategize next steps in teacher support (including learning walks or refinement of lesson design approaches). However, these specialists often have a large portfolio of schools to support and are in short supply.

“In principal meetings we’re collaborating together, and it’s all based around data. We just had a [principals’] meeting where we all brought data from the same assessment, which was something we’d never done before . . . that was interesting. I don’t think it was perfect, but we’re working and we’re getting there. Shifting from the million other things we talk about to having it center around [standards], this is definitely the focus now.”

- Although frequently reported in short supply, principals emphasized their **reliance on instructional coaches, teachers on special assignment, or other teacher leaders** to drive classroom improvements. To that end, principals emphasized the need for more peer observation and instructional modeling among teachers as well as increased opportunities for teachers to collaborate to review benchmark assessment results, plan lessons, and examine student work.

“It’s important to carve out time so teachers can observe some of their peers . . . [and to consider] the goal in having peer observations. ‘What are you going to bring back? What feedback are you going to give in your debrief?’ I think that’s something that we need to be more consistent with. Those teachers who are willing to do that can sharpen each other’s skills.”

“We’ve created time this year, for the first time ever, where we have collaboration days districtwide — 20 minimum days through the year — where our teachers get to meet and look at and focus on the standards. . . . They use that time to review their common formative assessments, to figure out what the kids need.”

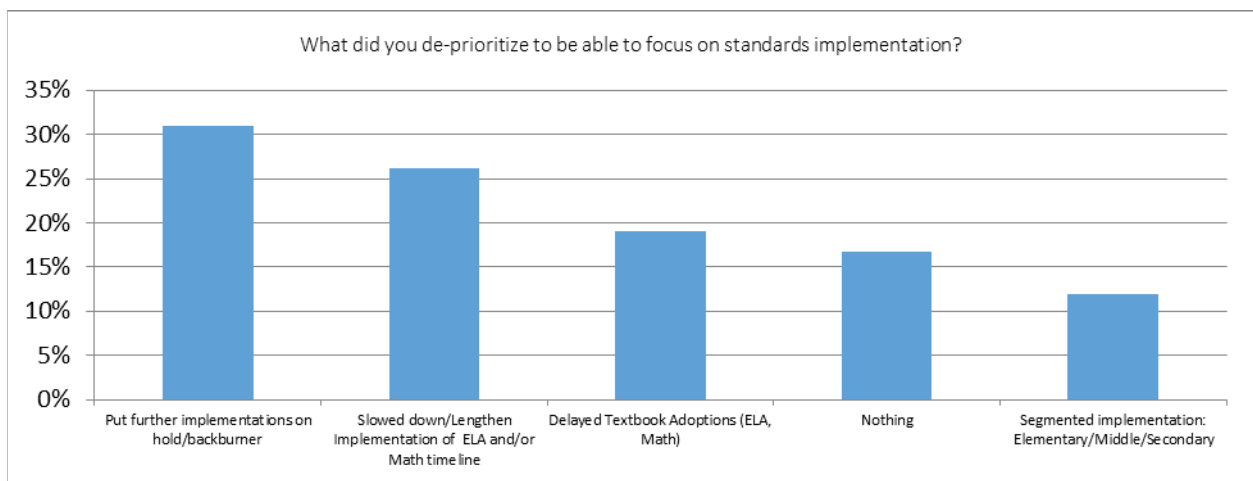
The surveys and focus group data, presented so far, provide relatively consistent information about how teachers and principals view the transition to the new standards. In general terms, teachers in California have expressed positive views about their adjustment to the standards. Principals, in turn, are providing (and have provided) any number of opportunities that enable teachers the opportunity for meaningful collaboration to transform instructional practice to meet the new standards. At the same time, principals in focus groups also cited barriers to making progress faster, including challenges related to finding quality substitute teachers and implementing rigorous, introspective, teacher-owned PLCs; a perceived overload of initiatives and resources; and educators’ inexperience and/or discomfort with honestly sharing their needs and practices with peers.

District Superintendents and Curriculum and Instruction Leaders

One more source of information can be added to the mix — each school year the Center for the Future of Teaching and Learning at WestEd completes interviews with over 40 *school district leaders* throughout the state to understand the current capacity and constraints within districts to support teachers through implementation of the revised California academic standards in ELA and mathematics and the Next Generation Science Standards (NGSS). District superintendents and directors of curriculum and instruction participate in a one-hour phone interview. The districts chosen were representative of the state, controlling for location (urban, suburban, town, or rural), race/ethnicity, free and reduced-price lunch eligibility and English learner percentages, and pupil/teacher ratios. Overall, district leaders spoke about how to balance resources and professional development needs and about measuring results to refine instruction within the restrictions of budgets and contracts and professional commitment.

Figure 1 displays the results when these district leaders answered the question, “What did you de-prioritize to focus on standards implementation?”

Figure 1. District Leaders’ Response to Standards Implementation Tradeoffs, 2017/18



As shown, districts most frequently indicated that they did not have the capacity for further implementations, such as with NGSS. One district leader said, *“Science [is] put on back burner. . . . Now with NGSS we will not de-emphasize ELA and math. [There is] not enough time in the day to do all work.”* Another district leader states, *“Science is getting the least attention. Social studies is the forgotten stepchild. Math is not getting as much attention and professional development.”* The slowing down of ELA and/or math standards implementation took a variety of forms.

- **Focusing on key areas within a subject matter.** A district leader stated, “We focused on ELA. We prioritized higher-level thinking, close reading, and application, and urged teachers to set aside some drill-based activities and classroom practices that were more focused on memorization of facts and procedures.” Another district leader stated, “We’ve moved to structured level of reading groups because we observed from our data that we had a lot of kids that weren’t reading on grade level by grade 3. We believe that reading is really the access to all the content areas, so we have a huge focus on reading by third grade. Then the second one is we’ve had a change of practice in our middle school math implementation where we’re using a lot more collaborative facilitated group work to encourage student voice and to really leverage the knowledge that kids have among themselves to increase their learning.” Several district leaders cited data being a driving force in terms of developing priorities, strategies, and professional development plans. However, how data and assessment are used was inconsistent across districts interviewed.
- **Concentrating on “unpacking the standards.”** As the assessments rolled out, districts found there was misalignment between instruction and the standards, which required districts to go back to “unpacking the standards.” As one district described, the goal is to *“assess what the teacher’s understanding of the standards [is] so they can unpack them, unravel them, unwrap them, whatever the term is, and really focus on the tier two vocabulary so they can use that as a gauge to check for understanding in the classrooms.”*

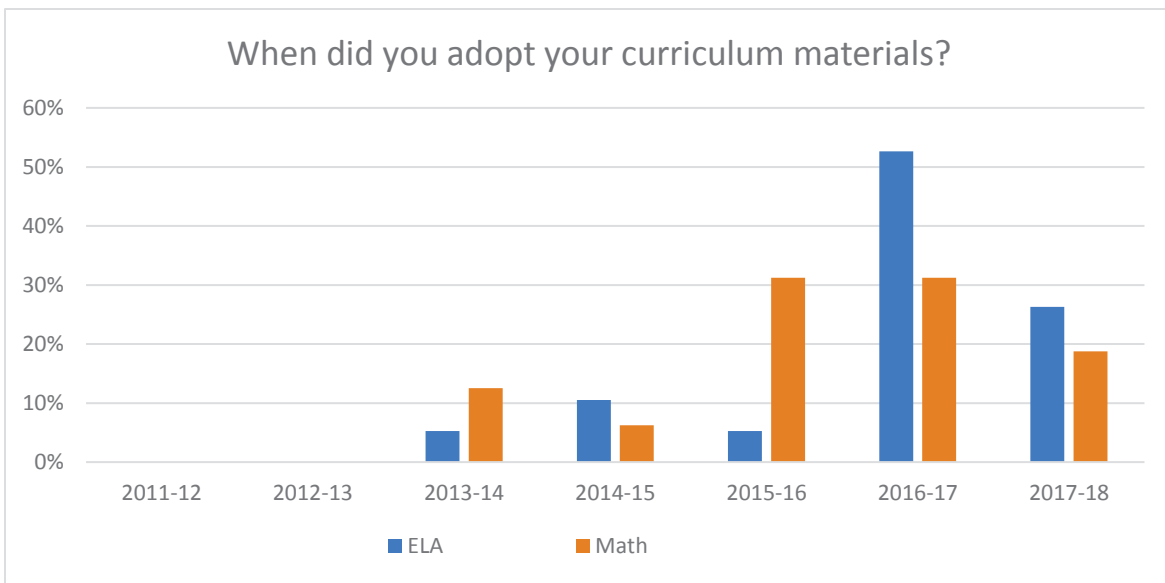
All districts who described “unpacking the standards” stated that, had the concentration on the standards occurred earlier, they believe the transitions would have been more effective. Conquering the instructional shifts was a key gap many identified as a major priority, but understanding the standards first, in retrospect, appears to be a more effective starting point (which some districts did follow).

- **Addressing change in pedagogy and mindset.** The change in pedagogy and instructional practices has in some ways been a double-edged sword for teachers. Some respondents said teachers are not really understanding the pedagogy associated with the standards and may be “unwilling” to change. On the one hand, it has given teachers the freedom “to teach” and, on the other hand, has forced seasoned teachers to adjust to new routines. The new pedagogical practices have also complicated the transition for new teachers. And while math was a major source of discussion around standards implementation, ELA was more balanced. Many of the district respondents stated that

the transition to the new ELA standards was less difficult than the transition to the math standards because of the ELA standards' closer alignment with previous standards.

- **Delaying textbook adoptions.** The availability of standards-aligned materials has been a major stumbling block in both implementation and textbook adoptions. Because aligned instructional materials were slow to develop, or alignment in new materials seemed inadequate, some districts developed their own units of study for ELA and math. Because instructional units took up to two years for districts to develop, the focus and rigor of the units developed have invited more scrutiny, and possible delay in implementation or rejection, due to externally published materials now on the market. On the other hand, many districts cited the time spent developing the units as one of the best professional learning opportunities for achieving standards alignment and understanding the associated aligned instructional practices. Figure 2 below illustrates the lag in the adoption of math materials and the relatively steady adoption of ELA over the past several years as aligned materials became increasingly available.

Figure 2. District Leaders' Reporting of Math and ELA Instructional Materials Adoption, 2017/18



Finally, the third central question in this paper explores how state resources are being used:

How have the resources that the CDE has built around standards implementation found their way into the field?

Our study has limited information to answer this question, with the greatest insights coming from focus groups. Most principals in the focus groups described how they were initially unaware of where to find, and how to use, state resources that support standards implementation. They cited difficulty navigating the CDE website and the density of the materials they did find. However, once state resources were located (or provided to them) and professional development was delivered around how to use them, principals saw the resources

as helpful examples of standards-aligned instruction and pedagogy. For example, principals most often mentioned the California Curriculum Frameworks as both the most helpful resource and the most dense. As a result, they at times described them as challenging for teachers to use.

“They [the CDE] actually gives you samples of what the student writing expectation is. With the old ones, they would say, ‘Do these things.’ Now to the question of, ‘Okay, teachers. This is what we’re supposed to shoot for.’ The state has very clear student writing samples. That should be your guide. You don’t find that unless you know it is there and actually read the standards because it is in the appendices. I feel bad for the state because I think they have provided more than you think and we don’t know how to access and get it, and as a consequence, are probably missing out.”

Following the California Curriculum Frameworks, principals mentioned the California dashboard, the digital library, and test preparation resources as the most used CDE resources. A common thread throughout all the principal focus groups was discussion around the difficulty of finding state resources on the CDE website, stumbling across state resources, and reliance on COE staff to provide the resource. The general consensus was that there is a need for more user-friendly navigation tools within the CDE website, supporting resources that are more easily accessible, and professional development for how to use them.

“The ELA and math frameworks have been helpful, especially with the examples they provide inside. You can compare those to your lesson or utilize some of those examples; that’s been helpful. Other resources on their website, the digital library, hit and miss. There are some really good performance tasks in there, and some things probably shouldn’t be there.”

We turn now to a set of three case studies to look at in-depth examples of standards implementation. One example is in math, one is in English, and one examines support for math and science capacity development through County Office of Education professional networks. What does it look like when the varied professional learning components reviewed here come together in the context of district practice? WestEd has partnered with groups of districts and counties across California working to shift, over several years, professional learning to implement the state’s new academic standards. The case studies signal the key lessons learned as professional learning *systems and structures* have slowly evolved to support ongoing attention to standards implementation.

Case Study 1: Principal Professional Development in a Math in Common® District

With the first release of statewide Smarter Balanced math assessment scores in 2015, Long Beach Unified School District leadership realized that something needed to change in classrooms and that principals had to play an important role in leading that change. The baseline year of Smarter Balanced scores revealed that all district schools performed more poorly in mathematics than in ELA. A district math office leader told us that “at every school, English outscored math.” The way the difference between math and ELA was presented to

staff, as though it were a given that math scores should always be lower, really highlighted the need to bring math to the forefront of the district’s work.

At the same time, while the district had provided professional development to every teacher in the district to support their new math curriculum adoption and standards implementation, district math office staff reported that their anecdotal evidence did not reveal instructional shifts in classrooms to the degree they wanted or felt necessary to achieve the standards. District leaders felt all teachers needed support in improving instruction and that site administrators had an especially important role to play in encouraging teachers to make instructional changes.

But even the best administrators may be challenged to lead math instruction if they are unfamiliar with the demands of the Common Core State Standards. Even principals who were formerly district math teachers and coaches reported feeling uncomfortable in a math leadership role because the Common Core State Standards and instructional approaches are so different from the way they themselves had formerly experienced and taught math. A secondary principal with whom we spoke told us, “It was really humbling.” Regardless of their own prior math-specific teaching and/or coaching experiences, each principal registered their own personal hesitations and “inadequacies” about providing instructional leadership for mathematics. Some principals reported feeling lost, especially regarding how to give instructional feedback to teachers. District leaders, recounting their trajectory of changing their principal professional learning opportunities, indicated that a starting point for them was in line with one principal’s comment: “I don’t know what I’m looking for [when I go into a math classroom].” District leaders concluded that, despite their best intentions, “the principals were really left behind with knowing how to supervise math and what changes [were] expected of teachers.”

To build system-wide and site-specific plans for math improvement that included both teachers and principals, district leaders knew they needed to draw on multiple district departments and organizational units and a range of staff from different levels of the system, including principals, principal supervisors, and staff in the math office. District leaders felt that, at least for the middle school principals, the path to improvement started with developing administrators’ knowledge of math instruction and then involving the principal with more regularity in math department activities. They posited that building this capacity and site-level collaboration would in turn support teacher collaboration and principals’ monitoring of instruction and quality of teacher feedback that principals were able to provide.

Principal Professional Development Structures

Principal professional development structures in the district vary by grade level, with some common and some unique opportunities offered to administrators at the elementary and secondary levels. At both levels, professional development initiatives use the common resource, *Principles to Actions*, from the National Council of Teachers of Mathematics (NCTM) to ground administrators’ learning about key mathematics teaching practices and the ways in

which these instructional elements can be identified in the classroom (NCTM, 2014). Drawing from this resource and others, administrator professional development at Long Beach Unified School District is organized into four interlocking structures: regular principals' and assistant principals' meetings (where math content-focused presentations are strategically included to support learning districtwide), side-by-side professional development with teachers, additional opportunities to practice, and, at the secondary level, leadership training involving principals and math department chairs working closely together.

One important part of the training is the focus on helping principals become more familiar with what mathematics instruction should — and should not — look like so that, when they are back at their school sites walking into classrooms, they are more aware of and can provide specific and targeted feedback to teachers about instruction. Monthly meetings have included opportunities for principals to view classroom video of mathematics instruction, to gather evidence of teaching practices the district is encouraging, and to compare and calibrate their evidence alongside peers from other schools and staff from the district's supervision and (math) curriculum departments.

In addition, at the secondary level, the district has organized what it calls the Administrator Training in Mathematics (ATM) half-day training sessions. Two critical features of the ATM structure make it different from principals' other training experiences. First, part of the structure involves observation in the selected math classrooms for 30 minutes, which is longer than the observations principals typically make for a formal district site-visit protocol (normally 10–15 minutes). These longer observations provide more extensive opportunities for principals to look for and cite evidence of each of the focal areas of the *Principles to Actions* observation instrument.

Another key aspect of the professional learning is the collaborative observation that principals engage in with others, including district math coaches, principals from other schools, principal supervisors or other district administrators, and assistant principals. Using a recording sheet and based on their own knowledge and experience, each participant gathers and cites evidence of the instructional practices, and afterward the group has another 20 minutes to discuss the evidence gathered from these multiple perspectives. Sharing these observations enables each participant to learn from others' perspectives on the commonly observed lesson and gives them an opportunity to “test out ideas and use the language of the practices.”

Once the evidence is gathered and shared, and the evidence has been considered and calibrated, the group together develops a rating and some suggestions for what feedback might be useful to provide to the teacher. To ease the pressure on principals in the first year of the ATM, the teacher feedback generated by the group was fine-tuned and delivered via email by one of the district math specialists rather than by the site principal. As such, the data from the ATM become actionable and useful, creating opportunities for learning both by the ATM participants and by the teacher whose class they observed.

Next Steps and Supports Still Needed

After reviewing principals' feedback from the prior year, in the 2017/18 school year the district has specifically tried to help K–8 and middle school principals focus their feedback to teachers more effectively on mathematics content. To do so, they have provided all principals with electronic access to scope-and-sequence and curriculum materials online. These resources include two that principals find especially useful: a high-level look at the math unit pacing for the year and more detailed unit guides that indicate the standards at play, the learning goals for students, and assessment evidence at the Smarter Balanced claim level. By digging into these online unit resources both during the meetings and on their own, principals become more aware of the specific math content they should see in a math classroom back at their school site. As one district administrator noted, "This [resource] is forcing our administrators to get down into the standards," although she acknowledges how important it was to first build administrators' comfort with observing and gathering evidence in math classrooms.

Standards Implementation Takeaway Ideas

- If math is to be a district priority, ensure that principals' training is aligned with that of other district stakeholder groups so everyone is on the same page with respect to the districts' goals and strategies for improvement.
- Build content-focused professional development into existing structures to optimize principals' limited time and enable learning across the school year. Organize additional learning requirements for principals as practical experiences that help them apply and improve their learning through experimentation and reflection.
- Experimentation will involve some risk-taking, and thus professional learning opportunities need to be created as "safe places to ask dumb questions," where individuals from different system departments and levels with diverse types of knowledge can reflect together to learn and build shared understandings and gain clarity about expectations.
- To nurture principals' understanding of classroom instruction, build professional development around classroom instruction and instructional goals. Clearly consider the acting theory about how principals' developing knowledge can and should contribute to improving math instruction.
- Provide math observation or reflection tools to help principals observe and gather evidence on specific elements of instruction of utmost interest to the district. Use such tools not for evaluative purposes but to support learning about instructional shifts, help principals build relationships with teachers, and create fodder for rich discussion among peers. To avoid overwhelm, streamline tools to focus attention on only a few instructional elements at a time.

Case Study 2: Leading with Learning: Systemically Transforming Teaching for English Learners

When California's new English Language Development (ELD) standards were released in 2012, few educators were prepared to implement them in their classrooms. These innovative

standards represented a new vision for the state’s 1.4 million English learners and a broader and deeper representation of ELD. While the extensive California K–12 *English Language Arts/English Language Development [ELA/ELD] Framework* provided the underlying theory, classroom exemplars, and instructional guidance to implement the ELD standards in tandem with ELA and other content standards, teachers still needed support putting the ideas into practice and making the necessary instructional shifts to ensure access and equity for English learners (Curriculum Framework and Evaluation Criteria Committee, 2015).

Fresno Unified and Sacramento City Unified School Districts were motivated to close persistent opportunity gaps, ensure their English learners were academically successful from the earliest years, and reclassify their English learner students as “English proficient” as quickly as possible. And so, they partnered with *Leading with Learning* and initially implemented the approach in 13 elementary schools across both districts. Originally funded in part by the U.S. Department of Education Investing in Innovation development grant, *Leading with Learning* was designed to address these goals to improve academic experiences and outcomes for English learners by simultaneously leveraging all parts of the district system: teachers, coaches, principals, and district leadership. Through a linked series of two-year courses, each level of the system plays a critical role in making necessary transformations toward educational equity for English learners.

Program Features

The teachers’ course, which is co-facilitated by the districts’ instructional coaches, includes intensive summer institutes and full-day sessions throughout the school year, which are complemented by site-based coaching. This professional learning — provided in whole schools and in multiple schools in the district — mirrors the type of teaching and learning called for by the new standards and frameworks: collaborative, integrated, intellectually rich, inquiry-based, culturally responsive, and equity-focused. Course sessions include demonstration lessons, differentiated by grade spans, in which teachers experience as learners “keystone pedagogies,” or high-leverage pedagogical practices designed for English learners, using complex texts and rich content. Teachers work together to analyze the lessons using the ELD and ELA standards and plan lessons that incorporate the new approaches. They try out the keystone pedagogies between sessions and bring evidence of student learning to each subsequent session, in which they reflect with colleagues on successes and challenges and their inquiry goals. Teachers also engage in deep dives into language itself to help their students understand and uncover how English works in different text types and disciplines and write more effectively and authentically.

Recognizing that teachers are part of a larger system, *Leading with Learning* also provides professional learning for instructional coaches and principals. In the coaches’ course, the coaches deepen their knowledge of language, literacy, pedagogy, and coaching through book studies; support one other in problems of practice; and design professional learning experiences for teachers. Coaches then work with grade-level teams of teachers to develop or refine lessons, give and get feedback on their implementation of new pedagogies, and reflect

on their own practice through examining evidence of student learning. Principals also convene several times a year (in addition to attending all of the teachers' course sessions) to learn more deeply about leading through an English learner–focused lens. They use a student observation tool, derived from the ELD standards and *ELA/ELD Framework*, that helps them provide targeted and relevant feedback to teachers and gauge the schools progress toward identified goals. All of this work is bolstered by a district leadership team, composed of representatives from multiple departments, which is focused on supporting implementation, sustaining the work over time, and scaling it to other schools.

Preliminary results from an external evaluation of the two pilot districts, Fresno Unified and Sacramento City Unified, indicate positive outcomes for students and shifts in classroom practice. Teachers value the opportunity to learn together how to help English learners — and all students — interact in meaningful ways using complex texts, understand how English works, engage in extended academic discourse, and write effectively:

We take the text apart, we put it back together. We look at it from this angle. We look at it from that angle. We have some very, very interesting discussions about the text, and where those discussions go is often surprising to me because it's driven by the kids and their experiences. Sometimes I find it's better to just get out of the way and let things flow naturally. And it's not only given us an avenue for real deep understanding of the text itself, but it also creates an environment in the classroom where the kids feel safe enough to speak out.

A central finding of the study is that the districts' instructional coaches are critical to successful implementation and that coaches, too, need opportunities to learn and grow as professionals:

I feel like the biggest impact Leading with Learning has provided me is that now my work has a consistent focus. Before Leading with Learning, it felt like my coaching work was very random in what I addressed with each teacher; now our work has a focus and that has made collaboration authentic and more valuable. I also feel like the work has raised the expectations of what is expected of the teachers teaching [English learners] in their classroom; as such, the teachers are much more receptive to and want more coaching.

District leaders and principals see the promise of Leading with Learning in student outcomes and shifts in classroom practice. They are sustaining the work in the original schools and scaling it to new ones. They also recognize the considerable systemic and cultural shifts that are necessary for English learner–focused transformations to take hold and spread:

I think that my big takeaway is this idea that engaging the whole district in your professional learning is going to bring you better results than just engaging the teachers or just engaging the principals. It's not part of our cultural norm and so it's not an easy thing to do.

Standards Implementation Takeaway Ideas

- Invest in teachers’ deep learning about the ELD standards and *ELA/ELD Framework*. It takes time for teachers to make the instructional shifts called for by new standards and frameworks, but once the foundations are solid, sustaining the practices and scaling to other schools becomes a reality.
- Position coaches as key levers of English learner–focused systemic improvement. Support coaches to learn deeply with their job-alike peers about the ELD standards and the pedagogical practices in the *ELA/ELD Framework* and how to support teachers to implement them. Ensure schools with English learners have equitable access to coaches who have built up deep English learner expertise.
- Focus on principals’ and district leaders’ learning about how to lead schools through an “English learner lens,” sustain the work over time, and scale promising practices to other schools. Provide them with time and resources to learn collectively, set common English learner–focused goals, and stay focused as they work collaboratively toward them.

Case Study 3: County and Regional Networks Supporting Standards Implementation

Since 2015, the CCSESA has been leading a bold initiative to design and implement a regional system of support for math and science standards implementation. The work is supported by the S. D. Bechtel, Jr. Foundation with the rationale that 1) implementation of instructional materials is difficult and complex work in the best of circumstances; 2) the capacity of COEs and school districts to support math and science professional learning varies across the state; and 3) the regional system of support, elaborated through CCSESA’s regional structure, is a promising approach to develop capacity across all parts of California.

Over the past two years, CCSESA has taken the lead in developing the math and science networks — composed of teams who are broadly representative of the state — to move the work forward. The strategy has been practical: bring colleagues together from their respective regions and carve out the time to consider instructional practice and internal capacity to replicate and scale the delivery of high-quality standards-aligned instruction.

To anchor the work further into the field, regionally representative groups of colleagues form a community of practice that meets three times this year to share strategies around instructional delivery and examine nodes of best practice throughout the state. The goals of these nested networks have been described since their inception as follows:

- Collaborate with the California State Board of Education and CDE to establish common language and understanding with a common message for the state.
- Include representative content leaders and experts from each COE, with the support of experts from other organizations and agencies as appropriate to the issues being discussed at each meeting.

- Meet quarterly to receive professional learning and develop action plans for how county offices can most effectively work with the school districts in their jurisdiction to strengthen implementation of the math and science standards.
- Serve as a feedback loop from the field to the state and other organizations and agencies at the state-policy level regarding resources, materials, policies, etc.
- Identify and share common problems and exemplary practices from across the state.
- Build the consistency of practice across the state for COEs delivering math and science professional learning.
- Focus on strategies to increase and strengthen local use of interim and summative assessment as well as formative assessment practices.

This framework has been instrumental in setting the gears in motion for the work that has followed in 2017 and 2018. At a high level, the initiative unfolded largely as designed with significant momentum and procedural integrity. Without detailing each professional convening, it is certainly the case that colleagues — in significant numbers — spend time talking through the myriad issues surrounding standards implementation. Content discussions in math and science are rich, strategies for supporting professional learning are central, and concern for equitable student learning is paramount.

Topics taken up by the participants regularly include math and science professional learning content, team-building, membership variation, regional variation, and some examples of how different groups have accessed available resources to apply them in their local context. In 2018, the regional teams have been asked to further develop and refine regional implementation plans that advance best practices and grow capacity within both their county systems and their school district systems. To further catalyze the process, teams have drafted Regional Action Plans (i.e., implementation plans) for math or science, or both. These plans support teams to ask and answer questions like “What should a regional team do with an implementation grant to honor the math and science standards?” or “What would the work look like and how would anyone know if capacity had improved?”

Standards Implementation Takeaway Ideas

- The COEs continue to offer a wide variety of services to districts; the implementation of new standards has increased the demand on county staff to be able to describe and support excellent standards-aligned instructional coaching in all content areas. The work described in this case study seems to indicate that math is further along in implementation than science is. The CCSESA work, to date, does not have a similar community-of-practice structure in ELA or social science — areas also in great need of professional development resources.
- Many of the supports that the COEs are providing focus on modeling instructional practice. Interestingly, the discussions often morph into how to maximize the capacity of school site-level teacher leaders who can provide peer-to-peer support around teaching and standards alignment. To that end, examining how COEs can support

district and school-site teams to expand their own teacher-leadership opportunities is a strategy that could be applied across content areas.

- Regional variation is considerable across the state when it comes to the level and depth of professional development support. The CCSESA work has fostered a commitment to new partnerships that bring instructional support expertise to areas of the state that might have less home-grown capacity. This condition bodes well for long-term capacity development across the state.

IV. Conclusions and Recommendations

This examination of standards implementation has not been intended to be a review of “how California did” over a narrow cross-sectional period of time. Rather, the examples have been designed to review how districts, teachers, and school leaders have responded to catalysts. We are interested, foremost, in understanding variation in implementation and making the connection to gaps in learning across parts of the state and across subject-matter areas.

In a nutshell, student outcome data through spring 2017 shows only modest progress across all student groups and, at the same time, the widening of achievement gaps in many California districts. Whether increases in student summative assessment results will more rapidly reflect the ongoing system-level investments in professional learning over the next several years remains an open question. Our field-based experience working with teachers and school leaders over the past several years corroborates much of the information presented: the work of implementing aligned instruction takes years of practice and support for that practice to matter. For the moment, we are encouraged by the scale to which educators are reporting their commitment to, and deliberations around, standards implementation.

Moving forward, how can the discussion of what we have learned during these early years of standards implementation be helpful in retooling and redirecting resources? What supporting strategies and priorities might be enabled through policy design?

Our recommendations, based on research reviews, field observations and recently collected survey data suggest emphasis in the following key areas of professional learning for teachers and school leaders:

- Consider investing in *internal professional learning systems and structures* as a complement to more traditional procurement models of teacher professional development that focus exclusively on instructional content. Our review suggests that districts with strong implementation programs rely, in a customized way, on complex internal support systems that often include district-level curriculum and instruction specialists who establish and support site-level professional learning models.
- Rethink principal training and support programs. The complexity of the standards, across grades and content, suggests that the principal should function as an *instructional manager* who connects resources within and across partnerships to secure

adequate and stable support around classroom observation practices and site-level professional development.

- Continue to invest in *professional networks* that allow educators to discuss practice and the challenges of scaling and deepening standards implementation. Though progress happens in small steps, the development of partnerships and professional affinity groups bodes well for organizing access to increasing numbers of schools and teachers over time. These groups are critical for developing connections to smaller and more isolated schools in California.

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