

POSITIVE OUTLIERS SERIES

Closing the Opportunity Gap

How Positive Outlier Districts in California Are Pursuing Equitable Access to Deeper Learning

Dion Burns, Linda Darling-Hammond, and Caitlin Scott

with Taylor Allbright, Desiree Carver-Thomas, Eupha Jeanne Daramola, Jane L. David, Laura E. Hernández, Kate E. Kennedy, Julie A. Marsh, Crystal A. Moore, Anne Podolsky, Patrick M. Shields, and Joan E. Talbert

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Executive Summary

U.S. education has experienced many waves of reform in responding to rapid changes in knowledge, technologies, and the economy. It is now widely accepted that, to succeed in the future, all young people must have the opportunity to develop critical thinking, problem-solving, collaboration, and communication competencies—often referred to as "deeper learning" skills. These opportunities can no longer be the purview of the privileged few.

At the same time, disparities in students' learning opportunities present a persistent problem. Substantial opportunity and achievement gaps remain between students of color and their White counterparts and between the growing number of students living in poverty and their affluent peers.

The adoption of the Common Core State Standards (CCSS), and other high-quality state and district standards across the nation, attests to the widespread agreement that all children should develop these essential skills. These new standards typically shift teaching from activities such as memorization and computation to the analytic and inquiry skills that undergird deeper learning.

Fortunately, many schools and districts are rising to this challenge. This study examines a set of seven "positive outlier" districts in California in which students across racial/ethnic groups are consistently outperforming students of similar racial/ethnic backgrounds from families of similar income and education levels in most other California districts. In addition, these districts are achieving more equitable opportunities and outcomes across a range of measures. This cross-case study consolidates lessons learned from these seven districts in California during the early implementation of new standards in California. The study is part of a larger mixed-methods project that includes:

- A separate quantitative study of California district performance in English language arts and mathematics from 2015 to 2017, which identified several hundred "positive outlier" districts in which African American, Latino/a, and White students did better than predicted on state tests, controlling for socioeconomic status. The study then examined which factors predict district differences, finding that teacher preparation and experience were the school-related factors most strongly associated with district outcomes.
- Seven individual case studies of districts selected from among those identified in the quantitative study as positive outliers. These seven, which were chosen for their geographic and demographic diversity, are Chula Vista Elementary School District, Clovis Unified School District, Gridley Unified School District, Hawthorne School District, Long Beach Unified School District, San Diego Unified School District, and Sanger Unified School District.

Lessons Learned

While the seven positive outlier districts we studied do not hold all the answers to improving schools, they are among California's leaders in providing deeper learning opportunities for all students in ways that promote greater equity. Our goal was to understand the policies and practices that support this notable achievement.

The case study districts are of different sizes—ranging from 2,000 to 128,000 students—and they serve different geographic locations and student populations. In these different contexts, each took a unique path toward continuous improvement focused on student learning. Yet despite these differing paths, our analysis of the individual cases revealed several commonalities in the key strategies and principles pursued across the districts.

Prioritize learning for every child: In positive outlier districts, leaders set a clear vision for teaching and learning, which they communicated throughout the district. Equity was a central part of this vision. At the same time, leaders struck a balance between a clear vision from the center and delegating considerable responsibility to school sites for how to enact that vision.

Build relationships and empower staff: District leaders supported instruction and intentionally built trusting relationships with teachers. Teamwork and collaboration were elevated as shared values and were central to the way districts approached continuous improvement.

Value and support stability and continuity: Districts had relatively low rates of turnover in leadership and teachers. This stability contributed to the clarity of the vision and to the long-term coherence of programs. It also allowed districts to build on their successes, fine-tune their efforts over time, and build strong capacity.

Attract, develop, and retain well-prepared teachers and leaders: Although many are highpoverty districts, the positive outliers generally avoided the worst of California's severe teacher shortages. These districts proactively created strong pipelines for educator hiring, often through partnerships with universities and "Grow-Your-Own" programs. They also worked hard to develop and retain teachers.

Build collective efficacy through shared instructional learning: Positive outlier districts used collaborative professional learning as a key to improvement, building upon existing structures such as professional learning communities and supporting teacher and administrator learning and problem-solving. Positive outliers invested in teacher coaching, often accompanied by professional learning cycles. They also analyzed student learning, using data to inform instruction, and building teacher capacity to drive improvement. Districts established strategic partnerships with external professional development organizations, sustained over time to introduce and develop specific skills.

Take a developmental approach to instructional change: Positive outlier districts took a phased approach to the implementation of the new standards, focusing first on providing time for teachers to unpack the standards and understand their expectations and then on engaging in professional learning to support instructional shifts. This developmental approach led to greater teacher buy-in and deeper understanding of the standards. The standards and curriculum thereby took center stage, and instruction was teacher led and student centered. Positive outlier districts also identified and learned from challenges in standards implementation.

Support collaborative, inquiry-based instruction and assessment focused on deepening understanding: Positive outlier districts supported teachers as they made standards-aligned instructional shifts that provided students with greater opportunities to engage in inquiry and collaborative learning in order to make meaning of their learning. Several districts also increased the use of newly designed formative assessments to gauge student progress and inform instruction. This approach favored mastery of standards over coverage of curriculum.

Use data and evidence strategically to inform teaching and learning: Positive outlier districts used data and evidence to improve practice, not to punish teachers or students. Educators turned to multiple sources of data and evidence—about student needs, behaviors, and outcomes across social, emotional, and academic domains, as well as about school and teacher practices—to inform teaching and learning, identify students in need of supports, and evaluate the programs and interventions. Data and evidence influenced decision-making at multiple levels, from district office to instructional leadership teams. Several districts made investments in data systems and professional learning on data analysis to boost teacher and school leader capacity to use data.

Activate instructional supports for students based on their needs: All positive outlier districts identified students for additional supports and targeted interventions, such as Reading Recovery and English Language Development instruction, to support their success. Additional supports for student learning, including for students with disabilities and English learners, were increasingly framed in terms of multi-tiered systems of support and encompassed both academic and social and emotional learning.

Policy Recommendations

Policymakers at the federal, state, and local levels can support the kinds of strategies and practices enacted by positive outlier districts that contribute to supporting student learning. From these lessons, at least five areas for policy work emerge:

1. Develop a stable supply of well-prepared, instructionally engaged teachers and leaders

The positive outlier districts focused on staffing, and they built systems to recruit and importantly—keep good teachers and leaders. They sought and helped train strong candidates to hire, often in partnership with nearby schools of education; ensured supportive mentoring; and invested in ongoing professional learning. They identified and developed leadership talent among teachers to enable them to mentor, coach, lead school improvement, and, in some cases, move into administrative positions. They treated educators as a valuable resource—not as interchangeable widgets. District leaders joined teachers in focusing on instruction as schools worked to implement rigorous and meaningful learning opportunities for all students.

To ensure that all districts can build a similarly strong and stable workforce, **state and federal policymakers** have a responsibility to produce an adequate supply of well-prepared teachers and leaders. These policymakers can help expand high-retention pathways into teaching that can both recruit and retain teachers. Building on service scholarships and forgivable loans that lower the cost barrier to entering teaching, such pathways include teacher and school leader residencies and Grow-Your-Own programs that recruit and prepare diverse candidates from the community who are committed to serve there. Given growing teacher shortages in certain high-need fields (special education, math, science, and bilingual education) and locations, incentives focused on these needs are particularly critical.

Districts then have the responsibility of careful selection, mentoring, and ongoing support. Districts should take a systemic approach to building a teacher and leader pipeline that responds to local needs. Making it a priority to hire and mentor well-prepared teachers who have the disposition and commitment to teach every child can reduce the risk of high teacher turnover and attrition, which are detrimental to student learning. Districts can also invest in the development of strong school leaders, who play an essential role in creating supportive working conditions and retaining teachers. Districts can provide opportunities for teachers to develop leadership skills, with opportunities to take on leadership roles as their skills and experience develop. Districts can involve district and school administrators in ongoing professional learning and can create structures for collaborative learning and planning between teachers and administrators.

2. Support capacity-building for high-quality instruction and focused instructional change

The positive outlier districts made deep and sustained investments in implementing the new state standards as well as in instructional strategies designed to further deeper learning. These districts developed capacity for focused instructional change by engaging administrators in cross-role collaborations, investing in teacher collaboration through professional learning communities, and using professional learning cycles to implement new instructional strategies.

California's overall approach to implementation of the new standards and a new state accountability system created an environment in which the positive outlier districts could undertake a careful, holistic approach. California introduced the CCSS and the Smarter Balanced assessments while also providing resources to build capacity, avoiding a rushed, top-down punitive approach that created backlash in some other states. The state is now in the process of developing a broader system of support in each of the major disciplines, as well as in meeting the needs of diverse learners who have historically been least well served by California schools, including English learners, students with disabilities, children who are homeless or in foster care, and African American and Latino/a students.

States can support teaching by selecting and developing high-quality assessments and using them for information and improvement, not for sanctions or punishment. They can allocate funds for professional learning and focus educators' attention on a whole-child approach to education through accountability systems that take into account student outcomes across a wide variety of measures. These measures can include both status and growth on achievement measures and graduation rates, as well as indicators of opportunities to learn, such as suspension rates, school climate, and college- and career-readiness indicators.

Federal and state policies can invest in a strong, readily available infrastructure of high-quality professional learning opportunities that build the collective capacity of schools and districts to teach for 21st-century standards and to meet the full range of students' academic, social, and emotional needs.

Districts can support capacity by focusing not only on outcomes but also on professional learning for educators that will help them meet all children's needs. These supports include professional learning communities and coaching cycles to implement new instructional strategies and support these practices through observation and feedback. Districts can reach out to experts in areas that are the focus for improvement, as well as harness expertise among existing staff and invest in district teachers and leaders to support professional learning within the district.

3. Use assessments and data strategically to support continuous improvement

Positive outlier districts used both rich assessments and a range of data and evidence to improve practice, not to punish students or teachers. In these districts, formative assessments informed instruction and helped teachers tailor supports to individual student needs. A range of data about student learning in relation to teaching practice allowed teachers and leaders to monitor the effectiveness of programs and interventions and continuously improve.

State and federal policymakers both have a role to play in developing productive assessments and appropriate uses of data. Federal policy should incentivize the development of performance-based assessments that can better reflect and measure deeper learning. This can be accomplished through both funding for assessment development and the use of appropriate standards for approving state plans. States can select and develop assessments that measure higher-order skills and support districts in using them, along with an array of data to support student learning. California has moved in this direction with the adoption of the Smarter Balanced assessments (now named the California Assessment of Student Performance and Progress), which emphasize advanced competencies such as critical thinking, the adoption of a multiple measures dashboard, and the Local Control Accountability Plan process. States can augment these with school climate surveys for students, staff, and families to inform school and district improvement efforts and triangulate with other data.

Districts and schools can use these assessment tools, analysis of student work, survey data, and other indicators—such as attendance rates, suspensions, and evidence of student needs—to improve school climate, to shape teaching and learning, and to identify and address student needs. Districts can support schools and teachers with professional learning and establish structures for data to be analyzed and used effectively in continuous improvement cycles at district and school levels.

4. Create coherent systems of support based on student needs, including academic, social, and emotional learning

Positive outlier districts created systems of support for students, tailored to their specific needs. Consistent with research in the science of learning and development, these supports incorporated both academic and social and emotional learning supports and were increasingly framed as multi-tiered systems of support. Social and emotional supports included social-emotional learning programs; wraparound services for health, mental health, and social supports; strategies such as culturally responsive teaching and learning; trauma-informed teaching and restorative justice practices; and parent engagement strategies to support student learning in and beyond school.

Federal and state policymakers can support these practices by coordinating agencies, programs, and funding to provide more streamlined and better integrated services to support children's physical and mental health and welfare, as well as their academic, social, and emotional learning. They can also invest in the training of educators that develops practices and systems focused on the needs of the whole child, while ensuring that resources for developing effective programs for English learners, students with disabilities, children who are homeless or in foster care, and others with particular needs are readily available.

Districts can implement multi-tiered systems of support as a core strategy to meet all students' academic, social, and emotional needs, and to foster inclusive student assignment policies. They can also increase support for both specialized and integrated English Language Development in mainstream classes. Districts can support programs to engage parents as partners in student learning.

5. Allocate resources for equity

Positive outlier districts consciously allocated resources to meet a wide range of diverse pupil needs for additional supports. They also invested in an experienced, stable educator workforce, and in professional learning to enable that workforce to become highly expert in meeting all students' needs. **Federal policymakers** can encourage these practices by enforcing equity provisions in federal laws, such as the Every Student Succeeds Act, that require equitable distributions of resources and staff. **State policymakers** can allocate funds based on pupil needs and, when making investments, take into account the need for increasingly well-prepared educators and a wide range of wraparound services and integrated student supports. California's Local Control Funding Formula (LCFF) was designed for greater equity, providing additional funds to support districts with concentrations of students living in poverty, English learners, and those in foster care. Through the state's Local Control Accountability Plan, the state has also set expectations that districts will allocate funds internally to meet the needs of historically underserved students.

Districts should also focus on resource adequacy and equity—not only in how they allocate funds to school sites and programs, but also in how they build and resource supports for struggling students. In particular, districts can spend funds efficiently when they invest in expert teachers who are assigned to teach students with greater needs and to mentor the teachers in those contexts, when they design and fund effective programs for those students, and when they intervene early and effectively for students who may struggle.

Introduction

Education in the United States has been the object of several waves of reform, stimulated in part by rapid changes in knowledge growth, new technologies, and the economy. Many of today's highest-paying jobs did not exist 10 years ago, and many long-standing jobs are disappearing.¹ There is now widespread agreement that all young people must have the opportunity to develop critical thinking, problem-solving, collaboration, and communication competencies—often referred to as "deeper learning" skills. Once reserved for a small minority of students, opportunities to develop these skills are necessary for all students to survive and thrive in a 21st-century society characterized by complexity and continuous change.²

At the same time, disparities in students' learning opportunities present a persistent problem. Substantial opportunity and achievement gaps remain between students of color and their White counterparts and between the growing number of students living in poverty and their affluent peers. These result from growing income inequality over the past 3 decades and the failure of many states to invest equitably in schools serving diverse students.³ Providing equitable access to meaningful learning opportunities is perhaps the major challenge of 21st-century education in the United States.

Fortunately, many schools and districts are rising to this challenge. This study examines a set of seven "positive outlier" districts in California in which students are consistently outperforming students of similar racial/ethnic backgrounds from families of similar income and education levels in most other California districts on California's new standards and assessments that better measure deeper learning. In addition, these districts are achieving more equitable opportunities and outcomes across a range of measures.

This report provides a snapshot of the seven districts and an overview of the main success strategies described in these studies. Then, it briefly describes the California context and our study methodology. The remainder of the report reviews the following strategies found in common across the districts:

- a widely shared, well-enacted vision that prioritizes learning for every child;
- instructionally engaged leaders;
- strategies for hiring and retaining a strong, stable educator workforce;
- collaborative professional learning that builds collective instructional capacity;
- a deliberate, developmental approach to instructional change;
- curriculum, instruction, and assessment focused on deeper learning for students and adults;
- use of evidence to inform teaching and learning in a process of continuous improvement;
- systemic supports for students' academic, social, and emotional needs; and
- engagement of families and communities.

The report concludes with a summary of lessons learned and suggests recommendations for federal and state policymakers and district administrators.

The California Context

To focus schools on these 21st-century learning goals, California's State Board of Education adopted the Common Core State Standards (CCSS) in English language arts and mathematics in 2010 and the Next Generation Science Standards (NGSS) shortly thereafter. These standards focus on the analytic and inquiry skills that undergird deeper learning, as does the new assessment system that accompanies these standards—the California Assessment of Student Performance and Progress (CAASPP), adopted from the Smarter Balanced Assessment Consortium. CAASPP includes performance items and tasks designed to reflect a greater depth of knowledge and more thoughtful application of skills.

In 2012, in a major departure from years of budget cuts, the state passed Proposition 30, which increased funds for education, and adopted the Local Control Funding Formula (LCFF), a much more equitable approach to school funding. Enacted in 2012, the LCFF equalized funding; eliminated categorical programs; and provided additional resources to support education for students from low-income families, English learners, and those in foster care. This funding reform has been paired with a new accountability system,

The Local Control Funding Formula (LCFF) equalized funding; eliminated categorical programs; and provided additional resources to support education for students from lowincome families, English learners, and those in foster care.

the Local Control Accountability Plan (LCAP), that requires school districts to evaluate annually the progress of student groups on multiple indicators of student opportunity and learning, to seek input from parents and community members about how to allocate resources for learning, and to lay out how LCFF funds will be used to support student learning.⁴

In combination, these initiatives represent a sea change in California's education policy and in the opportunities and expectations for change within local school districts. After a long period of fiscal and educational decline, statewide achievement has sharply increased on the National Assessment of Educational Progress in the last decade and graduation rates have gone up.⁵ A recent study found that districts that received the greatest investments through LCFF have, on average, seen substantial gains in both achievement and graduation rates, especially for students from low-income families.⁶

At the same time, achievement gaps became even more obvious when California introduced the new, more challenging standards. These gaps are in part a function of the long-standing inequalities in educational opportunity that existed prior to LCFF, especially around access to curriculum focused on higher-order skills, along with the wide and growing disparities in family income throughout the state.⁷

With the support of LCFF, LCAP, and the broadening evidence base about district effectiveness, California districts had a unique opportunity to respond effectively, and some have done particularly well in providing deeper learning opportunities to all students and leveraging achievement gains. Policymakers and educators have a unique opportunity to learn from these districts.

The District Role in Educational Improvement

From at least the 1930s, when the famous 8-year study by the Progressive Education Association documented the outcomes of a number of uniquely designed schools,⁸ research has shed light on how schools can leverage gains in student outcomes ranging from school achievement and graduation to indicators of personal and social responsibility. The effective schools research of the 1970s formalized this line of inquiry.⁹ Departing from the conventional wisdom of the 1960s, in which variations in student achievement were regarded as almost wholly attributable to individual differences, this research demonstrated that, after controlling for socioeconomic status, school effectiveness has a significant impact on student outcomes.¹⁰ By focusing on the role of institutions, this body of research assumes that schools can enable student learning beyond the influences of socioeconomic conditions. As one researcher noted, successful schools hold and communicate "the expectation that all students will achieve *and* make their achievement possible."¹¹

Although this line of research, along with recent federal policy, has focused on evaluating and improving individual schools,¹² more recent research has shown that districts are critically placed to make a difference in school practices and outcomes. Decisions delegated to districts vary from state to state, but districts routinely allocate resources to schools and organize key functions such as the hiring, assignment, and support of personnel. Districts can often influence what is taught, how it is taught, and how it is assessed¹³ because they enact responsibilities ranging from the selection of textbooks and other materials to strategies for managing curriculum and assessment. Districts can create policies regarding school design, instructional strategies, student discipline, and family engagement, and they often direct the work of educators in their implementation.¹⁴ Districts may also decide whether and how to seek funding and orchestrate extra supports for students and families, such as after-school and wraparound services.

In all their work, districts must interpret federal and state policy as they create conditions for teaching and learning.¹⁵ Moreover, districts can leverage sustainable, system-level change that improves all schools, rather than leaving schools to engage in isolated efforts that transform practice in one school at a time.¹⁶

Over the past several decades, much has been learned about the role districts play in influencing student learning outcomes. A summary of 31 studies of district effectiveness found 10 district characteristics, or practices, associated with high performance: (1) a districtwide focus and vision for student achievement, (2) clearly established and aligned curriculum and instruction, (3) use of evidence for decision-making, (4) a districtwide sense of efficacy, (5) building and maintaining good communications and relationships, (6) investing in instructional leadership, (7) a targeted and phased orientation to school improvement, (8) job-embedded professional learning for leaders and teachers, (9) strategic engagement with the government's agenda for change and associated resources, and (10) infrastructure alignment.¹⁷ These elements are worth exploring in more detail.

One frequently discussed element in district success is a vision that is used to guide practice. Some studies of exemplary districts have found that they establish districtwide instructional goals for student learning and then create planning processes for schools, including further school- and classroom-level goals, using these to guide management and ongoing improvement.¹⁸ A review of 23 studies of districts that had improved over time showed that a districtwide focus on a widely shared set of beliefs about student achievement was viewed as a key reason for the district's success.¹⁹

A district-level instructional vision is useful if it translates into high-quality teaching and learning in the classroom. Several studies found that successful districts take a systemic approach, using multiple levers to support high-quality instruction, ranging from careful hiring and mentoring to strategic professional development to opportunities for ongoing collaboration.²⁰

For example, both quantitative and qualitative studies indicate that student achievement tends to be greater when districts' hiring practices and allocation of resources orient expenditure toward instruction and investments in teacher quality. Ron Ferguson's 1991 study of how money matters was the first of several to find that well-qualified teachers were the most important educational resource for producing achievement gains, and that the most effective use of a marginal dollar was to invest in the quality of teachers hired and retained in districts.²¹ Our own recent quantitative study of California's positive outlier districts, which examined predictors of student performance, found that the most important school-based determinant of student achievement for African American, Latino/a, and White students was teachers' preparation, followed by level of teachers' experience. Students did significantly better where there were fewer underprepared teachers on temporary or emergency teaching credentials and where teachers were more experienced overall, which suggests stronger hiring and retention efforts within districts.

Several qualitative studies of district improvement illustrate these quantitative findings. For example, a seminal study of Superintendent Tony Alvarado's work during the 1990s in District 2 in New York City featured how an overhaul of hiring and professional learning designs drove significant improvement.²² Similarly, a study of California's Garden Grove Unified School District, which achieved growth in student achievement and graduation rates from 2003 to 2012, found that the district placed great importance on the quality of its educators, viewing them as "fundamental drivers of student success."²³ The district's hiring strategies allowed district leaders to assess the quality and potential of teacher candidates and to select teachers on the basis of skill and disposition, including a willingness to work collaboratively. These emphases were coupled with comprehensive strategies for professional learning, instructional supervision, and teacher leadership.

These and other studies suggest that increasing instructional effectiveness relies on supports for staff learning, opportunities for collaboration, and means for sharing strong instructional practices across classrooms and schools. A study of nine school districts found that a district's capacity for instructional change depended on increasing both human capital (i.e., individual educators' knowledge and skills) and social capital (i.e., the social links among educators that help them share knowledge and skills).²⁴

Several studies have found that the benefits of teachers' experience for student achievement are greater in strong professional working environments in which there are regular opportunities for teachers to collaborate and in which teachers work in teams.²⁵ Because teaching poses ongoing problems of practice and no single teacher has perfect knowledge of every aspect of the curriculum, pedagogy, and students, both ongoing professional learning and opportunities for teacher collaboration are critical for expanding and sharing teachers' collective expertise.²⁶ This means moving from an environment of professional isolation to one of collaboration and shared responsibility.²⁷

This shared responsibility also requires the intentional building of relationships across levels. When relationships are developed between educators and administrators, beliefs and vision become shared and enacted systemwide. In a study of 30 successful rural districts across 18 states, researchers found that district leaders underscored the importance of attracting buy-in from teachers and creating an environment of mutual respect.²⁸ Likewise, a multiyear study of turnaround in Sanger Unified School District in Fresno County, CA, showed how the district transformed from a system of top-down mandates and compliance to one of reciprocal accountability by investing in developing professional learning communities that share responsibility for all students' success.²⁹

Using data to inform instruction has also long been a strategy for school improvement, but the implementation of this strategy has varied and often has not been supported by professional learning.³⁰ Some studies find that successful districts support educators in collecting, analyzing, and using evidence to ground decision-making.³¹ Districts can provide data to schools, help them use it effectively, and create collaborative opportunities to further interpret the data to shape teacher and student learning.³² In one study of successful practices, researchers noted that data are a means to identify student and teacher needs for support, rather than for compliance and systems management.³³

District actions are potentially important levers for improving students' educational outcomes. Although there is likely no single strategy for success, as district size, context, and student learning needs influence the balance of priorities, there are recurrent themes in the literature that indicate areas for district attention, such as creating a vision for student learning and providing strong leadership around supports for high-quality instruction.³⁴ Further, some research suggests that what separates successful districts from others is their ability to take a systemic approach, with a comprehensive strategy employing many of the elements described above.³⁵

This study builds upon and contributes to the body of the research on high-performing districts. In particular, it may add to our understanding of what happens when districts shift to more ambitious instructional standards, such as the CCSS and Next Generation Science Standards, that require deeper learning of content and stronger critical thinking, communication, collaboration, and problem-solving skills. By investigating the elements underpinning the success of California districts that have outperformed the status quo with all students, including African American and Latino/a students, we hope to add to the growing body of lessons for educators and policymakers.

Study Methods

This cross-case study is part of a larger, three-phase, mixed-methods study examining positive outlier districts in California in which—accounting for differences in socioeconomic status—African American, Latino/a, and White students are consistently achieving at higher-than-predicted rates on California's assessments. The seven districts analyzed here are:

- Chula Vista Elementary School District
- Clovis Unified School District
- Gridley Unified School District
- Hawthorne School District
- Long Beach Unified School District
- San Diego Unified School District
- Sanger Unified School District

These districts represent a much larger group of positive outliers identified in the first phase of the study and described in a separately published quantitative analysis of districts' performance in California from 2015 to 2017.³⁶ The measures of districts' performance used in this study are the residual test scores in English language arts (ELA) and mathematics for all students, and for African American, Latino/a, and White students, produced by the regression models that control for student and community characteristics. (The groups studied were those with adequate population sizes across districts.) The residual represents the difference between the actual and predicted performance of a district's students in a given racial/ethnic group given that group's socioeconomic characteristics within that district.

In the second phase of the study, we selected a set of geographically and demographically diverse districts in which we conducted seven individual case studies from the fall of 2017 through the winter of 2018. These case studies are published individually.³⁷ This cross-case study is the third phase of the overall study, which synthesizes findings from all seven individual cases. More information about the cross-case study methodology is included in Appendix A.

The overarching research question of this cross-case study is:

In districts identified as successfully outperforming expectations for multiple groups of students, what factors may account for the success of all students in the district and for that of students of color in particular?

The three-phase study addresses several longstanding challenges in studying school success, including a common conflation of school effectiveness with student socioeconomic advantage and the difficulties of disentangling the many aspects of socioeconomic status that influence students' opportunities and performance. The strong correlation between educational achievement and socioeconomic status³⁸ has meant that schools and districts identified as high performing have generally been those serving affluent students, who have greater access to educational opportunities both in and out of school by virtue of family income, parents' education, and educational resources in the home and community.

The actual influences of school practices on achievement are visible only when these factors are well controlled, not only for the district overall but for each of its major student groups. Thus, this cross-case study of positive outliers investigates districts whose African American, Latino/a, and White students demonstrate strong academic performance after accounting for socioeconomic factors. The extent to which there may be common practices among the districts suggests that we may identify important underlying principles at work and better understand how they play out in distinct district contexts.

This mixed-methods approach offers several advantages for examining the factors that support the success of positive outlier districts. A common concern when studying school or district effectiveness is that the use of a single measure of effectiveness at a single point in time can miss instability in scores and other measures over time.³⁹ Another is that the use of a single case study may lead to findings that are specific to a single context.

Although our methodology allowed us to identify strategies that are suggestive of stronger outcomes for students of color and/or those from low-income backgrounds, it relies on participant reports, and we did not include a comparison sample, so we do not assert causal relationships. Future studies may extend this work by conducting independent evaluations of strategy implementation, by broadening the study to other states, and/or by comparing similar districts whose student groups achieve at lower-than-predicted levels.

Snapshot of Positive Outlier Study Districts

The positive outlier districts differ in size, location, and student population (see Table 1). In this section, we summarize the performance of each district. We then briefly profile the districts, drawing on the case studies, to highlight their context, their strategic priorities, and the factors that contribute to their success.

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District Name	Urbanicity	Schools	Students	AA	L	W	EL	SED
Chula Vista	Large suburb	47	30,053	4%	70%	11%	34%	51%
Clovis	Large suburb	48	42,746	3%	37%	41%	6%	41%
Gridley	Town distant	5	2,021	<1%	57%	35%	17%	69%
Hawthorne	Large suburb	11	8,573	20%	71%	2%	34%	86%
Long Beach	Large city	86	76,428	13%	57%	13%	21%	71%
San Diego	Large city	224	128,040	9%	47%	23%	24%	61%
Sanger	Town fringe	20	11,722	1%	70%	14%	18%	73%
California		10,291	6,228,235	6%	54%	24%	21%	60%

Table 1Positive Outlier Districts' Demographic Data, 2016–17

Notes: AA = African American; L = Latino/a; W = White; EL = English learner; SED = socioeconomically disadvantaged. SED for Gridley USD represents the average of the preceding and following school years (2015-16 and 2017-18) because Gridley USD administrators reported that the percentage in DataQuest for 2016-17 was incorrect. Number of students for San Diego includes students enrolled in SDUSD public schools and students enrolled in district charter schools.

Data sources: California Department of Education. (n.d.). DataQuest. https://data1.cde.ca.gov/dataquest/; National Center for Education Statistics. (n.d.). Common Core of Data. https://nces.ed.gov/ccd/ccddata.asp.

Performance of Positive Outlier Districts

As described previously, the measures of district performance used in this cross-case study are the residual scores produced by a statistical model that assessed the difference between districts' predicted CAASPP ELA and math scores and their actual average scores in 2014–15, 2015–16, and 2016–17 for African American, Latino/a, and White students.⁴⁰ Figure 1 shows the variation in student achievement across the 435 California districts that have at least 200 African American or Latino/a students and 200 White students (i.e., those large enough to have reliable estimates).

Districts in the top right quadrant of Figure 1 are identified as positive outlier districts because African American and Latino/a students, as well as White students, achieve at higher-thanpredicted levels, controlling for their socioeconomic status. In contrast, districts in the lower left quadrant are identified as underperforming because students of these racial/ethnic groups achieve at lower-than-predicted levels, controlling for their socioeconomic status.⁴¹ (See Appendix B for more detailed information about achievement in the positive outlier districts in this crosscase study.)

Figure 1 Student Achievement in California Districts and Positive Outlier Case Study Districts

Average African American, Latino/a, and White student achievement by district averaged across subjects, and grades in 2017



White students achieve lower than predicted based on their families' SES

White students achieve <u>higher</u> than predicted based on their families' SES

Notes: Figure includes districts with at least 200 African American or Latino/a students and at least 200 White students. The size of the marker is weighted by the number of African American and Latino/a students tested in the district. Achievement is measured by residuals in standard deviations. The origin (0,0) represents districts in which African American, Latino/a, and White students perform as predicted based on the SES conditions for families in each of these racial/ethnic groups in their district.

Source: LPI analysis of data from California Department of Education. (n.d.). California Assessment of Student Performance and Progress (CAASPP) results. https://caaspp.cde.ca.gov (accessed 01/05/18); National Center for Education Statistics. (n.d.). Education demographic and geographic estimates. https://nces.ed.gov/programs/edge (accessed 01/05/18).

In addition to better-than-predicted performance in ELA and math from 2015 through 2017, positive outlier districts also had strong graduation rates among student groups. Four-year cohort graduation rates for Latino/a students in 2017 ranged from 80% in Gridley to 92% in Clovis, with all districts at or above the state average for Latino/a students (Table 2). African American 4-year graduation rates in 2017 were also well above the state average in the four districts with a sufficient number of such students to provide data, ranging from 84% in San Diego to 100% in Sanger. The state average graduation rate for African American students was only 73%.

Table 2Four-Year Graduation Rates, 2017

Demographic	Chula Vista	Clovis	Gridley	Hawthorne	Long Beach	San Diego	Sanger	California
African American	N/A	95%	N/A	N/A	86%	84%	100%	73%
Latino/a	N/A	92%	80%	N/A	84%	82%	88%	80%
White	N/A	94%	81%	N/A	88%	92%	91%	87%
All students	N/A	94%	77%	N/A	86%	87%	89%	83%

Note: Because Chula Vista is an elementary school district, it has no graduation rates. Hawthorne School District has only one charter high school. Most Hawthorne students attend high schools in Centinela Valley Union High School District; the remainder attend the charter school. Therefore, we do not report graduation rates for Hawthorne in this table. The state does not report graduation rates for districts in which the student group population is 10 students or less. In each case, these cells are marked as not applicable, or "N/A."

Data source: California Department of Education. (n.d.). DataQuest. https://data1.cde.ca.gov/dataquest/.

Similarly, suspension rates among positive outlier districts were typically lower than state averages (Table 3). For example, the suspension rate for African American students in 2016–17 ranged from 1.6% in Chula Vista to 9.2% in Clovis, compared to the statewide average of 9.8%. In Hawthorne, this rate was 3.7%, having dropped significantly from around 12% prior to 2015. Latino/a suspension rates in 2016–17 were at or below the state average of 3.7% in all but two districts. Rates ranged from 0.6% in Chula Vista and 0.7% Hawthorne to 5.4% in Clovis.

Table 3Suspension Rates, 2016–17

Demographic	Chula Vista	Clovis	Gridley	Hawthorne	Long Beach	San Diego	Sanger	California
African American	1.6%	9.2%	0.0%	3.7%	8.4%	7.4%	5.0%	9.8%
Latino/a	0.6%	5.4%	3.1%	0.7%	3.1%	3.7%	3.8%	3.7%
White	0.7%	3.8%	6.3%	2.9%	1.8%	2.3%	3.1%	3.2%
All students	0.6%	4.3%	4.5%	1.4%	3.5%	3.3%	3.4%	3.6%

Data source: California Department of Education. (n.d.). DataQuest. https://data1.cde.ca.gov/dataquest/.

Positive Outliers' Contexts and Approaches

Chula Vista Elementary School District is located just south of the city of San Diego, about 7 miles north of the U.S.–Mexico border. The district consists of 47 schools, which include five dependent and two independent charter schools.⁴² Chula Vista is the largest elementary school district in the state, with 1,500 teachers and 30,000 students in kindergarten through 6th grade. Chula Vista's approach to continuous improvement was based on a philosophy known locally as

"interdependence," which clarified and balanced the respective roles of district and schools. The district also supported professional learning cycles for school-site educators and district leaders in which training was followed by opportunities to practice, receive feedback, and observe colleagues, thus supporting iterative improvement. Chula Vista took a slow, deliberate approach to the CCSS, building knowledge and awareness of the standards prior to full implementation. The district used data to inform its efforts to address student needs, particularly those of English learners, and to support student learning with a districtwide instructional vision and skill-specific teacher coaching.

Clovis Unified School District is a midsize district located in Fresno County in California's Central Valley. Clovis fosters area- and site-level innovation, encouraging leaders to compete with one another's schools and learn from each other's successes. Its multistep hiring process for teachers takes into account academic factors, personal disposition, and suitability to teaching. Taking its own approach to the new standards—the "Clovis Way"—the district developed CCSS-aligned curriculum guides and interim assessments, for which it received a 2016 California School Boards Association Golden Bell Award. Decision-making in the district is shaped through the collection and analysis of a range of data at each level of the system, and the district has established a variety of support services, including "transition teams" when students change schools and targeted counseling services for historically underserved students.

Gridley Unified School District is in a small town of around 6,500 in Butte County, located in the upper Sacramento Valley. Due to its size, Gridley operates with few district office staff and thus encourages site-level leadership and strong community relationships. Gridley has been able to maintain a stable core of teaching staff and to avoid significant layoffs and other financial challenges during the Great Recession.⁴³ A strong emphasis on early literacy and tiered interventions for literacy in elementary and middle school has supported the strong performance of students.

Hawthorne School District is a small district in a working-class suburb of the Los Angeles metropolitan area's South Bay region. Hawthorne has received notable attention for high performance, with five of the district's seven elementary schools earning Gold Ribbon status from the state of California in 2016. District educators attribute this success to developing a climate of trust and strong relationships among educators through stable and collaborative leadership, a clear vision for staffing, and centralized coaching and support for instruction. The district took a deliberate approach to adopting the CCSS, building capacity and buy-in among teachers. Hawthorne provides targeted support for its English learners and is increasing its emphasis on students' social and emotional learning. Hawthorne has reduced suspensions and expulsions through its support for positive behavior practices and associated professional learning for teachers regarding culturally responsive teaching and learning.

Long Beach Unified School District is the third largest district in the state and has won several awards for its improvement processes and success with students.⁴⁴ The district has worked closely with California State University at Long Beach and Long Beach City College on student articulation from pre-kindergarten through college. Known as the "Long Beach College Promise," the partnership has helped students better prepare to meet the demands of postsecondary studies.⁴⁵ Close partnerships with CSU-Long Beach for preparing teachers and leaders have also supported a coherent vision and strong instruction in the district.

Long Beach has focused on aligning expectations and supporting schools to promote improved instruction and remove barriers to advanced coursework, while also working to support students' social and emotional learning. Long Beach is also part of California's eight "CORE districts," which gives it access to various school improvement initiatives.⁴⁶ The district's strategic approach to improvement has centered on a standards-aligned instructional vision, supported by investments in collaborative professional learning at multiple levels, which builds educators' collective efficacy.

San Diego Unified School District is the second largest district in California. Key elements of the district's strategy include a clear instructional vision, investments in coaching to support teaching, and professional learning cycles that engage teachers in ongoing analysis of data and teaching practice to improve student outcomes. Through partnerships with two external partners, the district developed a multidimensional equity strategy to remedy opportunity gaps. The strategy emphasized literacy instruction, collaboration among educators to improve school climate, and multi-tiered systems of support for students. The equity strategy has also worked to cultivate greater engagement of students in classrooms and greater engagement of families and communities in supporting high-quality learning experiences for students. As part of this strategy, SDUSD took significant steps to broaden access to advanced coursework, implement restorative justice practices, and improve staff's abilities to support students in their academic, social, and emotional development.

Sanger Unified School District is located a few miles southeast of Fresno. During the accountability era of No Child Left Behind, Sanger earned the reputation of being a successful "turnaround district" based on its students' steep and steady improvement, especially for English learners and students with disabilities. Between 2004 and 2012, Sanger USD moved from being one of the lowest-performing California districts, under threat of state takeover, to exceeding statewide district averages on the California's Academic Performance Index. By 2012, most of Sanger's 20 schools had high student achievement compared to demographically similar schools, and many had received Blue Ribbon awards from the state.

Sanger's success was aided by long-term investments in a stable, well-prepared teaching force; a culture of collaboration among and support for teachers; a proactive leadership pipeline; professional learning communities at all levels for continuous improvement; and shared accountability within schools and between each school and the district. The district's priorities for change in moving to the new standards included renewing training for effective professional learning communities, establishing processes for effective instruction, and building multi-tiered systems of support for students.

In the sections that follow, we describe the key strategies these districts used to support student achievement and offer examples of how the strategies were enacted in different contexts.

A Vision Focused on Learning for Every Child

As shown in their snapshots, the districts we studied are quite diverse in terms of size, demographics, and geographic location; however, we found common elements that contributed to their success. One of these elements was a vision for learning for each and every child. Research evidence from the past 3 decades points to the importance of a widely shared vision for district success that informs decisions about policy and practice.⁴⁷ A common feature of positive outlier districts was a strong vision for engaging all students in the new learning expectations. The

A common feature of positive outlier districts was a strong vision for engaging all students in the new learning expectations. The districts offered a set of clear messages about goals for student learning, as well as how to shift to more intellectually ambitious standards for everyone.

districts offered a set of clear messages about goals for student learning, as well as how to shift to more intellectually ambitious standards for everyone. Yet within these guidelines, positive outlier districts generally also granted flexibility and discretion to site-level administrators to determine how to adapt the district vision in the particular context of their school. This lent itself to a culture of mutual accountability, with the district offices viewing their role as supporting sites to advance student learning.

Promoting Equity Through the Vision

District messages typically included clear statements about equity and learning that they enacted in multiple ways. In Chula Vista, the district's overall vision statement focuses specifically on closing achievement gaps:

The [Chula Vista] community will work collaboratively to ensure that ALL students, including English Learners, Students with Disabilities, and designated target groups, show measurable growth, which will lead to reducing the achievement gap in literacy and mathematics. This will occur through the implementation of high impact language development strategies aligned to the California State Standards and driven by the District's LCAP goals.

In neighboring San Diego, the district established a specific equity vision—to "develop equity leaders who unlock genius one student at a time and maximize the growth in every interaction"⁴⁸—to complement strategic visions for instruction and curricula (see "Building and Enacting an Equity Vision in San Diego Unified School District"). A district instructional support officer described the role of this vision in shaping the conditions for learning:

Equity has been the overarching driving force of our system. Who has access to what? Who's getting supports? It is very strongly supported by our superintendent. We look at everything we do through an eye of equity and access.

Building and Enacting an Equity Vision in San Diego Unified School District

San Diego Unified has developed an integrated strategy for realizing the district vision of equitable access to learning opportunities. The district collaborated with two main external partners—Equal Opportunity Schools and the National Equity Project—to identify district practices that were maintaining inequities along socioeconomic lines.

At the school board's urging, SDUSD partnered with the National Equity Project to identify five "equity levers": literacy, staff collaboration, meaningful student engagement, relational leadership, and integrated multi-tiered systems of support. These levers have been instrumental in two ways: They provide a specific lens through which the district can identify, monitor, and support actions that work, and they provide consistent language that leaders can use to surface and address lingering equity issues. A district leader explained:

NEP [National Equity Project] has given us the language that we need to articulate a vision for each and every student and given us the wording on how to ... interrupt inequities with skill and grace. We don't shame or blame.... It's basically about uncovering what we need to do and where our kids need us most.

SDUSD has enacted several initiatives to transform district practices in accordance with its equity vision. During visits to schools, area superintendents use rubrics aligned with each equity lever to inform principal goal setting, to provide leaders with feedback, and to gauge progress. The district has led professional learning for principals and interested teachers to examine its vision and levers. The district has also developed an Equity-Centered Professional Learning Community Assessment Tool for district and school leaders to assess their efforts in areas such as productive collaboration, student-focused professional learning, trusting relationships, candid cross-cultural dialogue, and results-focused professional learning communities.

Equal Opportunity Schools examined district data and found that students had differential access to teachers who encouraged them to enroll in advanced courses. In response, the district office reorganized to address the inequities that were contributing to this differential access, such as placement rates and coursework for English learners, students with Individual Education Plans, and those with initially weak mathematics backgrounds. Strategies included a monitoring system for students at risk of falling behind and supports to improve courseling.

At the site level, school leaders learned to craft student schedules that ensure greater access, equity, and opportunity, with guidance from area superintendents and using the district's master schedule expectations. Courses not aligned with University of California admissions requirements have been eliminated or repositioned to ensure that students take the necessary classes, especially in mathematics and science. English learners are now taught in mainstream classes, with instructional coaching to support them. These changes at the school level help ensure that the district's equity vision is a reality for all students.

When promulgated districtwide, these vision statements also provided a touchstone for decisionmaking. We were struck by the universality with which teachers and principals referenced these statements when discussing initiatives in districts such as Clovis and Long Beach. In Clovis, for example, the district's approach to teaching and learning was captured in "Doc's Charge," an 800word hiring charge from the district's founding superintendent that was later adopted as the central element of the district's philosophy, which hung on the wall in nearly every school and in several district offices. Written ostensibly for newly employed teachers, the document now guides teachers and principals at all levels of experience. Among the many "Doc-isms," as they are known locally, "a fair break for every kid" and "we believe in people, not programs" were often repeated as educators described their work. The district listed several as among their "non-negotiable core values" (see Figure 2). Taken together, these were interpreted as empowering educators to make decisions they deemed were in their students' best interests, even when that meant changing instructional programs and practices.

Figure 2 Clovis "Core Values"

Our Non-Negotiable Core Values

"We believe in high standards in Clovis schools." - Floyd "Doc" Buchanan, Ed.D.

We believe that integrity cannot be compromised. We believe in collaboration based on shared decision-making and trust. We believe that standing together with our students, employees and community is our strength.

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Students	Employees	Community	Schools and Facilities
"A fair break for every kid." -Doc	"It's people, not programs, that make the positive difference for students." -Doc	"Education revolves around teamwork and trust." -Doc	"When you do something, only do it first class." -Doc
 Educate the whole child in Mind, Body, and Spirit. Base all decisions on what is best for students' academic, social and emotional well- being. Commit to a safe and inclusive learning environment for ALL students. Believe every child can learn and we can teach ALL children. 	 Foster a climate of trust and respect through relationships and communication. Collaborate and empower all employees in the decision-making process at the site, Area and department level. Be accountable to high standards, both individually and collectively. Surround students with the very best role models and mentors. Support life-long learning by providing ongoing professional development for all employees. 	 Great schools build great communities and great communities build great schools. Engage with parents and the community to support ALL students. Recognize the cultural perspectives of our community. Be accessible to parents and the community as we continue to grow. 	 Provide safe, student-centered, world-class schools. Build state-of-the-art facilities that promote student success. Maintain quality campuses that create community pride. Design learning environments that serve ALL students now and in the future.

Source: Clovis Unified School District Strategic Plan 2016-2019. See also: https://www.cusd.com/StrategicPlan.aspx.

Similarly, in nearby Sanger, the district mantra, "Every Student, Every Day, Whatever It Takes," has served as a moral imperative for more than a decade. This phrase places students at the center of learning: Educators are granted discretion to make the system fit the student, not vice versa.

This same ethos was stated succinctly in Hawthorne in the first of the district's core values: "Students are the focus of all decisions." A parent leader from Hawthorne described how this value permeated throughout the district:

I would say the attitude of putting the kids first [is a strength of the district].... From the teachers to the playground supervisors to the admins, it really just goes through [the whole district]. And even to the staff here at the district office, when we have district meetings, it's: "How can we help our kids? What can we do to get these kids to really achieve their potential?"

Supporting Schools to Enact the Vision

Positive outlier districts simultaneously provide clear statements about goals and values, while typically granting discretion to sites in how to achieve these goals. Long Beach officials described this balance as "tight-loose" accountability. The district communicates a set of non-negotiable, or "tight," expectations premised on broad principles, including equal access to meaningful learning and new standards. But it maintains a

Positive outlier districts simultaneously provide clear statements about goals and values, while typically granting discretion to sites in how to achieve these goals.

"loose" approach to how principals meet those expectations, offering leeway so that site leaders can pursue the goals in ways that will work locally. Principals set clear and attainable school goals based on the district's expectations and their own understanding of their school context. Principal supervisors offer feedback regarding school progress toward meeting those goals, as well as recommendations for clear actions focused on continuous improvement to support students. Principals then do the same for teachers. The district provides support—such as additional coaches or professional learning—not sanctions, to the principals of schools that are experiencing challenges.

In Chula Vista, this balance was known as "interdependence." Developed by the district's superintendent, the concept built on the district's existing philosophy of decentralization by clearly articulating the roles and responsibilities held individually by the district and sites and those held jointly between the two. This balance is codified visually with a yin-yang symbol (see Figure 3). The superintendent described how interdependence sought to overcome a perceived lack of clarity and cohesion among schools:

I think part of it was the isolation that I saw schools work under and how certain principals floundered, especially the new ones—the lack of support and connection they had in a district as large as ours. The principal turnover was pretty great because of that. I just said, "We need to retain our leaders. We need to also create a better support structure for our teachers as well."

He further described how interdependence built upon the work of John Kotter's theory of change management, in which organizations require both hierarchy and flexibility to accelerate change and improvement:⁴⁹

It's important for an organization to work as a hierarchy. You have to have roles and responsibilities in order to maximize efficiencies.... Yet [Kotter] also talked about the other side of the organization—for it to be networked, which would allow organizations to be free-thinking [and] free-flowing, have a team approach, and do things differently.

Figure 3 Chula Vista's Model of Interdependence



Source: PowerPoint slide provided to the Learning Policy Institute research team by Chula Vista Superintendent.

In a somewhat different take on the school's role in the district's vision, "Doc's Charge" in Clovis establishes an ethos of competition and entrepreneurship as key to individual and collective educational improvement. A district administrator described entrepreneurship in this way:

I don't want you to confuse entrepreneurship with [going] rogue ... [as in] "I want to make a name for myself and create something brand new." It really isn't that. There is a lot of structure, and within that structure [schools are] allowed to identify something that's not being successful and then say, "Okay, what can I do at my site to make it more successful?" and then be able to process that, be able to look at something that is successful, and go, "I like that, I'm going to adapt it, I'm going to tweak it a little bit, I'm going to try and see if that will help us with student achievement, if that will help us with behavior, if that will help get more parents into our meetings and connectedness with our students."

Educators we spoke with said this vision of schools as friendly competitors and principals as entrepreneurs created a productive balance between autonomy and accountability—one rooted in trust and mutual respect between system levels and sustained through regular communication. A secondary school principal in Clovis East told us:

I think our district really trusts us as leaders.... [O]ur superintendent and the district office team put a lot of effort into building relationships with their leaders, so that we're all basically on the same page. They have our backs, and they trust us to make good decisions, so when we come forward and say we want to do this, it's "What do you need? How can we help you?"

In Gridley and Hawthorne, the two smallest districts in our study, there was a personal and informal quality to the communication and collaboration between district and sites regarding the district vision. Gridley's district office had just two full-time staff working in the areas of curriculum, teaching, and learning. Gridley's school principals had considerable discretion for decision-making, yet given that all schools are located less than a mile from the district office, district and sites maintained close communication. In Hawthorne, instructional leadership teams met monthly at the district office to collaboratively plan site-level professional learning. District leaders took advantage of the small district size with visible presence in schools and classrooms, and they knew all faculty and staff by name.

Instructionally Engaged Leadership

Continuity of leadership contributes to the dissemination of a consistent vision and the creation of an effective working culture. For example, some research has found that committed superintendents who remain in their districts are generally associated with improved student achievement.⁵⁰ In positive outlier districts, leaders with deep experience in their districts could home in on instructional changes. Many educators attributed their students' successes to sustained instructional leadership.

Stability and Deep Experience in the District

Continuous, stable district leadership was a key factor in most positive outlier districts, and one that educators frequently identified as a contributing factor to students' success. In Chula Vista, for example, leadership has remained stable over the past 3 decades, with just three superintendents since the 1990s. Continuous, stable district leadership was a key factor in most positive outlier districts, and one we frequently identified as a contributing factor to students' success.

Francisco Escobedo, the Superintendent when we completed our study, assumed the role in 2010 and shepherded the district through the transition to the CCSS.

Escobedo told us that Chula Vista placed particular importance on the selection of its district leaders. As vacancies emerged, the most successful school principals were tapped to apply for senior leadership roles. The school administrator selection process emphasized the district principles of interdependence and collaboration. A panel of eight or nine stakeholders—teachers, parents, classified district representative, and a principal representative—identified the top three candidates from a pool using a specific interview protocol developed from the district's Principal Profile, which includes the major competencies desired of leaders. Escobedo also met with candidates individually to get a sense of their personal traits and aptitude for senior roles, including emotional intelligence, a commitment to equity, and demonstrated humility. He explained that, to uncover candidates' personal qualities, he asks them to

"Share with me a time where you failed—where you made a bad decision. What did you do? Tell me what your actions were. How did you resolve that failure?" If they can think of one, own it, and figure out a way to re-establish relationships ... that's great. I'm keen on the emotional intelligence aspect. By the time they're here, I know they have the technical stuff.

Promotion of effective and experienced principals from within Chula Vista's ranks further fostered stability across the district and allowed those deeply familiar with the district to inform ongoing leadership development.

Longevity of leaders in Hawthorne also contributed to a sense of stability and trust. In interviews, teachers and district leaders noted how this generated a sense of participation in a collective enterprise and common purpose. The District Superintendent, Helen Morgan, had been in the

position for 8 years, having previously worked as a coordinator for professional development; a principal; and a teacher, including 6 years as president of the teachers association. This longevity and breadth of experience gave her a big-picture perspective on the district. A Hawthorne school board member, Dr. Eugene Krank, explained that this contributed to a positive climate in the district:

A lot of our administrators have come up through the ranks, where they were teachers at first and eventually [got] their credentials and move[d] on.... Even [the] superintendent, you know, she was a teacher at one point. I think there's a certain appreciation for everybody's role. We don't have a sense of hierarchy.

In Long Beach, Superintendent Chris Steinhauser has served in the role for 15 years, having previously been a student, teacher, principal, and associate superintendent in the same district. The previous superintendent, Carl Cohn, served for the 10 years prior. The district has also seen little turnover of the school board, and many district leaders and principals have themselves been teachers in the district. As a result, the district's present instructional vision—the Five Understandings, or "Five U's"—was built upon long-standing systems and resources.

A senior district administrator indicated that this leadership stability has contributed to an effective working relationship between the superintendent and school board and, in turn, translated into improved education for students. He described this collaborative work and communication as follows:

[The school board] will bring [any issues] up with the superintendent. They'll bring [any issues] up potentially with one of us in assistant superintendent–level positions. They are very understanding of their role inciting policy and then letting the people that they hire, the superintendent and his staff, actually do the work. I think those are things that underpin all of what we do, all that we've accomplished.

Likewise, members of Sanger Unified's senior leadership team have had long histories with the district. The significant reforms that shifted the district to an approach characterized by collaboration and shared responsibility, improving relationships with and among teachers and raising student achievement, occurred under the leadership of a single Superintendent, Marc Johnson, who served from 2004 to 2013. His replacement, Matt Navo (2013–17), worked in the district as a teacher and principal for 14 years before taking on the role, and the present Superintendent, Adela Madrigal Jones, has worked in Sanger for more than 30 years as a teacher, principal, and associate superintendent. Thus, three generations of incoming Sanger leadership have had deep familiarity with the context of the district and the strategies that led to its turnaround and success.

Sanger supported continuity by cultivating a teacher pipeline into leadership positions. Through frequent opportunities for professional learning and mentorship, teachers could progress from professional learning community lead to curriculum support provider (who coaches and supports classroom teachers) to assistant principal or principal, and later to district specialist or administrator. A strong leadership pipeline helped ensure continuity of principles and practice within the district. It also meant that Sanger had a "deep bench" for leadership, so that principals moving into district leadership did not significantly deplete schools' leadership capacity.

This was also the case in Clovis, where school and district administrators have usually had long careers in the district, rising through the ranks. Typically, school principals have been Clovis teachers, area superintendents are former principals, and senior district office administrators were former area superintendents. District administrators were thus steeped in the culture of the district and were highly regarded as educators by teachers. Superintendent Eimear O'Farrell, appointed in 2017, began in the district as a teacher in 1993 and climbed through the ranks, as did her predecessor, Janet Young, and the founding Superintendent, "Doc" Buchanan.

Although San Diego has previously experienced periods of leadership turnover, the district's present Superintendent, Cindy Marten, has been in the position since 2013 and was a teacher and principal in the district before reaching the central office. She also participated in and values the literacy reforms undertaken in the earlier era of district leadership and is building upon prior successes while also surmounting the challenges of instability caused by the district's experience of having had seven superintendents (including several interims) during the previous 10 years. District leaders described how that period of turnover of senior leadership contributed to a disruption of district identity and a lack of sense of collective purpose by leaving decision-making responsibility and the directing of resources unclear. This affected the extent to which equitable practices could be implemented. Since the selection of the current superintendent, San Diego has enacted a long-term vision for the district, strategically engaged with external partners to diagnose inequities in the system, and developed an equity vision and levers for action.

Of our case study districts, Gridley had the most recent turnover of superintendents. However, the district has had substantial periods of stability in the position of superintendent. The present Superintendent, Jordan Reeves, was appointed in 2016 following 4- and 8-year tenures, respectively, of his two predecessors.

Instructional Engagement

Stability was not the only element of district leadership that supported the successes in these districts. District leaders we met were instructionally engaged. They saw their job as supporting quality instruction that could meet a wide range of student needs at all levels of the system, rather than merely overseeing buildings, buses, and bureaucratic procedures, as many superintendents have historically done. This engagement put leaders in position to support teachers as they shifted to include all students more deeply in meaningful learning.

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During the shift to the new state standards, district and school leaders in positive outlier districts were more than organizational managers for adults; they were involved as leaders of learning for students. As a senior district administrator from Chula Vista observed, "I've seen, probably over the

past 10 years, maybe 15 years, a shift in the role of the site leader, from manager to instructional leader." Research suggests that the promotion of and active participation by school leaders in teacher learning and development help improve student outcomes.⁵¹

Educators in positive outlier districts discussed a number of observational strategies used to engage district and school leaders in shaping instruction. These strategies varied and had different names (walk-throughs, instructional rounds, collaborative inquiry visits, etc.), and all involved leaders visiting classrooms to observe instruction. These visits helped district and school leaders support the work of teachers in the classroom and gain common understandings of effective practices so as to share them systemwide. Respondents indicated that these observations helped leaders gain a shared understanding of what high-quality teaching looks like and identify problems of practice that could be addressed through ongoing professional learning, often in professional learning communities.

In most districts, walk-throughs and subsequent discussions took place in teams, commonly composed of a principal, assistant principal, and one or more teacher leaders. In Clovis, two of the five school areas⁵² employed a continuous improvement strategy known as Internal Coherence, which involved regularly scheduled classroom visits, called instructional rounds. In Long Beach, principals led by principal supervisors engaged in collaborative inquiry visits in which they observed and learned from practices in other schools, assessed a school's progress toward goals, and shared collegial feedback and strategies on ways to meet those goals.

Sanger's School Academic Achievement Leadership Teams of district and school administrators regularly visited each other's schools. The teams have defined protocols for walk-throughs, combining them with data analysis and systems for feedback. This allowed administrators to work together to identify and share a common understanding of effective practice, to conduct cross-school analyses, and to assess and iteratively improve initiatives.

In positive outlier districts, leadership teams often met monthly, but some occurred more frequently. For example, in Hawthorne, all principals were required to spend each Thursday morning visiting classrooms, a practice that has been in place for 8 years. The superintendent underscored the importance of this time for principals:

I instituted what I call sacred time. Every Thursday from 9:00 to 11:00, you won't be called from the district office, you won't have any interruptions from the district office. You are in classrooms, and you are walking classrooms. It's not exclusive time, but that time is set in stone. I expect that you're in classrooms more than that. However, it ensures that at least once a week for 2 hours, administrators are watching practice.

Hawthorne allocated resources to make this possible. It hired a dean of students for every school, with responsibility for behavioral and disciplinary issues, freeing up principals' and assistant principals' time to focus on instruction. District leaders organized walks regularly and have developed common observation protocols to generate reports about their classroom visits and facilitate conversations across schools. (See Figure 4.)

Figure 4 Example of Classroom Observation Protocol at Hawthorne

Problem of Practice: How do students demonstrate that they understand the mathematical concepts being addressed and how does their instructional experience change based upon whether they do or do not demonstrate this understanding?

Findings:

- 1. Students demonstrated understanding in a variety of ways (individual questioning, whole class questioning, shout-outs, whiteboards/posters/other visual displays, etc.)
 - a. Most observations yielded evidence of heavily guided teacher-directed practices
 - b. In some settings, students were observed self-assessing their understanding or confirming their understanding with peers via questions, discussion, and structured collaborative activities.
- 2. Responses to student demonstrations of understanding varied across the observations.
 - a. Problems were redone on the board for the entire class, notes were being made about tomorrow's focus based on today's learning, guiding and reflective questions were asked, individual redirection or guidance was given, time was extended as needed, etc.
- 3. The presence and effectiveness of the change in instructional experience was dependent upon multiple factors.
 - a. When combined with an intention to examine student work or listen to student statements/discussions, frequent circulation by teachers allowed for more immediate and responsive support and differentiation.
 - b. When provided as needed, teacher guidance and input made collaborative activities a stronger vehicle for students articulating their own learning and supporting the learning of others.

Next steps:

- 1. Reinforce the posting and active utilization of learning targets that are truly representative of student understanding/learning rather than simply tasks, can be accomplished in a single instructional setting, and written in a fashion that promotes student ownership, as that is the first step in students and teachers assessing the learning that is taking place.
- 2. Continue to promote and celebrate the wide range of ways in which students are asked to demonstrate learning. Support classrooms in incorporating more opportunities for students to articulate and assess their learning with peers.
- 3. Stress the need for formative assessment to be an ongoing and active process that requires all learners, students and adults, to be working together in close proximity with frequent interactions.

Source: Observation notes provided to the Learning Policy Institute research team by representatives of Hawthorne School District.

In a similar process in San Diego, area superintendents were also expected to spend considerable time visiting schools, observing practice, and providing supports to principals and teachers. As one area superintendent explained, "I get up every day and I go to schools and I stay there all day long ... next to leaders in classrooms, next to students." She described the value of this process in sharing effective practices from one school to another:

I find strengths and build capacity by connecting leaders to leaders, teachers to teachers. Going inside and outside the district when we see someone who's actually getting different results for students. Sometimes we don't have answers and we're not sure what to do. So, we'll gather an integrated team and say, "How can you help us think differently about what this leader can do to support teachers, to become stronger?"

Likewise, in Chula Vista, cabinet members—the senior district administrators responsible for an academic or administrative unit—were each responsible for a cohort of principals and visited school sites at least once a month. Moreover, every district cabinet meeting began with an in-depth discussion of an educational research article, building members' understanding of instructional strategies, challenging their assumptions, and strengthening cohesion among administrators.

Across all districts, respondents indicated that observing classrooms helped leaders develop an orientation to instruction, deepen their knowledge of the new state standards, refine their expectations for student learning, and sharpen their understanding of effective pedagogical approaches. It also helped build relationships and common understandings with principals and teaching staff, enabling leaders to support their staffs more effectively.

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A Strong and Stable Teaching Force

Research evidence indicates that student achievement tends to be greater when districts invest in teacher quality, including recruiting and retaining teachers.⁵³ Respondents from positive outlier districts credited much of their success in implementing new standards to a strong and stable teaching force. A common view about the importance of strong teachers was voiced by a high school department chair from Gridley:

I attribute a lot of the success here to just having a good staff of people who care about kids and got into teaching for the right reasons.

Of course, such a staff does not magically appear. The districts used a range of purposeful strategies to recruit and retain well-prepared and committed staff.

Teacher Stability

Interviewees described positive outlier districts as attractive places to work, and several districts reported having been less impacted by the teacher shortages building over recent years, in part because they have lower turnover. The emphasis on continuity reflects research that finds low principal and teacher turnover associated with greater gains in student achievement.⁵⁴

Our analysis of California staffing data confirmed that teachers in positive outlier districts were less likely to leave than their colleagues statewide. For example, whereas around 3.5% of teachers statewide in 2015–16 left to work in other districts in 2016–17,⁵⁵ the average for positive outlier districts was half that, at just 1.8% during the same year. (See Table 4.) Teachers in positive outlier districts were also generally less likely to leave teaching, or the state, altogether, with the attrition rate for the seven positive outlier districts around 6.9% from 2015–16 to 2016–17, as compared to 8.5% statewide.

	2013-14 to 2014-15		2014–15 t	o 2015-16	2015-16 to 2016-17	
Reason for Leaving	P. O. District Average	California	P. O. District Average	California	P. O. District Average	California
Left the Profession/State	6.8%	7.8%	6.4%	8.5%	6.9%	8.5%
Left the District	2.6%	3.2%	2.2%	3.5%	1.8%	3.5%
Total Leavers	9.3%ª	11.0%	8.6%	12.0%	8.7%	12.0%

Table 4 Teacher Attrition From Positive Outlier Districts

Note: The positive outlier districts' average teacher attrition percentages were calculated by averaging the average attrition rates from each of the seven districts.

^a Due to rounding, "Total Leavers" is not the sum of those leaving the profession/state and those leaving the district. Source: LPI analysis of California Staffing Data File provided by the California Department of Education on request.
As a result of low attrition and strong recruitment, the proportion of underprepared teachers was generally low across positive outlier districts, despite the growing shortages of teachers in most districts.⁵⁶ Statewide, the number of underprepared teachers—defined as those with intern credentials; provisional, short-term, or limited assignment permits; or waivers—grew from 6,077 in 2012–13 to 12,345 in 2016–17.⁵⁷ This represents roughly half of all credentials issued in 2016–17, more than doubling the share of substandard credentials from about 2% to 4% of all teachers statewide. Table 5 shows that from 2014–15 through 2016–17, the proportion of teachers with less than full teaching credentials in positive outlier districts also grew but was consistently below state averages.

Table 5 Proportion of Underprepared Teachers (Interns, Permits, and Waivers)

	2014-15	2015-16	2016-17
Positive Outlier Districts	1.7%	2.1%	2.5%
California	2.4%	3.3%	4.0%

Note: The percentages for positive outlier districts were calculated as the number of intern credentials, permits, and waivers according to the California Commission on Teacher Credentialing database, divided by the total number of teachers in the district, and then averaged over the six districts. (Gridley had no data recorded for these years.)

Source: LPI analysis of California Commission on Teacher Credentialing and DataQuest, California Department of Education data. Data available at https://www.ctc.ca.gov/commission/reports/data/edu-supl-ipw and https://data1.cde.ca.gov/dataquest/.

Positive outlier districts employed a range of strategies to attract teacher candidates, find the right people, and create the working conditions to retain effective educators. These involved a clear philosophy and effective processes for teacher hiring; relationships with initial teacher education programs; strategies for developing leadership skills, since leaders greatly influence staff retention; and creating an educator pipeline. Their strategies also involve intentional relationship building and a culture of collaboration.

Finding and Hiring Effective Educators

Just as stability of leadership was a factor in a coherent vision, district administrators in positive outlier districts emphasized the importance of finding and hiring effective educators to build a stable teaching workforce to enact that vision. Although there were differences among the districts, common elements included a clear hiring process and school input into the process, often through panel interviews. Several districts emphasized the attention paid to finding teachers who were both well trained and academically capable, and who had the desired disposition and commitment to teaching.

Several positive outlier districts had a clearly articulated philosophy that emphasized their commitment to hiring strong staff. Long Beach's approach drew on the motto "Every student deserves a great teacher, not by chance but by design."⁵⁸ There, working with preparation institutions and then hiring strong candidates are considered the first steps in "designing" an effective teacher.

Chula Vista articulated the philosophy of hiring "A-Players,"⁵⁹ a strategy from the business world. The approach involved defining the desired key competencies, attracting a pool of high-quality candidates, and enacting a collaborative and participatory interview process.⁶⁰ This approach was used in hiring central office staff, and then central office staff and principals used a similar approach to hiring teachers at the school level.

Clovis's unique approach to hiring teachers was articulated in "Doc's Charge," developed by the district's founding superintendent (1960–91). The document asks teachers to be role models, because developing "winning" students requires surrounding them with winning adults, who set high standards and foster a competitive ethic in their students (understood as competition against both a standard and oneself, and in collaboration with others.) It states:

We've got a Clovis image to keep up, and we're looking for people a cut above the average. We're concerned about your appearance, your attitude, your teaching skills, your ability to work with students, but most of all we're concerned about your character and your values.

Teachers' character and disposition were also emphasized in Long Beach's selection goals. A senior district administrator described the qualities they seek in prospective teachers:

First and foremost, we value [the applicant's] character, and we want to make sure that we vet our teachers centrally before we send them out to the school sites. Our protocols for interviews are really to ... dig deeper into their character as a teacher, as an educator. And we value the teacher who will say, "You can put me at any school," because the city of Long Beach is so diverse, ... the district is so diverse, ... and we have affluent areas and we've got those that are in the lower socioeconomic ends, but we prefer the teacher who has that attitude that they can teach at any school.

With the district returning to hiring in 2016 after several years of a hiring freeze following the Great Recession, Long Beach worked with an educational foundation to refine its selection process for teachers and administrators, using a research-based interview process derived from the perspectives of effective teachers and their descriptions of what their job should entail. An equity orientation was central to Long Beach's hiring process, and the interview process sought to assess teachers' attitudes toward teaching students of all backgrounds and levels and hire only those who believe these youth could be successful.

Building an educator pipeline

Positive outlier districts did not wait for excellent staff magically to appear and knock on their doors. They used proactive strategies to develop pipelines for teaching and leadership talent. These strategies may have been particularly important in the years from 2014–15 through 2016–17, when new standards were being implemented statewide and good teachers were in short supply.

These teacher recruitment strategies included creating strong partnerships with initial teacher education programs and developing "Grow-Your-Own" strategies. Positive outlier districts also created opportunities for teachers to develop their leadership skills and eventually progress into school and district administration, while they fostered a positive working climate to contribute to staff stability.

Connections with initial teacher education programs

Several studies show that graduates of teacher preparation programs often take their first teaching assignments in familiar locations, typically close to the place of their student teaching assignments or near their hometowns.⁶¹ Proximity to, and relationships with, initial teacher education programs were cited in most positive outlier districts as factors in the recruitment of teaching staff.

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In San Diego, district and school leaders reported that many of the district's early career educators come from local universities, including the University of California at San Diego (UCSD), the University of San Diego, and San Diego State University, and had typically interned or student taught in the district prior to obtaining their placements. These relationships were built and strengthened over many years with substantive give-and-take about the nature of preparation for the city's schools so that teachers and leaders would be familiar with the approach taken by the district. For example, a distinctive language- and literature-rich approach to literacy development distinguished San Diego when much of the state was emphasizing phonics, so universities working with San Diego often also took a language- and literature-rich approach.

Several other districts created special relationships with universities. In Hawthorne, the superintendent reported working hard to build relationships with Loyola Marymount University and the University of Southern California, noting that "having student teachers is a really wonderful way to get some really ... great staff." Similarly, Sanger hosted intern teachers from Fresno State University's teacher preparation program and provided on-site training for administrator credentialing. This relationship helped fill open positions at Sanger.

Proximity to two university teacher education programs (Chico State University and University of California at Davis), and to an urban center, gave Gridley an advantage over more remote locations. District and school representatives indicated that, unlike many districts in the state, Gridley had not faced teacher shortages. As one principal noted:

Well, the other thing that we really have in our favor in this district is we're very close to UC Davis and Chico State ... and people love living in Chico. It's a pretty neat place to live. A large percentage of our teachers live in Chico and they commute. And so we get very good, qualified teachers. I mean, I can't remember hiring one that did not have a credential.

"Grow-Your-Own" strategies

Several positive outlier districts also used Grow-Your-Own strategies that encouraged local youth to return to the district as teachers. For example, as part of a long-standing agreement known as the Long Beach College Promise, Long Beach students receive their first year of study at Long Beach City College tuition free and are also guaranteed admission to California State University at Long Beach if they meet the state's college entrance requirements. This has provided Long Beach students, including those interested in teacher education, with an incentive to undertake training locally.

A key aspect of the partnership involved postsecondary teacher education faculty and Long Beach educators collaborating to develop the coursework, fieldwork, and professional development for current and future Long Beach teachers. A district administrator commented:

It's just a nice symbiotic relationship.... Many of our students will stay within the city. They will go to Long Beach City College. They will go to Cal State Long Beach. They'll get their teacher credential, and they're back in our system. That, I think, is something that just creates a nice synergy over time that has gone on now for 50-plus years.

Experienced educators from Long Beach Unified often go on to become instructors at California State University at Long Beach, and thus former teachers from the district are involved as instructors in the preparation of its future teachers. In addition, current Long Beach teachers are involved as cooperating teachers for student teachers and as co-instructors in some courses. Several teachers commented that having their colleagues as teacher educators provided a smooth transition into the district for prospective teachers, with one experienced teacher noting:

All of my professors in my credential program [at Cal State Long Beach] were teachers or curriculum leaders [at Long Beach Unified]. So when I graduated, I came in, and I was like, "I know all this stuff" because that's exactly what they were teaching at the college. It all kind of works together.

Long Beach has also seen its Grow-Your-Own approach as a strategy to diversify its future teaching workforce. A district administrator explained current efforts:

One of the things that we're thinking about is how to build up our educationoriented student pathways in the high schools, because our schools are beautifully diverse. If we could get students who might be interested in education, if we start there, [we could] keep them in our city [and] bring them to provide service in their own community. It's one of the ways that we're thinking about diversifying our teaching force that then would pay off for our administrative workforce, too.

This Grow-Your-Own approach has also been in effect in Clovis Unified, where district administrators estimated that around 40–50% of its teachers had themselves once been students in Clovis schools. Their Grow-Your-Own approach involved two main elements. The first was that all five high schools in the district offer an education pathway as part of their Career Technical Education programs. At Clovis High School, the "Careers with Children" pathway places students in internships in elementary schools and includes training sessions at the district's professional learning center. This gives students the experience of being an educator in the district. Support services staff also noted that a number of graduates of their parent academies—offered in English, Spanish, and Hmong, and primarily intended to serve as a bridge between home and school—had later gone on to work in the district as instructional aides.

A second element was that Clovis provides training for existing instructional aides seeking to become teachers. The district operated an after-school program at all but three of its elementary schools, employing 300 instructional aides. A district preschool program employed an additional 150 staff across 28 sites. The majority of these 450 staff were college-age students employed by the

district soon after high school. Realizing that around 50% of these aides were themselves seeking to become credentialed teachers, the district initiated a program for these staff to receive monthly professional learning in literacy instruction, lesson observation, and peer feedback.

Processes for teacher hiring

Schools in most positive outlier districts had significant input into teacher selection. In Gridley, for example, hiring was formally a district responsibility; the district screened initial applications, but schools could make hiring recommendations through panel interviews and, occasionally, demonstration lessons. This allowed schools a voice in selecting candidates who were a good fit for the school and students. One principal noted that the superintendent was open to conferring with principals prior to making a formal offer.

School sites have even greater discretion in Chula Vista. A committee of stakeholders at each school interviewed and selected potential teachers and classified staff. Once selected, district human resources officials provided logistical support (e.g., background checks, fingerprinting, physicals, etc.) to finalize the hiring process.

The balance between school and district input into hiring was exemplified by the process in Clovis. Hiring was a staged process of between four and seven interviews. Candidates were first screened by school principals, typically together with a school-based panel. This involved several interviews or a demonstration lesson. The principal then took selected candidates for an interview with the area superintendent. If that interview was a success, the area superintendent took the candidate for a final interview with the superintendent, who determined whether to offer the applicant a contract.

Principals explained that these higher-level Clovis interviews were more than a pro forma exercise. When a leader recommends a candidate for hire, that leader must vouch for the candidate's suitability for teaching and effectively puts his or her own reputation on the line. This serves as a strong incentive for principals and area superintendents to be thorough and judicious in their hiring recommendations. As one school administrator noted:

We truly do take our time. They really do have that many interviews at Clovis.... It's ingrained in us; the most important thing you do as an administrator is hire, because that is the person that's on the front line with our kids.

To get hired at Clovis, teachers also had to be committed to teaching all students, regardless of the students' backgrounds. Because the district was considered a desirable place to work, a school principal from a higher-poverty school in the district described how she took care during interviews to find committed teachers to ensure that her school did not become a "stepping stone" into the district, noting: "I really have an honest conversation with them.... I explain what their role is and how they're critical. Our kids need people. They need role models. They need somebody who's going to be a constant in their life." A district administrator further added:

When we go and hire people, we're not looking for robots who can just simply stand and deliver curriculum or simply be a great manager at a school site. We're looking for people who really care about the kids.

Keeping Good Teachers

From 2014–15 through 2016–17, the districts we studied generally had low rates of teacher attrition. Educators cited strong working conditions, positive culture, and a climate of teacher support as the reasons for high staff retention among positive outlier districts.

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In Sanger, for example, when asked what best accounted for their early success on

CCSS assessments, Sanger administrators and teachers invariably cited a collaborative culture that helped create a stable teaching force. By developing norms of collaboration and investing in teacher professional learning, Sanger transformed from a district with serious recruitment challenges in 2004 to one that was highly desirable just a few years later.

District leaders were conscious of building relationships in these districts as a strategy for teacher retention. In Hawthorne, district leaders were well known for being a visible presence in the district and knowing all faculty and staff by name. Hawthorne's superintendent, for example, participated in school events, greeting parents at a Saturday STEM (science, technology, engineering, and mathematics) event and dancing with students in an elementary school *baile folklorico* performance. A teachers association leader commented on how these relationships contributed to the positive climate in the district and, in turn, to teacher retention:

I think it's because you feel like you're in a family.... You don't feel like somebody doesn't know you. And when [district administrators] come to your site, they know everybody.... They know whether you're a teacher, a secretary, a custodian, doesn't matter who. They know your name and who you are, and that's why I think people stay: because they feel like [they're] part of something.

An associate superintendent echoed this sentiment:

I think people really feel like they play a role and their voice is heard. I think that that's part of what makes people stay in their jobs. It's not always the paycheck. It's that sense of purpose, being a part of a bigger effort, satisfaction, [and] feeling valued. I feel like people feel that here.

In Clovis, supportive and collaborative working conditions helped retain teachers despite the availability of higher teacher salaries in some neighboring districts. Several teachers and administrators ascribed this to the systems in place to support teachers, and to the culture of high performance. One principal noted:

People want a place to belong and a place to feel valued in the work that they're doing. I feel like Clovis Unified very much does that. [It] gives you a place to belong. They value their people; they value the resources that the community has to offer and utilize those.

A teacher from the same school in Clovis commented that there were structures and supports that helped teachers with challenges in their work and led to teacher retention. These included support staff for behavioral issues and "transition teams" to help high-need students adjust in moving from elementary to intermediate and from intermediate to high school. He added:

[Administrators] are supportive. We have support staff in that process so there's not a divide in terms of, if I need help, I can ask someone for some help, and I feel like they will value that question from me. I don't feel at odds with my administrators.

In rural Gridley, the small size of the district played a role in staff retention, creating a sense of connection, with around two thirds of teachers, particularly at the elementary level, living either in the town or in surrounding communities. Gridley teachers also appreciated the supports that allowed them to focus on teaching. As observed by a principal and former teacher:

I think it is [because of] that small-town piece that we have a fair amount of longevity in our teaching staff here. When you come to Gridley, it's hard to leave.... I've always told people who interviewed for jobs here: I don't ever feel like I've been unsupported by any of my administrators. There's nothing I've asked for, for my classroom, to do what's good for kids, that I've been denied in all those years.

Developing a culture and climate of support can be challenging in larger districts. In Long Beach, the district has a dedicated Teacher Quality and Retention Office focused on supporting and keeping teachers. Staffing surveys of new teachers conducted by this office found that teachers identified opportunities for professional development as the main reason they would choose to stay in the district. The district's well-developed induction program focuses both on learning for new teachers and on helping them build connections with colleagues to create support for early career teachers.

Collective Instructional Capacity

Past research shows that exemplary districts use professional learning to build teachers' instructional capacity.⁶² In addition to recruiting and retaining teachers, professional learning was a key element in building knowledge for, and transitioning to, the CCSS. Although there were differences in approaches, the districts used several common strategies, such as professional learning communities and professional learning cycles. These were often combined with coaching to support teachers and embed practice. Organizational processes that promoted cross-role collaboration and coherence among district and schools were also important. In addition to using these combined strategies within the district, several positive outlier districts engaged strategically over time with external partners for particular professional learning needs, including for developing districtwide equity strategies.

Professional Learning Communities

Professional learning communities are teacher teams that meet regularly to understand standards, plan instruction, reflect on student work, revise lessons accordingly, and plan interventions and enrichment to ensure that all students learn.⁶³ Professional learning communities were well established in each district prior to the implementation of the CCSS. Professional learning communities in Clovis began as early as 2000, with districtwide investment and training for their development in 2007–08. In Gridley, professional learning communities were introduced and became firmly established as part of an earlier round of standards-based training in 2005. Similarly, Sanger first adopted professional learning communities: A Foundational Practice at Sanger.") The Sanger experience illustrates how the use of professional learning communities can evolve over time in a district.

Professional Learning Communities: A Foundational Practice at Sanger

Back in 2005, Sanger Unified School District administrators invested in developing professional learning communities (PLCs) as their primary strategy for turning around student performance. To implement PLCs, they relied on training and materials developed by Richard DuFour, a pioneer in the PLC movement. All administrators and teachers in the district participated in DuFour training sessions at least once over the next few years. The DuFour training and this approach to improving student achievement focused on two things: (1) developing teachers' skill in using standards-based assessments and data to evaluate and improve their instruction, and (2) engendering teachers' shared accountability for all students' success.⁶⁴ The district invested in professional development, selected instructional frameworks, and dedicated time for PLC meetings—in contrast with more typical approaches of relying primarily on the adoption and implementation of textbooks or specific curricula.

In moving to a PLC strategy for continuous improvement, the district invested heavily in developing teacher leadership, creating positions in schools to support teacher learning (Curriculum Support Providers), and focusing principals on leading learning in their schools' teacher PLCs.

PLCs became the way of doing business among Sanger USD teachers and administrators alike. By 2012, the district had developed effective systems and routines for professionals to work together to ensure that all students achieve to high standards:

- Teachers work in PLCs at their grade level or in their subject area, each facilitated by a lead teacher.
- School principals and PLC lead teachers make up a school leadership PLC.
- A district area administrator and group of four of five principals form a PLC that observes and learns from classrooms in each other's schools.
- Several PLCs at the district office level work to support teacher learning in content areas and between special education and general education.
- The district cabinet operates as a PLC to shape and refine district-level decisions and supports.

Sanger USD's collaborative culture extends beyond district boundaries. The district has sought—and been sought by—networks, partnerships, and foundations that offer opportunities for learning and sharing. Its choices are strategic based on the perceived fit with Sanger's needs and the time commitments involved.

While all districts relied on their well-established professional learning communities, teachers and administrators in several districts said the quality of professional learning communities had been uneven. To address this variability and to build capacity for the instructional shifts needed for the CCSS and deeper learning, several districts invested in ongoing efforts to improve the effectiveness of their professional learning communities. San Diego leaders did this through Principal Institutes—whole-day professional learning events for administrators, several of which focused on developing best practices in professional learning communities. These institutes had the additional result of helping principals attend to instructional practices.

In Sanger, despite the strong foundation in professional learning communities, the district invested in sending teams of teachers and principals to a professional learning community institute. Most teachers and principals had attended at least one of these institutes previously, but the ongoing need for repeated exposure to ideas and refreshment of knowledge was part of Sanger's developmental approach to embed practice and build over time. This core element of the district's philosophy of change was referred to locally as "repainting the Golden Gate Bridge."

In adopting the CCSS, several districts invested in expanding the amount of teacher professional collaboration time available. In Sanger, time for professional learning communities was doubled from 1 hour to 2 hours weekly. Chula Vista used funding flexibility under the LCFF to invest around \$15 million in hiring arts teachers to initiate its Visual and Performing Arts program. This not only provided arts instruction for students, but also released teachers for a dedicated block of 1.5 hours of teacher professional collaboration time weekly to meet with grade-level counterparts and engage with professional content.

Professional Learning Cycles

Professional learning cycles are iterative processes in which educators plan a change, implement the change, collect data on implementation, use data to evaluate implementation, and then plan for the next change. In positive outlier districts, these professional learning cycles helped translate learning during teachers' team meetings into practice and embed instructional changes in all the districts. In Chula Vista, for example, the cycle encapsulates the elements of high-quality professional learning for continuous improvement.⁶⁵ Staff receive direct instruction on a topic or pedagogical strategy, followed by opportunities for educators and leaders to practice the approach in a nonevaluative context, receive feedback, and observe colleagues (see Figure 5). Professional reading on the topic, analysis of interim data, and examination of student work are ongoing and are intended to inform implementation. During the final weeks of a learning cycle, instructional leaders monitor teacher use of the practice, measure effectiveness, and develop plans for future professional development. Cognizant that making shifts in instructional practice involves a sustained approach, teachers are expected to engage in each of these professional learning elements at least four to six times in order to have full mastery of new practices. All of this work is supported by coaches. In Chula Vista, LCFF funds allowed the district to invest in schoolbased resource teachers, who observed and modeled lessons; supported professional learning communities to strengthen instruction, planning, and assessment; and facilitated networking among teachers.

In Hawthorne, each school had two coaches—one each for literacy and mathematics—who led professional learning cycles. To do this, they worked with teachers to identify a focus area, meet to discuss lesson plans, observe a lesson, and meet again to guide teacher reflection of the lesson and future changes. Coaches emphasized that their role was not to judge teachers, but rather to offer support for instructional improvement. A mathematics coach described it as follows:

I'm not evaluative. I'm a peer coach. For example, I just sent out an email last week [saying], "Okay, in the classrooms next week observing, ... remember what we're looking for, what we're focusing on.... How are you helping your kids access the text?" ... Then we debrief afterwards, "Well, how do you think it went?" It's a really collaborative piece with teachers. It's not like, "You did this great, you did this poorly." No, that's not my job. My job is, "If we're going to have your kids access this curriculum, how can I help you do that?"

In San Diego, student-centered coaching cycles of 4–6 weeks guided the work of resource teachers and were supported by district-level coaches. In interviews, district leaders highlighted the use of evidence to inform instruction and support continuous improvement. The cycle consists of a pre-assessment using quantitative and qualitative data analysis to determine student strengths and learning gaps. Teachers, resource teachers, and principals co-construct standards-aligned learning goals specific to each grade level, subject area, and instructional practice they will use to support students toward these goals. During the cycle, resource teachers, principals, and district administrators conduct classroom walk-throughs. At the end of the cycle, students complete a post-assessment to determine the influence of the instruction on student learning outcomes and to support teachers in reflecting upon practice and making evidence-based instructional decisions.

Figure 5 Professional Learning Cycles in Chula Vista

	Professional Learning Cycle - Summary
Cre train	ate a professional learning plan that builds expertise in all staff through repeated cycles of: ning - opportunities for practicing - receiving feedback - observing colleagues
	Repeated Cycles refers to the need for teachers to be engaged in all aspects of PL – training - opportunities for practicing - receiving feedback - observing colleagues - at least 4 to 6 times before they can be expected to have full mastery of that strategy.
	Training refers to direct instruction on how to implement a strategy or practice in a classroom setting. Quality training includes explanation, modeling, connection to research and results, differentiating for learners at different levels, opportunities for experimentation and discussion, introduction to all materials needed, etc.
	Opportunities for Practice refers to allowing teachers multiple chances over several weeks to experiment with the new strategies in a low risk environment in their own regular teaching settings.
	Receiving Feedback refers to having someone observe each teacher several times as they practice the new strategy and give structured feedback that reinforces the positive actions of the teacher and makes suggestions for improving the use of the strategy observed.
	Observing Colleagues refers to having each teacher observe several other teachers practicing the use of the new strategy, discussing what was seen and giving feedback to each teacher afterward.
	Professional Reading refers to having a system in place for circulating articles weekly about the powerful practices being learned throughout all cycles.
	Looking At Student Work and Data refers to the important practice of regularly engaging teacher teams in using structured protocols for examining authentic student work and other performance data that is directly connected to the professional learning cycles.
	Monitor, Measure and Modify refers to the ongoing process of having the principal, the ILT, and other school leaders conduct frequent walkthroughs to all classrooms in order to have a clear understanding of the level of implementation of the practices being studied in the professional learning cycles to facilitate good decisions about future training and resource allocation.

Sharing Practices Systemwide

Across districts, organizational processes promoted cross-classroom, cross-school, and often crossrole collaboration in professional learning, with strategies for sharing practices systemwide. In each case, practice was increasingly deprivatized: It became public and shared, as educators were expected to learn from one another and to develop common norms and practices, not close the door and do their own thing. According to respondents, these strategies for systemwide sharing contributed to a culture of learning and to alignment between school and district leadership and teachers.

Four districts—Chula Vista, Hawthorne, Long Beach, and San Diego—engage instructional leadership teams in shared professional learning. Similar teams were also present in Clovis and Sanger. These teams usually consisted of a principal and four to five teachers at each school site, charged with helping set the instructional direction for the school and developing coherence between teachers and school leaders. In addition, at least five of seven sites use principals' meetings for professional learning and planning, drawing alignment between district and school leadership.

Cross-role collaboration was highly developed in Sanger and Chula Vista, where the concept of professional learning communities had been extended from schools to the district office. At Chula Vista, professional learning permeated multiple levels of the system. (See "Professional Learning at Multiple Levels in Chula Vista Elementary School District.")

Professional Learning at Multiple Levels in Chula Vista Elementary School District

Chula Vista's professional learning cycle is at the core of its efforts to develop a learning organization. All Chula Vista staff members have had opportunities to engage in the elements of this professional learning cycle—direct instruction on a topic or pedagogical strategy; opportunities to practice the approach, receive feedback, and observe colleagues; professional reading on the topic, analysis of interim data, and examination of student work; measuring effectiveness; and developing plans for future professional development—although the experiences vary depending on their role. Chula Vista uses professional learning communities at multiple levels:

- Central office administrators: Each cabinet meeting begins with discussion of a research article related to instructional and leadership topics of importance to the district. In-depth conversations challenge members' assumptions and ensure that the leadership team has a common understanding of effective instruction.
- **Principal cohorts:** Lead principals and a cabinet member support a cohort of eight to 10 principals. Meeting monthly, they discuss data, problem-solve, conduct school walk-throughs collecting formative assessment data, and share best practices and resources. Cohorts participate in district-led professional learning sessions, with cabinet members conducting follow-up visits and providing personalized coaching.
- Instructional leadership teams: Comprising the principal, assistant principal, and teacher leaders, instructional leadership teams attend district professional learning sessions in which they explore specific instructional practices, processes, and district-recommended protocols, and share best practices and resources to address common areas of need or problems of practice. After district-led sessions, each team determines how the content can be translated and incorporated into each school's professional learning structures. Using a combination of assessments, teams identify areas for improvement by grade level and/or student group.

• School sites: At whole-staff sessions and in grade-level professional learning communities, teachers and coaches discuss how they take on learnings from instructional leadership teams. Grade-level teams develop performance tasks, unit tests, and interim assessments that can be used across classrooms within a grade; review student work; and identify instructional strategies and supports for student learning. Teachers are allotted time to experiment with new teaching strategies, with opportunities for peers to observe or conduct informal, nonevaluative walk-throughs and discuss implementation.

Opportunities for safe practice, collaboration, and classroom observation support Chula Vista teachers at school sites by engaging in the cycle of professional learning. These varied learning experiences, which include dialogue with their colleagues and instructional coaches, allow educators to develop their pedagogical expertise.

The professional learning cycle, using research-based strategies with opportunities for professional learning at every level, contributes to fostering a culture of continuous improvement in Chula Vista.

Cross-role collaborations and professional learning at multiple levels also helped ensure that effective practices were shared across schools. Long Beach's approach engaged educators across schools to review and refine instructional practices. For example, the district has developed the "ObserveMe" online platform, through which teachers can request observation visits from other educators, both to share practices in their classroom and to receive feedback from colleagues that helps them further develop their teaching. (See "Professional Learning Supports in Long Beach Unified School District.") Such strategies help promote collegial collaboration and avoid the professional isolation that can inhibit continuous improvement.

Professional Learning Supports in Long Beach Unified School District

- **1. Curriculum specialists:** A team of curriculum specialists creates curricular materials, co-teaches lessons with teachers to model instructional strategies, guides staff discussions about content and standards, and facilitates several other professional learning strategies.
- Instructional leadership teams: A principal and at least two or three teachers from each school attend district-level professional learning sessions together two to three times a year. They get training from the district, which they are expected to bring back to their schools to help facilitate school improvements.
- **3. Collaborative inquiry visits:** Each school is in a network with approximately three other schools. Teachers and administrators from the schools visit each other's schools to give each other feedback in the areas they are working on. This also provides an opportunity for educators to learn about practices they might implement in their own schools.
- 4. Unit lesson study: District instructional coaches work with teams of teachers at a school site to take a "deep dive" into what students should know under the CCSS and then plan a lesson together, teach the lesson while watching each other, and review outcome data from the lesson to determine how to improve upon it. This helps teachers practice the steps necessary to collaborate together and also gives them a better understanding of the standards and instructional practices needed to support student learning. The unit lesson study was piloted in 2016–17 at 22 schools and implemented across the district the following year.

- **5. Principal meetings:** Principals attend district meetings focused on teaching, learning, and student data, especially as they relate to supporting the instructional shifts required under the CCSS. Principal meetings had existed in the district for several years, but they became more focused on teaching and learning after 2014–15.
- 6. ObserveMe: Teachers use an online application to indicate when they would like other educators to come to their classrooms to observe them and provide feedback. This process helps educators see practices that they might want to replicate and also provides valuable feedback for teachers that helps them continue to learn and grow. This platform was implemented in some schools in the district in 2016–17.
- 7. MyPD: The district compiled instructional resources and videos of teachers from across the district who were delivering lessons on different topics and addressing different standards. This convenient video platform provides personalized, self-paced courses for teachers and helps educators see what effective teaching and learning looks like in LBUSD classrooms. MyPD was implemented in 2016–17.
- 8. Staff meetings: A Long Beach philosophy is that every meeting is professional development. School leaders are encouraged to make sure that every whole-school, grade-level, or department meeting is dedicated to helping teachers meet the school's goals, rather than focusing on administrative or logistical issues.

In another example, Clovis fostered a competitive, yet collaborative, culture in the district so that each teacher and school observed the district's best teaching practices and proactively replicated those practices. Data and evidence of performance were made visible. Teachers observed colleagues in their own school and in other schools to learn from successes. This enabled the spread of effective practices from one school to another.

As an example, the principal at a combined middle and high school in Clovis explained that the school had heard that an instructional approach called Reading Apprenticeship was a success at a high school across town. This approach, developed by researchers at WestEd, involves students in reading daily and learning how to reflect on their reading. It has been used and well researched across the state.⁶⁶ A science teacher from the school was invited by colleagues at the other school to visit and investigate. This led to a two-way exchange of information and teacher visits, contributing to buy-in for Reading Apprenticeship from teaching staff, and the principal agreed to adopt the program, ultimately providing training to 40 teachers in 2 years across the middle and high schools. He noted how adopting the instructional strategy built upon what teachers were already doing and further supported the goals of the CCSS:

There were a lot of strategies that our teachers were already doing.... But there were some components that were new. I think the "think aloud" portion of it ... was really something the teachers all connected with [and] that they needed to do more [of]. And teaching kids to think about their own thinking was something that really drew them in. That shift of learning into the Common Core ... just aligned perfectly.... And part of that first lesson in the Reading Apprenticeship training was on metacognitive thinking and how kids take control.

This strategy and culture of competitive collaboration meant that Clovis's district office struck a balance between allowing areas and schools the latitude to establish their own initiatives and also communicating the district's vision. This gave schools and teachers a voice in the professional learning relevant to their class and school context. The district played a kind of "research and development" role, often piloting professional learning initiatives by working with a group of interested areas, schools, or individual teachers on district-led professional development initiatives aligned to the CCSS. As a senior district administrator explained:

We stopped trying to do forced marches around professional development because it doesn't work, right? What we try to do now is support the schools if they believe that's what they need.

Engaging Strategically With External Partners

Positive outlier districts not only used knowledge and expertise in the district to build teaching capacity through strategies such as professional learning communities and coaching, but also engaged with external partners for professional learning in specific practices, including addressing issues of equity. Partner organizations included universities, county offices of education, and nonprofit organizations.

Positive outlier districts were strategic in their approaches, identifying specific areas of learning needed and selecting partners able to provide these. Sanger, located in Fresno County, has for more than a decade sought out various county offices for specific kinds of professional learning they feel those counties support well. Based on evidence of achievement gaps among students in specific content areas, grade levels, and student subgroups, the district sought high-quality professional development for targeted needs. They judged a county office's professional learning program as a "good fit" with district needs if it included professional developers with content expertise, experience working with practitioners, and willingness to customize professional development to the district and on-site support to district schools. Having previously worked with Riverside County for training in effective professional learning communities, the district has contracted with the following other county offices over the past 5 years:

- Tulare County for professional development in mathematics, Positive Behavioral Interventions and Supports, support for English learners, and Early Literacy/ Writers' Workshop;
- Ventura County for ELITE: English Learner Institute for Student Success training for English learners and long-term English learners' instruction and interventions; and
- Orange County for development of the Lifeskills Education Advancement Program afterschool and family night programs.

Positive outlier districts favored sustained engagement with external partners over short-term arrangements. For example, Long Beach and Sanger were two of ten districts that joined the Math in Common network of districts, a 7-year initiative (2013–20) designed to shape instruction to support the teaching of the CCSS in mathematics. These network districts participated in professional learning activities such as Principals Institutes, summer professional development for teachers, and site-based consultancy visits, and joined a community of practice that allowed them to share learnings among educators in the network.

Likewise, leadership teams from each elementary school in the Clovis East area engaged with a team from Harvard University monthly for 2 years to develop instructional capacity and coherence in mathematics. A Clovis East teacher leader described how this long-term engagement focusing on teacher collaboration was paying off in terms of student learning:

What we learned along the journey was the importance of really being committed to long-term professional development, understanding theory, using data as our driver, but also understanding the importance of "collective efficacy"—meaning how do we work together as teams and value people and learn to trust?

We stuck with it, and all of a sudden 2 years later we're starting to do instructional rounds, and we're listening to teachers sitting with every single person on your faculty who's bought into the work because they've seen success in their classroom.... Only two [of our area schools] are not Title I, so we're looking at our most struggling learners who are starting to show progress academically.... We're just building that core of teachers that were suddenly seeing the power of what happens when you learn to work together as professionals.

Clovis also worked districtwide with Fresno State University and the Fresno County Office of Education to offer "Math Camp" for 114 teachers from its Title I elementary schools over 3 years. Rooted in Cognitively Guided Instruction, Math Camp is student-centered and builds on students' prior knowledge, encouraging them to use a range of strategies in problem-solving.

Several districts engaged with external partners to leverage their leadership in addressing specific issues of equity. Hawthorne partnered with Center X from the University of California at Los Angeles to provide professional learning focused on improved equity. Working with Center X partners, they provided professional learning centered on mathematics and science instruction, as well as culturally responsive teaching and learning. Similarly, since 2003 several Long Beach schools have worked with Safe and Civil Schools on issues of school climate and supporting positive behaviors. The district adopted the program systemwide in 2015–16.

San Diego engaged deeply with two organizations—Equal Opportunity Schools and the National Equity Project—on issues of equity. Equal Opportunity Schools guided the district in analyzing barriers to more equitable enrollment in Advanced Placement and International Baccalaureate classes and rearranging its central office organizational structure to facilitate greater enrollment in classes that meet California's university entrance requirements. San Diego's partnership with the National Equity Project from 2014 went beyond professional learning, helping it develop a districtwide equity vision, identifying five equity levers for change, and using these to translate the vision into concrete practices. The vision and equity levers helped shape the professional learning agenda and the ways in which the district measures and monitors change. Specifically, the work brought attention to professional learning to support students of color and students from low-income families. An area superintendent described this attention to equity as the central focus for supporting student success:

Our focus on equity, I think, is what's shifting it [learning outcomes]. It's no longer the status quo, or trust that you're going to do what you need to do, but we're going to be intentional about it and call it out.

A Developmental Approach to Change

One common thread in districts' approach to the CCSS was a deliberate, iterative approach to implementation of new standards and deeper learning for all students. This type of approach is consistent with reviews of research on implementation. These reviews show that implementation occurs in stages and involves support for staff at all stages.⁶⁷ Positive outlier districts often began introducing the new standards with professional learning for staff. The districts built upon existing strengths,

The districts built upon existing strengths, such as professional learning communities, and brought teachers into the process, drawing on existing teacher knowledge and ensuring deep understanding and appreciation for the standards.

such as professional learning communities, and brought teachers into the process, drawing on existing teacher knowledge and ensuring deep understanding and appreciation for the standards. This approach helped to demystify the standards' more rigorous expectations for in-depth learning, prior to taking on new curricula and assessments. Perhaps most importantly, this deliberate approach meant that districts could adjust as they met challenges along the way.

This approach was possible in California because the state did not emphasize high-stakes tests or school sanctions before teachers could learn how to teach the standards.⁶⁸ States that focused on intensive testing with consequences for schools, teachers, and students often created a backlash from parents as well as educators.⁶⁹ Instead, California worked to adopt and pilot aligned assignments to use for information, not for punishments; to create curriculum frameworks to guide teachers' work in classrooms; to engage teachers in reviewing materials that could be made widely available; to offer block grant funding for professional learning and technology purchases to support the standards; and to give schools time and opportunity to learn to use the standards.⁷⁰ While the state essentially gave districts permission to take the necessary time for implementation, the positive outlier districts' deliberate, step-by-step use of this time helped ensure that the necessary shifts in practice would take place and would take root at a deep level.

Professional Learning for Instructional Change

The first phase of implementation in most districts was professional learning. This typically involved teachers reading and unpacking the new standards, understanding their structure and organization. For example, most districts used a mapping exercise to understand how new standards corresponded to the previous state standards; to identify essential, or "power," standards; and to build an understanding of the shifts in pedagogy needed to teach to them.

In San Diego, professional development began with principals and teacher leaders and was then shared with teachers through professional learning communities in their schools. The district held professional development days for principals and teacher leaders in which district staff and external partners explained the purpose of the standards and their pedagogical demands, and then discussed the instructional shifts necessary for students to succeed. Finally, the teams discussed the kind of student behaviors that teachers might observe in the classroom that would evidence critical thinking and more student-centered learning.

Chula Vista began implementation of the CCSS shortly after state adoption in 2010. Like San Diego, it phased in professional development. First, the district hosted sessions for principals, teacher leaders, and instructional leadership teams, and later for classroom teachers and school staff. The district initiated a 4-year professional learning plan for the CCSS in 2011–12, beginning with writing in grades k–1 and then cycling through grades (k–1, 2–3, and 4–6) and subjects (opinion writing, mathematics, and explanatory writing) over the subsequent 3 years to 2014–15. Early in this cycle, the district held centralized professional learning sessions for teachers from all 47 schools—a departure from previous practice—and engaged professors from San Diego State University, who helped shift the focus of instruction from a teacher-directed model to a more student-centered model aligned with these new standards.

Sanger had a tradition of testing new ideas with a small number of teachers or pilot schools, so leaders began in 2012–13 with several strands of professional development in English language arts and mathematics. This professional development primarily involved professional learning community lead teachers, coaches, and principals. For example, half-day workshops for teacher cohorts in grades k-2, 3-5, and 6-12 focused on shifts in learning standards, thinking tools, academic discourse, and mathematical practices.

Using an interdepartmental approach at the district level, Long Beach created a series of professional development modules that district professional development providers used systemwide, outlining the differences between the old and new standards, along with the related instructional shifts. An early adopter of the standards, Hawthorne used monthly meetings of administrators, coaches, and teachers facilitated by an external partner, the Talking Teaching Network, both to build familiarity with the new standards and to promote greater understanding and commitment from staff. (See "A Teacher-Driven Approach to CCSS Implementation in Hawthorne.")

A Teacher-Driven Approach to CCSS Implementation in Hawthorne

Hawthorne's deliberate approach to the implementation of CCSS exemplifies the approach taken by several positive outlier districts. The approach was careful and purposeful, intentionally building capacity and buy-in with staff. Teachers were given time and resources to first study, and then implement, the new standards, allowing much of the process to be teacher driven.

Hawthorne was an early adopter, starting the process before it became state mandated. The district engaged an external organization, the Talking Teaching Network, to facilitate monthly professional learning sessions for administrators, coaches, and teachers to study the new standards and the required instructional shifts prior to implementation. A representative from the Talking Teaching Network noted the importance of bringing in teachers early and investing in capacity building prior to implementation:

You need intellectual commitment from the teachers, and you're not going to get that just by requiring it. You're going to have to go out and grow it. You're going to have to go out and invest. That requires getting people involved from the get-go.

A Hawthorne teacher further explained how this additional early capacity building aided teachers in implementation:

Our district was so proactive in easing the teachers into the transition, ... first looking at the California standards and then comparing them to the Common Core standards, and that actually put a lot of teachers' minds at ease because there was a lot of correlation between the two. Then [we] really [dove] deep into, "What are these standards all about?" and really research[ed] them. So by the time the transition took place with the testing and everything, we were like, "Oh, we've got this. We know this."

Another explained how taking a collaborative approach to professional learning around the new standards supported teacher buy-in and confidence:

Everyone was really receptive. At the very initial beginning of course there's going to be that natural pushback: "Oh, not another new thing, another thing to get."... We took baby steps, and everybody felt like, "Okay, we've got this. We've got this." We had a lot of staff development on it, a lot of collaboration, whole-school collaboration, subject-level collaboration, grade-level collaboration. There was a lot of discussion and making sure everybody understood it."

After a period of professional learning and familiarization with the standards, the district moved to adopt new curricula. Hawthorne engaged teachers and other stakeholders in the process, forming a committee of teacher leaders from all school sites in the district, as well as parent representatives. Prior to reviewing new materials, the committee examined student demographic and performance data and identified what they would want from a curriculum serving the district's student population.

For example, in selecting the middle school English language arts curriculum, the committee noted that they wanted passages that would be interesting to students of different cultural backgrounds, as well as supplemental materials to use for interventions and support classes. They also paid attention to whether the materials truly reflected their understanding of the standards or were merely a repackaging of the previous standards. Curricula were selected one at a time over several years, further reflecting the district's commitment to a deliberate rollout of new programs.

After familiarization training and the selection of curricula, Hawthorne supported the implementation of the CCSS through ongoing district- and site-level professional learning for instructional leadership teams, school administrators, coaches, and teachers.

Educator Involvement in Developing Instructional Frameworks

Once teachers had the opportunity to understand the new standards deeply, positive outlier districts then sought to change instructional practice to ensure that each and every student met the new, more rigorous CCSS. In Long Beach and Chula Vista, each developed and promulgated a new districtwide instructional vision. San Diego created a "Four Learning Cycles" framework to advance instructional improvement. District leaders developed the framework from observations and data analysis of early standards implementation. The framework focused on creating positive learning environments based on the following themes: creating an academic, social, and emotional environment worthy of children; promoting classroom environments that are alive with collaborative conversations; promoting student agency and voice; and unlocking the genius of

all children, including students with disabilities and English learners. Each theme was addressed in multiple forums throughout the year, including Principals Institutes (full-day sessions with principals and district leaders) and Leadership Labs (half-day workshops in which principal cohorts and area superintendents conduct school walk-throughs).

In Clovis, the district engaged existing teacher knowledge for standards implementation. The district assembled teams of teachers, 120 teachers in total, and tasked them with deconstructing the new state standards to identify a small number of essential, or "mastery," standards. As the district did not initially find a publisher with materials that addressed both the level of aligned content and their school communities' needs, these teacher teams developed a series of curricular units for each grade level. These units served as curricular resources in English language arts and mathematics for the first 2 years. The guides that the teachers constructed identified the "essential questions," "big ideas," and "key skills" for every unit, and the standards associated with each. Units also contained suggested activities and teaching resources and listed key performance tasks and corresponding scoring rubrics.

Although Clovis adopted a textbook series 2 years later, this teacher-led approach served as a form of professional development for participating teachers. The standards teams had representatives from every area and school, as well as all tested grade levels. During the curricula rollout, teachers who had participated in the creation of materials met weekly with their grade-level teams to explain the rationale for the documents and the purpose of the student performance tasks. This ensured that at every school there was a teacher with deep knowledge of the standards and curricular materials who could serve as a resource for colleagues and explain how to implement the curricula in practice. A Teacher on Special Assignment with the district described the value of this approach: "More than the production of the documents and the material that came out of it, it was the process of teaching everybody through that system."

Curriculum, Instruction, and Assessment Focused on Deeper Learning

With their deliberate approach to implementing new standards, educators in all positive outlier districts reported changes in curriculum, instruction, and assessment that deepened opportunities for ambitious student learning across the district. These changes may be related to past research on deeper learning showing that teachers' beliefs about the value of student-centered teaching are strongly correlated with student reports of opportunities for deeper learning.⁷¹ Our cross-case study revealed common themes about the implementation of the standards that enabled teachers to come to value a shift to deeper learning through student-centered instruction as they were immersed in studying and engaging with the standards.

Adjusting Curricula to the New Standards

Positive outlier districts took differing approaches to the adoption or development of standardsaligned curriculum, but these steps always came after teachers had engaged in professional learning around the standards and had begun adjusting their instruction to those standards. In Chula Vista, the district waited 4 years to adopt textbooks. A district leader described what they had learned from an earlier textbook adoption in 2000, stating that schools had success when teachers went beyond

the textbook, learned how to unpack the standards, developed indicators for success, and created their own assessments against the standards. He said school staff developed a much stronger skill set by doing the "heavy lifting" of making sense of the standards and determining how best to teach them. In contrast, in cases in which the textbook was the primary instructional planning tool, teachers tended to be "textbook driven rather than standards driven." Thus, district leaders delayed adopting new instructional materials and instead hosted districtwide professional learning opportunities for all teachers to begin the heavy lifting.

Positive outlier districts took differing approaches to the adoption or development of standards-aligned curriculum, but these steps always came after teachers had engaged in professional learning around the standards and had begun adjusting their instruction to those standards.

Similarly, as of December 2017, Gridley's school board had yet to formally adopt a mathematics text, although most elementary teachers were already using Engage New York, a curriculum series developed by a set of schools and teachers in New York State. The formal adoption would follow the teachers' informal endorsement of curricula based on their professional assessment of how well the materials worked for Gridley students. In Chula Vista and Clovis, districts solicited formal teacher feedback in the selection of textbooks. Clovis's district office served as a kind of research and development department, identifying promising curricula, piloting two of these in schools, and seeking educator and community feedback to make a final determination.

Positive outlier districts also worked to build teachers' capacity to develop their own curricular materials. As they transitioned to the new state standards, district leaders gave greater latitude and responsibility to teachers to determine what the standards meant, how to teach them, and which materials to use to support that teaching. In most of the districts, teachers supplemented textbooks with additional resources. In others, the district decided not to adopt textbooks, relying on teacher-developed units instead. In essence, the materials were organized to fit the goals of the standards and the teachers' approach to delivering them, and not vice versa.

An educator from Gridley described how his science colleagues began this process literally, by ripping an old textbook apart and reorganizing the chapters into binders according to the district's essential standards. Over 3 years, Gridley High's mathematics department restructured its courses into an Integrated Mathematics sequence. The department chair described how having educators go through the restructuring process engaged them deeply with the standards and moved the department further from a textbook-based approach toward one that was educator led and more focused:

[The textbooks] helped us frame our notes, but we have all written our own graphic organizer notes that we're going to work with students, and then we've selected the homework. We've all gone through one by one and said, "These are the problems, these are the 10," because we don't really do the, "Hey, we're going to do 1 to 39 odd [numbers] tonight." Those days are gone. There [are] reasons why I pick the 10 I pick for their learning.

[Course restructuring] is a lot of work the first year, but once we're done it's a little bit less [work] for a teacher. But I think just that planning and that curriculum.... You just can't teach everything that's in the book. There are modules that we don't actually get to. But we really strengthen some of our more essential key standards.

In San Diego, teachers, principals, and district leaders felt that their focus on ensuring that all schools offered a "guaranteed and viable curriculum"⁷² was central to improvements in student learning. District officials made clear to teachers the distinction between the curriculum—the standards, prioritized and clustered as "critical concepts"—and curricular resources to support teaching.⁷³ By focusing on the curriculum as a means of teaching the standards rather than a lockstep series of lessons, educators had leeway to choose the curricular resources to support their teaching. This helped educators think strategically about their work, their teaching goals, and how they create learning environments to achieve these goals. Further focus was brought to this work with districtwide initiatives that require all students to graduate having satisfied California's requirements for college entry and that provide students with access to college-level courses during their high school careers.

One district, Sanger, almost exclusively used teacher-developed curricular materials. In a practice that began prior to the advent of the CCSS, teachers in Sanger developed their own lessons through their professional learning communities and with district support, and then shared these broadly. Building on this strength, the district identified a need to shift from single lessons to the development of units, given the complexity of the new standards, and offered professional development to support this work. The educator-written units were shared and enhanced within and across schools through professional learning communities and districtwide grade-level professional development sessions. They were made available to all on a website, www.SangerLearns.com, where they are linked to locally developed scope and sequence by subject and grade level.

Teaching for Deeper Learning

Teachers across several districts characterized their role under the CCSS as moving from a "keeper of knowledge" to a guide for student learning. A teacher from Clovis described the difference in instruction in her school:

I always think of "big T, little s." So, T for teacher.... Before the shift of Common Core, [instruction was] very teacher-directed. Ninety percent of the school day, teacher, teacher, teacher talking: direct instruction, kids just working. I look at Common Core now as a "big S, little t": very student centered, student driven. Especially in math. And not just being very "step one, step two, step three."

She went on to describe how significant a change in teaching practice this was for many teachers:

Teachers have had to really shift the way they conduct their day ... [to] be able to have chaos in a classroom. I say that because students need to talk about what they're learning, and that's going to cause noise, and that's going to cause movement.... Research shows that that's how kids learn best... but it also takes a teacher not being such a micromanager and being ... more the facilitator now. And I feel like that's been a huge shift.

As a teacher from Long Beach observed, this also required a change in expectations about teaching practice from administrators:

I know when I first started teaching ... the expectation was that kids are sitting quietly. When your principal came in, they [would] value the kids sitting quietly and listening.... Now it's the complete opposite. Now we want to hear productive talking and that collaboration and really learning from one another.

Her colleague further described the shift in the way teachers approached lessons:

It's more the kids guide the teaching rather than us [being] the keeper of all the knowledge.... Let's see what the kids already can do, and then we base our teaching off of that.

In Gridley, we also saw how a school was adapting a pre-CCSS, very structured teaching method to the instructional shifts intended under the new standards. When the CCSS standards were being introduced, Gridley's previous superintendent had invested in professional development in Explicit Direct Instruction (EDI).⁷⁴ This was offered to all interested staff in the district and was adopted sitewide at the middle school. The school's principal described how elements of this method were used to support certain aspects of instruction, even as they continued to move instruction to align with the CCSS:

[We] looked at the EDI strategies in relation to the Common Core's focus on deeper critical thinking and higher depth of knowledge and found it to be something of a disparity. We found that EDI looked like it really worked very well for surface-level pieces but not as well for the deep critical thinking pieces. But you can't do critical thinking all the time. That's why there are some elements of [EDI] that are still very effective.... The teachers who adopted it found it to be extremely effective in helping focus what they did in their classroom and forcing them to check for student understanding during instruction.

In another example of shifting instruction, an elementary teacher in Gridley explained how she and her colleagues had restructured teaching in English language arts as they sought to deepen students' engagement with the text and use the text in multiple ways across the course of a 3-week unit:

We do one extended read throughout the week that we do multiple times. We use it to teach grammar and spelling within the context of reading. We also use it for our writing.... So, one week we're focusing [on] narrative, the next week we're focused on informative [text], and then the third week we're focusing on opinion writing. We're constantly cycling through it instead of, "This is our narrative trimester, this is our opinion trimester, and this is our informative write trimester." It's constantly going back and cycling through the different types of writing. I've seen a huge improvement in their writing with that.

Shifts in mathematics teaching strategies placed greater emphasis on conceptual understanding, problem-solving, and metacognitive strategies over mathematical procedures. For example, Clovis High mathematics teachers reported using active teaching methods such as "vertical whiteboards," a strategy in which several problems are placed on boards around the room, and students move in small groups working together, discussing possible solutions, and discussing reasoning.

Districts also built on existing teaching practices that aligned to the CCSS's focus on deeper learning. For example, in anticipation of the instructional shifts to deeper learning required by the CCSS, Long Beach began investing in professional development in mathematics that supported these shifts and fostered collaboration. This early investment helped prepare teachers for the transition to the CCSS. (See "Strategies for Fostering Deeper Learning in Long Beach Unified School District.")

Strategies for Fostering Deeper Learning in Long Beach Unified School District

Long Beach has implemented important systems and initiatives to lead instructional shifts that support student learning. The CCSS provided an opportunity to continue to move away from emphasizing a "right" way of approaching a problem toward offering multiple points of entry to problem-solving. Long Beach has used multiple strategies to foster deeper learning.

The first was setting a clear instructional vision to raise the rigor of instruction. The district created a framework for deeper learning called the "Five Understandings." This framework emphasizes four districtwide strategies for instructional practice—high-quality instruction aimed at college and career readiness, complex texts to build conceptual understanding of content, collaborative conversations to allow deeper understanding of content, and formative assessment to collect evidence of where students are and what to teach next—and a fifth understanding, collaborative planning to promote a collective culture of efficacy.

A second element was intensive professional development. In mathematics, for example, all elementary teachers had opportunities for in-person trainings on shifts in instructional practice, three or four times a year over 3 years, supported with collaborative planning along the way, as part of the Math in Common initiative. The goal was to ensure that students were better prepared to work together and use mathematical reasoning to solve challenging problems. This effort included mathematics lesson study, based on the Japanese lesson study model and designed to support teachers as they shifted to teaching mathematics through rich, challenging tasks. It proceeds with

coaches leading collaborative lesson planning and modeling the lesson while teachers observe; modification of the lesson based on teacher feedback; and, finally, teachers working in pairs to teach the lesson in their own classrooms. After piloting this effort at low-performing schools, the district aims to expand this model to all elementary teachers.

Long Beach has developed a graduate profile that outlines the qualities and competencies with which its students should graduate for success in careers or postsecondary education, aligned both with state standards and with the skills sought by industry. Long Beach is a Linked Learning district: Every school, from elementary to high school, has college and career goals for students, and all high schools offer Linked Learning pathways. These pathways provide coursework around a specific industry, such as architecture, engineering, or health sciences. At the high school level, every content area designs curricula that connect to work-based learning projects related to career pathways. The district's 1,300 local partner businesses help to support students' college and career learning, from providing guest speakers to enabling students to participate in job shadowing, apprenticeships, and internships.

Long Beach also promotes deeper learning by expanding access to advanced curricula. With placements in algebra not reflecting the diversity of its students, Long Beach is using data to identify students who have demonstrated prerequisite math achievement and monitoring course enrollment to ensure that those students are enrolling in accelerated mathematics courses. Similarly, the district is paying for all students to take the PSAT and using scores to encourage students to enroll in Advanced Placement courses. This has resulted in an 82.4% increase in Advanced Placement course over 4 years.⁷⁵

Long Beach supports instructional changes oriented toward deeper learning through its Office of Curriculum, Instruction, and Professional Development. Staff from the office develop curriculum materials in partnership with teachers, conduct research on best practices, facilitate professional development workshops, model lessons in teacher classrooms, and draw on research to inform their professional development. The office has also developed a series of research-based videos to support teachers' efforts in implementing formative assessment.

Teachers and principals in several districts reported that shifts in instruction were sometimes accompanied by changes in the physical environment of the classroom. To facilitate applied and project-based learning, San Diego is in the process of converting kindergarten and transitional kindergarten classrooms into "makerspaces." These classrooms provide materials and tools that allow students to explore, create, and test their ideas, and experiment with creating tools to solve real-world problems. In some elementary classes in Gridley and Clovis, desks have been replaced with height-adjustable furniture organized into pods, and chairs have been replaced with "wobble seats" that allow children to move their bodies as they work. A 2nd-grade teacher in Gridley noted that she had adapted her instruction within this changed classroom environment to facilitate greater student collaboration:

My classroom looks a lot different than your traditional classroom. I don't have any desks in there. The kids sit in groups of four and it's completely flexible seating, so they choose their seat. They switch seats three different times a day, so they're always working with a different group of four. They have to problem-solve together throughout whatever we're doing, whether it's math or language arts.

Addressing Challenges in Teaching for Deeper Learning

As teachers changed their classrooms and instruction, positive outlier districts learned from their experiences and adapted their approaches as they faced challenges that arose during CCSS adoption. Challenges included consistency of messages about teaching for deeper learning, systems for communicating large and complex curricular shifts to teachers, and variations in teachers' instructional practices, as well as how to communicate with parents and the community.

Districts leveraged existing professional learning communities to ensure clear communication about teaching expectations, and this allowed them to adapt their teaching over time. For example, Sanger had started implementing standards in k–8 mathematics, training coaches and professional learning community lead teachers. From this early experience, district leaders learned that professional learning community lead teachers did not feel sufficiently prepared

Districts leveraged existing professional learning communities to ensure clear communication about teaching expectations, and this allowed them to adapt their teaching over time.

to bring their colleagues up to speed. This led to a new model for professional learning: training all teachers, one grade level at a time, so that everyone could get firsthand exposure to the new ideas.

San Diego experienced similar challenges around clear communication. The district provided training for principals and teacher leaders, who then shared this learning at their school sites, often engaging in these discussions with the support of area superintendents and coaches during the time set aside for professional learning communities. Although the training increased teacher and leader knowledge of the CCSS and the district's rationale for their adoption, it also resulted in disparate interpretations and instructional shifts at school sites. As one area superintendent and former principal described, "Our approach wasn't systematic. It was really each individual site—how they were implementing and how they were monitoring the implementation."

As a result, area superintendents in San Diego noted that, although teachers often referred to the CCSS as driving their instruction, their lessons were often still aligned with the previous California standards or not on grade level. Realizing that they had to further calibrate and hone their professional learning around the new standards and the related curricular and instructional shifts, district leaders created a clear framework to guide professional development and the onset of CCSS-aligned instructional practices.

Similarly, an initial lack of communication systems created uncertainty for Chula Vista teachers during the transition. Without a formal set of textbooks, teachers were sourcing and developing their own instructional resources. Despite the efficacy of the approach in terms of building teacher capacity, it also entailed teachers spending additional time for lesson planning and locating materials beyond what was previously expected, creating concerns among teachers. The district responded by increasing its engagement with the teachers association, expanding and sharing professional learning rollout plans, and inviting teachers into the decision-making process. Teacher consultation groups helped the district choose textbooks to pilot and voted on preferred texts as part of the selection process.

Despite the overall movement toward CCSS-aligned instruction, there was also variation by teacher. District and school leaders in several districts commented that some teachers were slow to take on new instructional methods. A high school department chair from one district commented that it was often experienced teachers who were reluctant to shift instructional practices, especially when they had been achieving success in previous years. In another district, challenges were greater at the secondary level. As a district official noted:

We are still seeing in a lot of high school classrooms the traditional lecturestyle instruction that gives very little room for student engagement, student collaboration, group thinking, and group problem-solving. [The new approach] is very uncomfortable for a lot of teachers, and so that's something that we're cognizant of and we're always working to figure out ways to change high school instruction particularly.

A coach from Hawthorne added that despite the district having provided professional learning on mathematics strategies, such as "number talks," they were not yet seeing these strategies implemented in the classroom as frequently as they had hoped. Thus, despite the overall shift in instructional practices experienced in positive outlier districts, variations in practices still existed, underscoring the importance of collaborative practices and the need to attract teacher buy-in to initiatives in order to enact educational change.

Finally, some districts experienced initial tensions with parents and communities. This was most pronounced in Clovis, where the district conducted research and held town hall meetings to overcome apprehension and what some described pejoratively as "reform math." Furthermore, in Chula Vista and Clovis, a shift away from worksheets that focus on procedures and algorithms in instruction to conceptual instruction meant parents felt less able to support their students with homework. Teachers described how they needed to continually provide information on the value of new instructional methods. A Clovis elementary teacher explained:

I tell the parents in parent-teacher conferences. I tell them at Back-to-School Night, too: "This is a way we're teaching math to get their understanding. I promise you they will learn how to stack numbers [use an algorithm] eventually. It's not that they're never going to learn it. My job as a 2nd-grade teacher is to get them prepared for math when they become an older student—in 4th, 5th, 6th grade. I want them to be successful, not just in 2nd grade. I want them to be successful in math throughout their education career. So, teaching them to understand numbers now will benefit them in the long run."

Assessment for Learning

In positive outlier districts, the ongoing shifts were supported by assessment practices that give more access to student thinking, which helps teachers reflect on what is being learned and what kind of work needs to be done. These assessment practices include both formative assessment tools created by teachers individually or in grade or subject matter teams, as well as benchmark assessments that give periodic checks on student progress on standards. Several positive outlier districts are using these assessments as a strategy to enhance student learning. For example, district leaders in San Diego Unified described how they saw the policy shift from the high-stakes testing era of No Child Left Behind to the more locally directed environment of the CCSS as an opportunity to encourage teachers to harness formative assessment as a tool to learn, reflect, and inform instructional improvement. Locally developed assessments include common formative assessment tools, such as end-of-unit assessments, as well as quick strategies such as "exit tickets," in which teachers collect student responses to a small number of questions at the end of a class period to see what students understand and what they have questions about.

A teacher coach explained that the shift toward student-centered instruction under the new state standards means that "there are so many opportunities to listen in and see what kids are doing versus standing up and teaching, where you don't really know what the kids are doing." Similarly, an assistant principal underscored the significance of the shift from a paced coverage of the curriculum to mastery of standards, explaining it to his teachers as follows:

I don't want to know what you're teaching exactly 3 weeks from now to the day, because I hope you don't know. You really shouldn't know. If you're responsive to what your students are learning, you'll have an idea, but not specific. That's been a big shift. We used to have a number of teachers who would calendar out their entire semester.

Educators and principals across San Diego Unified reported the use of varied strategies for formative assessment of student learning. In addition to tools such as exit tickets, teachers also use individual student conferences, writing samples, and in-class observation notes during independent or group work. District and school leaders also discussed the importance of common formative assessment tools by grade-level teams, including brief writing tasks or constructed responses assessed with a cocreated rubric, or interim assessments

A district official explained that the absence of a districtwide assessment has allowed educators to focus on aligning students' needs with instruction and then on assessing for understanding, as opposed to having the assessment drive the content and pace of teachers' instruction.

created through the item test banks available on Illuminate, the district-adopted web-based data and assessment management platform. A district official explained that the absence of a districtwide assessment has allowed educators to focus on aligning students' needs with instruction and then on assessing for understanding, as opposed to having the assessment drive the content and pace of teachers' instruction.

Although professional learning communities in Sanger developed and analyzed common formative assessment tools prior to the CCSS, these tools are being updated with the advent of the new standards. Professional learning communities are developing new formative assessment tools to include performance tasks and scoring rubrics to help teachers assess student learning against the higher-order competencies of the new standards. The district is investing in building teacher capacity in this area. From 2018, all teachers will participate in a professional development process to assess the rigor and relevance of their professional learning community–developed common formative assessment.

Formative assessment also forms a key part of Long Beach Unified's approach to continuous improvement and is one of the Five Understandings that form the district's instructional vision. Long Beach Unified's approach draws on the work of Dylan Wiliam regarding Embedded Formative Assessment.⁷⁶ It offers several strategies for teachers to assess student learning throughout a lesson in order to inform their teaching. These include developing instructional strategies that elicit evidence of learning, providing strategic feedback, and helping students to use each other as resources. The goal is for teachers to use ongoing formative assessment embedded into lessons and units to continually gauge student learning, in addition to more formal benchmark assessments in which students participate periodically. District research on formative assessment contributed to the development of videos that help teachers learn how to create and use more effective measures of student learning. Teachers access the videos through a district professional learning website.

Some districts are also using standardized benchmark assessments to monitor student progress. Sanger opted to use state-approved Interim Comprehensive Assessments that are aligned with the California Assessment of Student Performance and Progress (CAASPP). This benchmark assessment presents students with items in the same format as the state summative assessment, and the district provides fine-grained reports that teacher professional learning communities can use to identify performance gaps. Hawthorne decided to use the Interim Assessment Blocks, which contain similar items to the Interim Comprehensive Assessments but are grouped to test specific subjects and skills.

Chula Vista and Clovis opted to use their own series of measures to gauge performance. Chula Vista developed a set of what it calls "Local Measures" assessments that reflect learning expectations against the CCSS and in three key content areas:

- Reading (informational and literary texts): Teacher-conducted running records assessments to assess students' reading levels (e.g., Lexile)
- Mathematics: A district wide test aligned with the CCSS that emphasizes students' concept development and problem-solving skills
- Writing: A common writing prompt scored using a common rubric that assesses students' writing development, particularly around explanatory and informative writing

The selection of a small number of districtwide assessments brought focus to the district's work and helped motivate changes in practice as the district adapted to the new standards. A former district official credited this focus with contributing to increased performance, noting that based on the Lexile reading levels in 2012, only 34% of Chula Vista students were on track for college and career readiness; 5 years later, more than 60% were on track.

Clovis also developed its own series of interim assessments, known as iCALs and iCAMs—Interim Clovis Assessments in language arts and mathematics, respectively. These interim assessments drew from the Smarter Balanced Assessment Consortium (SBAC) item test banks that comprise the CAASPP. Described by a district administrator as a "dipstick into the SBAC," these assessments take place annually in the fall and spring. In its own analysis of these data, Clovis found a high correlation between the student outcomes on the interim assessments and those on the state assessment, regarding them as a useful gauge of schools' progress toward meeting the CCSS.

Clovis's assessments, like its curriculum guides, were developed by teams of teachers. This required participating teachers to understand clearly what each question is asking and which standards it reflects. This served as a powerful form of professional learning, deepening educators' knowledge of the standards and how to teach them.

Similarly, in Hawthorne, results from Interim Assessment Blocks and curriculum-based unit assessments were used in site-level professional learning. Coaches facilitated teachers' review of unit assessment results, looking at individual, classroom, and school-level scores and examining the performance of student groups such as English learners, Redesignated Fluent English Proficient students, and African American students. Teachers also hand-scored free-response items from the Interim Assessment Blocks during site-level professional learning. Hand scoring deepened teachers' understanding of the assessment system and helped them see opportunities to make shifts in instruction. A district office administrator explained the importance of this exercise to teacher learning:

It was critical that they calibrated scoring.... Some of the realizations that come out—some of the grammatical features maybe are not as important in writing as we'd graded in the past, and [not as important as] really looking at the student's thought, understanding, and expression. With mathematics, you can actually get the wrong answer and still [get] partial credit based on your thinking and your approach. Those were things that were powerful enough that we said if we can get to those conclusions as a result of this experience, that will undoubtedly affect classroom practice.

The use of interim assessments varied by school in Gridley. At primary and elementary levels, the schools took the district-identified essential standards and created new report cards, listing essential standards and benchmarks for each school trimester. An example is shown in Figure 6. In doing so, the schools brought alignment between curriculum and assessment and made expectations for learning transparent to staff and the community.

Ferential	Mathematics													
Essential Standards	Dencimark							Trimustan d	-	DEDEODMANCE		DEEINI	TIONS	
Foundational Skills Phonemic Automators	d Beg 13 12 13	Reporting Period Beg T1 T2 T3					Trimester 1	A Matte Graded				- L.		
RE 2 Understands that words are made us of		Conventions			1	1	2	Operations and Algebraic Thinking	_	3 Meeter Billion	Met the Standard			-
sounds	4 5 7 10	10 Lia Prints uppercase and lowercase						subtraction.		2 Indenty Mich of	anoaru			-
RF.2b Produces single syllable words by blends sounds	9	L2 Follows r	ules about words and					QA.1 Solve addition and subtraction word problems within 20	1	1 Has Not Met C	ne Stand	ard	-	_
RF.2c Says each of the sounds in one syllable words	3 7 9 10	L2a Uses capitalization						Understand and apply properties of operations and the relationship between addition and subtraction.	1	Trimester 3			7	
RF.2d Separates the sounds in one syllable		L2b Uses purchasion					CA.3 Use strategies to make it easier to add and	1	Number and Operations in Base Ten			-		
RF.3 Uses word study and phonics skills to read	14 00 00 44	L2e Uses phonics skills to spell unknown words						OA.4 Use addition facts to solve subtraction prob-	1	Use place value understanding and properties of operations to add and subtract.				
words	20 39 41	L 11 Uses 4 types of settences						Add and subtract within 20.		NBT.4 Add within 100, using 2 digit numbers and 4				
RF.3a Knows the spellings and sounds of consonant digraphs								OA.5 Count on to add and count back to subtract	1	multiples of 10		H-	-	
RF.3b Reads one syllable words	1.00	Speaking and Listening Standards		1	1 1	T2	T3	CALS Add and subtract fixently within 10, use mental strategies to add and subtract within 20	1	NBT.5 Explain how to find a 2 digit number	10 more e	r 10 less l	han 1	
RF.3c Uses long vowel spelling patterns		St. 1 Takes	oad le amus discussions			1	2	Work with addition and subtraction equations.	_	NBT,6 Explain how to subl other multiples of 19 up to 1	ract multi 10.	des of 10	ion 1	1
RF.3/ Reads words with inflections		OLI TRACT	a alas for discussion	+	<u>.</u>	÷	÷	QA.7 Determine if an equation is true or false	1	Measurement and Data				-
RF.3g Reads knegularly spelled words	1 19 36 59	SL1a Pollows notes for discussion SL1b Talks with others and adds to what the		+		;	2	QA.8 Determine a missing number in an equation	1	MD.3 Tell and write time to the hour and half ho		our 2	2	
Reading Standards: Literature		say		1	<u> </u>	-1	-			Geometry			_	-
RL1 Asks and answers questions about key details in a text	0 1 4 6	SL1c Asks questions about what is being 1 1			1	Trimester 2 Reason with shapes and their attrit			butes.					
RL2 Relets stories		SL6 Speaks in complete sentences			1	1	11	Number and Operations in Base Ten		G.1 Distinguish between defining attributes and describion attributes of shares.				
RL3 Describes characters, settings, and events in a story RL5 Tells the difference between fiction and								Extend the counting sequence.		G.2 Build two dimensional or three dimensional				-
		Characteristics of a Successful Learner			T2		тэ	NBT.1 Count from any number to 120. Read and write numbers up to 120	1	shapes to create new shapes G.3 Divide circles and rectanoles into two or four			-	
son-fiction RL1 Asks and answers questions about a law		Follows school and class rules			3		3	NBT.2a Understand 10 can be thought of as a but-	1	equal shares and name the smaller parts 2				
RL7 Uses pictures and words to tell what a boo	1.27	Shows respe	ot for property and materials	3	3		3	NBT.2b Understand the numbers 11-19 have a len	1	MATHEMATICS	Beg	T1	T2	ТЗ
RL10 Reads nonfiction text		Cooperates/V	Works well with others	2	2		2	NET 3 Compare 2 tun-doit numbers with compari-	2	Reporting Period	-	100	12	100
Language & Writing Standards		Warks indepe	andanity	1	1	Т	1	son symbols >, =, and <	~	NBT.1 Writes numbers up to 121	2	Touria	12 14	a luna
L2d Spells sight words	0 10 14 5	Completes and returns homework		3	2	\top	3	Measurement and Data		NBT.1 Reads numbers up to 12	1	6 /2	20 /2	2 1 /2
L2d Spells common spelling patterns	1 4 8 8	Reads at home		3	3	+	3	Measuring lengths indirectly and by iterating length units.		CALS Fluently adds within 10	0	8 /14	4 /1	4 10 /
Lansuage & Writing Standards Content		Does neat and careful work		2	1		2	MD.1 Order three objects by length 2		QA.6 Fluently subtracts within 19	0	0 /	5 /1	0 1 /
	122	<u> </u>			-	_	_	MD.2 Measure objects with nonstandard units	2	GA.6 Use Strategies to add within 20	10	11 /	10 /	s 15 n
speaking		EXPLANATION OF		MA	RKS	_	ŧ.,	MD.4 Organize data into three groups or less and		CA.6 Use Strategies to subwatt with 20	• 0	0 "	10 /	5 10 12
L1c Uses nouns and verbs that agree		3 Meets Expectations		ask and answer questions about data	2					_				
L1f & 1g Uses adjectives and conjunctions		2 Nearly Meets Expectations					Integrated/Additional C	urriculu	m: The	following	1			
W.2 Writes about a topic with facts and details		1 Does Not Meet Expectations					areas are integrated into Science, Social Studies,	Health, I	E, and /	lit.				

Figure 6 McKinley Primary School, 1st-Grade Student Report Card

Source: Provided to the Learning Policy Institute research team by Gridley district staff members.

Using Data and Evidence to Inform Teaching and Learning

Using data to inform instruction has long been a strategy for school improvement, but the implementation of this strategy has been uneven and has often not been supported by professional learning.⁷⁷ In some settings, teachers have been asked to study test score data under the presumption that when they have identified lower scores they will automatically know what to do to improve student learning—a presumption that is often incorrect.

Our case studies provide more information about how educators use a wide range of data and evidence about student experiences and learning in settings in which educators also experience intentional professional learning. Just as the new standards emphasize student use of evidence to support decisions and arguments, these districts have emphasized teacher use of evidence to support planning and decision-making about how to improve instruction.

Positive outlier districts emphasized the use of assessments and other data about students' attendance, feelings, behavior, and experiences to inform teaching, and several increased their investment in the use of data and evidence as they moved to the CCSS. Data were used for three primary purposes: to inform instruction in the classroom, to target extra supports to students' needs, and to evaluate the effectiveness of strategies. Positive outlier districts used data at multiple levels, informing decision-making at the district office level, among principals, in teacher professional learning communities, and by individual teachers to support learning.

Using Data and Evidence to Inform Instruction

A core use of data and evidence in positive outlier districts was to inform instruction. Teachers in professional learning communities discussed the results of unit assessments to determine areas they needed to revisit in their teaching. For example, San Diego took a "learning through doing" approach to improving teachers' capacity to use data to inform learning as part of their student-centered coaching cycles. A teacher coach described how teachers approached the use of data to inform learning since the advent of the CCSS:

That process of analyzing an assessment, looking for, "What are the observable behaviors that we can actually notice and name? How are students doing with those? And then what are we going to do about it? Versus just, "Okay, I've got eight of 10 students that score proficient on this, so that's 80% of my class."... We're actually looking at what students are doing and what they need for their instruction. We're trying to make that generalizable to any assessment or any kind of data point that you want to collect. How can we have observable behaviors that we can use to really inform our teaching and our next steps?

Similarly, data were at the heart of professional learning community team discussions informing instruction in Clovis, as a mathematics teacher explained:

Those weekly agendas are sent out to their team 48 hours ahead of time. They also include what data for which tests. You're coming with your data, you've already analyzed it, you know which kids need intervention, and it's a group discussion.

In Chula Vista, teachers used professional collaboration time to review student work and performance after administering assessments. For example, the principal at one school asked each teacher to track student progress on Achieve 3000, an online reading program that serves as an interim assessment of student reading levels and nonfiction comprehension. Teachers engaged in this process collaboratively, noting student Lexile level growth and identifying specific instructional strategies to support individual student performance. In addition, teachers reviewed student writing samples and other constructed-response items during collaboration time, leaning on each other's expertise to develop next steps and identify where additional support was needed.

The use of data and evidence to inform instruction led leaders to value data in multiple aspects of their leadership. A senior district administrator from Clovis underscored the importance of instructional data in the district:

We still collect data on almost everything, and we believe it's what should drive our instruction. It's what drives our policies, it's what drives our funding, it's what drives our staffing.... At the same time, it's also what drives us to want to be better and to learn from other people.

Using Data and Evidence to Inform Individual Student Supports

Positive outlier districts also used data and evidence diagnostically, to identify students who might need additional learning supports. For example, in Gridley, with all students at the middle school level receiving some form of intervention or enrichment, teachers analyzed assessment data in 6-week cycles, identifying areas of student growth and ongoing learning need,

Positive outlier districts also used data and evidence diagnostically, to identify students who might need additional learning supports.

and informing placement into a next round of intervention. In San Diego, area superintendents and principals analyzed data to identify groups of students in need of additional support, with teachers then identifying "focus students" within these groups to examine in depth. The process of doing so helped highlight specific learning needs of these students and the teaching strategies to support their learning. A district teacher coach explained the rationale for approaching it in this way:

The theory behind it is that the more we pay attention to their [students'] learning needs and the more we get underneath how to best meet [these needs], then we step back and say, "What impacted the growth of this child? And let's name that." And then we leave the teacher with those strategies. Now [the teachers] can implement that when we're gone. We figured out how to meet [this student's] needs, and how do we take what we learned about [the student] and apply it [to other students], because it's just good teaching.

Identifying students in need of supports commonly entailed the use of multiple measures. Hawthorne teachers used multiple data sources to place students in mathematics and English language arts courses, including scores on the CAASPP, teacher recommendations, and grades. For referrals to English language or special education support, the district analyzed data with a critical perspective to ensure that their choices were appropriate and not influenced by biases associated with race, language, cultural background, or immigration status. A school psychologist described how before conducting an assessment, the school considered the following:

What is their English language acquisition?... What are some interventions that have been tried, especially with our population with African Americans, and English language learners, and kids who are coming in with a different culture? There are some biases that I have to rule out before we say, "Let's go for it and assess for special education," because sometimes if a student is new to [the] country, am I even going to assess? Is it a language issue, is it a culture issue, before we move forward and say, ... "You might have a disability."

In Sanger, the district is establishing integrated data systems to assist with identifying students in need of support. The system captures multiple data sources and uses them to monitor the progress of traditionally underserved groups of students to identify specific needs for intervention. Current data systems include one that merges academic performance data (Illuminate) with behavior and outcome data (PowerSchool), while another (ELLevation) tracks performance data for English learners and migrant students. Likewise, in Chula Vista, the district has invested in the creation of a Local Control Accountability Plan Matrix, a data visualization resource that provides a snapshot into a student's academic performance, attendance, and disciplinary history so that appropriate and multifaceted interventions can be implemented to advance student learning.

Similarly, in San Diego, district data systems monitor a range of factors to identify students at risk of falling behind. Known as the district's early warning or at-risk monitoring system, these real-time data on attendance, behavior, and coursework keep track of progress for students at the secondary level. The system's model allocates each student 100 points and deducts points on a sliding scale depending on the student's academic, behavioral, or attendance records. Students are assigned one of four levels: on track, nearly on track, off track, and far off track. Students with scores below 50 are flagged as far off track, and their scores are color-coded red in the system's display. Both district and school personnel monitor the system, but counselors also have the discretion to identify appropriate supports and interventions for students who may need additional support.

In all these uses of data and evidence to inform individual student supports, positive outlier districts were oriented to use data in nonpunitive ways, to support teaching and learning and continuous improvement. This was summarized in a widely quoted phrase from San Diego's superintendent: "Using data as a flashlight, not a hammer." An area superintendent explained that the statement is "about uncovering what we need to do and where our kids need us most. Then we're not apologetic about the fact that the kids that need more will get more."

Using Data and Evidence to Inform Strategy

Positive outlier districts also used data and evidence to assess the effectiveness of initiatives and to inform changes in strategy. Although this differed with the organizational structure of each district, the examinations of data typically took place at principals' meetings. In Chula Vista, for example, principals meet in cohorts of 8–10, led by a lead principal. These cohorts receive training in professional learning cycles, which includes a discussion of data to help principals grapple with problems of practice and use insights from their colleagues to continuously support and improve their respective sites.

Similarly, in Sanger, principals present school data at annual summits with district administrators to identify improvement priorities for their schools. District leaders regularly examine student data to set priorities for improvement and evaluate policy decisions. These leaders rely on both formal and informal feedback from district and school staff to assess the effectiveness of their supports to teachers and schools. A teacher coach explained how the district uses evidence to inform and refine policies and practices:

Sanger does well at trying new things and reevaluating and not being afraid to make changes if [something is] not working well. Always look at what's not working for kids. We make [a strategy] our own and make it fit—we're not about adopting programs; rather, [we] adapt and fit them to our students.

In Clovis, principals have several kinds of meetings to discuss evidence, evaluate successes, and share good practices. The first is an annual meeting known as the Fall Charge.⁷⁸ Representatives from the district's assessment and accountability department work with all area superintendents and school principals on how to use data from the CAASPP for diagnostic and planning purposes. In recent years, the Fall Charge has featured training in the use of the district's Data Analysis Tool, a template that supports schools in drilling down into summative assessment data to evaluate improvement efforts and plan ahead, comprising the following four steps:

- 1. Research: Prompts site administrators to use data to identify areas of concern and success (e.g., 5th-grade mathematics trends)
- 2. Recall: Focuses on facts of the previous year (e.g., all mathematics-related activities)
- 3. Reflect: Focuses on how the activities might have produced the observed assessment trends (e.g., specific teacher understandings and strategies)
- 4. Respond: Prompts ideas for next steps (e.g., content or strategies to address observed gaps)

A second kind of meeting in Clovis is known as Principal Grade Level Expectations (PGLE, pronounced locally as "piggle"). During PGLEs, school administrators report on their site's data and, having discussed with their school management team, describe factors they deem responsible for their successes—a further mechanism by which good practices at one school can be picked up by other schools.

There are multiple other structures in Clovis for data dialogue through regularly scheduled meetings, including monthly district–area superintendent and principal–area superintendent meetings, site learning director meetings with district representatives from the departments of assessment and of curriculum and instruction, formal and informal principal professional learning communities in each area, and grade-level and course teacher professional learning communities. Each forum offers occasion for looking at a variety of data sources to assess progress toward districtwide and site-based goals and improvement efforts—including as part of the district's CLASSI accountability system. (See "CLASSI Accountability System in Clovis.")

CLASSI Accountability System in Clovis

Clovis's collaborative-competitive culture combines with a data-driven approach to continuous improvement in its accountability system, the Clovis Assessment System for Sustained Improvement (CLASSI).⁷⁹ There is significant competition among schools to achieve well on CLASSI, and data are closely watched at district and school levels.

The system parallels the "Sparthenian" philosophy the district instills in its students—"Be the best you can be in mind, body, and spirit"—by collecting data on, and rewarding performance in, three components. It serves both evaluative and diagnostic functions, but district schools and areas also regard it as a major annual summative assessment.

School scores on each component are compiled throughout the year. The CLASSI system enjoins schools to focus not just on students' academic performance, but also on their co-curricular activities and the quality of school life. All 5,000 district employees attend an annual ceremony at which awards are given to schools that nurture the "whole child," which includes supporting their social and emotional learning, engaging their families, and celebrating cultural diversity.

The three CLASSI components measure both outcomes and processes:

- Component I: Pupil Achievement Goals, Multiple Assessments, Composite Index: Academic achievement indicators aligned with California curricular standards and the California State University entrance requirements. Includes CAASPP results for all student groups and, from 2017–18, average growth per student above expected year-to-year growth.
- Component II: School Management, Student/Parent Involvement, Co-curricular Program Ratings: A "Clean Campus" score based on parent ratings over the year; community involvement measures of meeting attendance and diverse representation on school assessment and review team committees;⁸⁰ co-curricular and performing arts performance measures; and Character Counts! parent survey ratings for elementary and intermediate schools.
- **Component III: Site Review, Self-Study, Self-Rating:**⁸¹ Schools' processes and practices (as opposed to outcomes), focusing on cultural competency and self-assessment on an Intercultural and Diversity Advisory Council rubric. The review includes assessment of each school's practices relative to multicultural education, hiring for diversity, cultural competence, and issues of racial and sexual harassment.⁸²

CLASSI extends district standards and competition beyond academics to include students' co-curricular outcomes, parent engagement, and cultural competency. This broadened view of standards for success forges collaboration among teachers and staff beyond the boundaries of grade-level and subject area professional learning communities. The competition lies mainly in achieving CLASSI standards (versus being better than another school or area), and falling short of an annual award prompts new effort and collaboration. Perhaps ironically, the competition between Clovis schools and between areas to win annual CLASSI awards drives the collaboration within and between area schools that is essential to their continuous improvement.

Most positive outlier districts increased investment in data systems and the analysis and use of data while implementing the new standards, a reflection of the growing importance of data to inform district strategies during the switch to more rigorous standards for all students. Sanger grew its data department from one part-time person in 2012 to an information systems team headed by a former secondary school vice principal and staffed by two full-time data analysts and a database administrator.

Long Beach has increased investment in its LROIX (pronounced EL-roy) data system⁸³ to make it comprehensive and user-friendly. The system not only can report on a host of indicators, such as attendance records, CORE survey data, test scores, and discipline incidents, but also includes a suite of data tailored to the needs of high schools, including student grades, Advanced Placement data, Scholastic Aptitude Test data, Preliminary Scholastic Aptitude Test data, graduation status data, on track for graduation data, college attendance data, benchmark assessments, and data on whether students are on track to meet the state's requirements for entry into California public universities. The data system now also includes climate, culture, and social-emotional measures.

Supporting Teachers in the Use of Data and Evidence

In addition to investing in infrastructure and district-level staffing, several districts reported providing data-use training for teachers. In Hawthorne, teachers at one school were offered a stipend to participate in training in data analysis. A teacher coach described the process teachers used to analyze data to adjust future instruction and plan in-class small-group interventions:

Each teacher will get a complete printout of how every single student did in all of their classes.... We have to break it down: How did your ELs [English learners] do? How did your African Americans do? Then you're comparing that to how the entire class did. Then we're going question by question.... You'll see exactly which questions were the strongest in your classroom, which may be different or similar to the person next to you.... They have to pinpoint ... the three weak points for the class as a whole and how you're going to reteach that.... Then we're going to look at 6th grade as a whole.... If we see that theme is still an issue, then how do we address that again [for the whole grade]?

In Long Beach, producing custom data reports was previously a district responsibility, but principals and teachers were increasingly expected to generate their own reports of the data most relevant to their students. The district also provided a "Data Day" of paid professional learning to give teachers a common strategy in using the LROIX system, making sense of the data, and enabling teachers to make evidence-informed decisions to support student learning.

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The district's goal in putting data in the hands of teachers was for data to become a tool for improvement, rather than just a district evaluation tool. An assistant superintendent underscored the important role that a collaborative and collegial teaching culture plays in the effective use of data to support teaching and learning:

The culture of our system [is] a culture of continuous improvement, a culture of use of data, a culture of trust and professionalism around that use of data, that data are not used as a means of punishing staff [or a] means of demeaning staff. It's really used as a means of shining the light on areas of concern and setting up systems of improvement around that.

Systems of Support for Student Learning

The use of data and evidence helped positive outlier districts provide a wide range of supports for student learning both academic and nonacademic. Leaders in these districts and schools said creating these systems of support has been a key means for closing the opportunity and achievement gaps that have long existed between more and less advantaged students. Such systemic supports for students have been the focus of many educators seeking to improve schools

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across the nation.⁸⁴ Several areas of support stood out as important in all our positive outlier districts, including strategies for literacy and English learners, development of students' social-emotional skills, and multi-tiered systems of support.

Strategies to Support Literacy and English Learners

All the positive outlier districts emphasized literacy for all students, and most increased support for English Language Development during the switch to the CCSS. Several districts restructured courses to address the challenges facing English learners. Literacy was seen as critical not only to English language arts, but also to accessing other subjects—such as mathematics, with the CAASPP including more word problems and performance tasks. In general, educators regarded the move toward more learner-centered instruction with frequent opportunities for small-group discussion as beneficial for developing vocabulary and literacy skills for all students, and especially for English learners.

In Gridley, for example, educators used a range of assessments and interventions as part of an emphasis on early literacy and layered strategies for early identification of, and intervention for, English learners. This began at the district's k–1 primary school. The principal described reading as both a gift to students and an essential skill for survival in the world, adding that a strong foundation in reading by the end of 1st grade was critical to students' educational pathways, and that addressing difficulties later in children's schooling was increasingly difficult. The primary school had a long-standing program of Reading Recovery, supported by teacher aides; an "intervention wall" to monitor students' progress on a range of literacy assessments; and the early establishment of a culture of reading by 1st grade.

In the district's elementary school (grades 2–5), reading support specialists assess each student three times a year and provide reading intervention and support to around a quarter of the school's 600 students. During 5th period, the district's middle school provides intervention or enrichment to all students to support learning in specific areas—a strategy for which it was named a California Gold Ribbon School in 2015—and further tiered literacy interventions for students needing additional English language supports. These strategies are elaborated in "Literacy and English Language Supports in Gridley."

Literacy and English Language Supports in Gridley

Key to Gridley Unified's greater-than-predicted performance in English language arts is the range of interventions to support early literacy. The foundation for strong intervention and support begins with 1st-graders at the k-1 primary school. The school has a strong base in Reading Recovery, which has been adapted to meet the school's needs. Students receive an initial assessment to identify their needs and check readiness for Reading Recovery, which provides 30-minute one-on-one reading instruction. Foundational skills in phonemic awareness and phonics are provided to those who are not yet ready for Reading Recovery sessions.

The school seeks to establish a strong culture of reading early on, engaging parents so that they create habits at home, as noted by the school's principal:

We set the tone early.... In 1st grade they have to go home and read 20 minutes a night. They need to practice.... We just kind of build that in, ... that [reading] is just what we do here. This is what we do in Gridley.

A striking example of the school's emphasis on early literacy support is the "intervention wall," located in a private staff area, with plastic pockets containing cards with students' names and their scores on the Basic Phonics Skills Test and Rigby levels (a measure of complexity of text that a student can read). As students progress in their reading abilities, the cards are moved from left to right in columns labeled "Below Basic," "Basic," "Proficient," and "Advanced." The wall allows teachers to see exactly which students need support, and to ensure that none fall through the cracks.

A 1st-grade teacher explained how the wall served as a catalyst to draw on each other's expertise to support student learning:

We'll look at it every other month when we're at a grade-level meeting in that room.... And then if one of those kids [is] stuck way back here [on the left], I can say, "Hey, I can't move this kid. I need some help. What are you guys doing? What do you suggest? This is what I've tried. What else can we do?"

In grades 2–5 at the district's elementary school, a two-person reading specialist team assesses every student in the school three times per year for areas needing skills support, such as phonemic awareness, phonics instruction, comprehension, or writing. The team also assigns targeted intervention or instruction, designates English Language Development group work, and provides additional resources to their classroom teacher. By assessing every student and working with as many as possible (around 150 of 600 students), literacy issues are caught early and skills-specific reading support is normalized as part of elementary education.

Gridley's middle school offers several tiers of support. Every student has a 5th period class, during which they receive learning support in either mathematics or English language arts or take an enrichment class determined based on needs identified through benchmark assessments. Students can rotate among classes every 6 to 8 weeks as they make progress on the identified skills. A second form of intervention is extended English language arts blocks for students needing additional support. A third tier is one of three levels of designated English Language Development to address phonemic awareness, vocabulary development, or "word attack" strategies, depending on student need. The school also offers additional support through Advancement Via Individual Determination (AVID) classes.

Most positive outlier districts also cited specific interventions and supports for English learners. In Hawthorne, this was credited as contributing to the district's strong performance. Hawthorne had used funds provided under the LCFF to increase the number of English language special projects teachers, allocating one to each school site. Having identified students for additional support using data from common assessments, English language special projects teachers provided small-group, pull-out instruction to support English learning and work on specific content with students.

Positive outlier districts provided professional development to improve teaching English learners, in most cases focused on supporting English Language Development. In several districts, specialist coaches were used to further support teachers. In San Diego, prior to the arrival of the CCSS, specialist English language instruction resource teachers provided pull-out services for targeted English Language Development instruction. These resource teachers were now tasked with supporting teachers directly during professional learning communities or as part of coaching cycles.

As part of its equity vision, San Diego is also transforming its English language newcomer centers. These are targeted at new arrivals in the district, with students having the same teacher for all subjects. Although the centers were originally intended as 1-year transitional programs for English learners, students often remained in the centers for multiple years without progressing back into regular classes. As instructional changes became fully implemented, the district made pedagogical changes, educating English learners in mainstream classes and providing teachers with access to instructional coaches to support effective pedagogical strategies.

In Sanger, the district was experimenting with similar strategies at the secondary level to move long-term English learners—those who have not met state standards for reclassification to English proficient within 3 years—into mainstream classes. Schools either eliminated separate Specially Designed Academic Instruction in English (SDAIE) classes or expanded them to include English-only students and to allow for more heterogeneous groups and language models. As in San Diego, Sanger staff members were concerned that separate SDAIE classes for English learners fell short of the rigor needed to meet the new standards. In addition, in the years prior to implementing the new standards, Sanger developed individual language plans for students at risk of becoming long-term English learners. The plans track a range of data (CAASPP scores, levels on the California English Language Development Test, and course grades) and set specific areas for development.

Early success with the Guided Language Acquisition Design (GLAD) strategies in Chula Vista prompted the district to hire two resource teachers to act as GLAD specialists and support teachers. The GLAD strategies integrate English Language Development across content areas. This work began in schools with many English learners and subsequently spread to other schools across the district. A teacher leader described how these specialists informed instruction at her school:

The teachers have been trained. Of those GLAD strategies, we've selected quite a few that we are doing to fidelity, which promote the language development [of] all students. These are the content cognitive dictionary, the comparative and narrative input charts, the poems and chants, and the See/Think/Wonder [protocol]. So, those are the ones you're going see across the grade levels.

In most positive outlier districts, there was thus a movement toward greater emphasis on integrating English Language Development into the regular classroom. However, rather than just leaving English learners to figure things out on their own, the districts were developing teachers' skills for guided instruction through coaching and a range of other supports and were closely monitoring students' progress.

Supports for Social-Emotional Skills, Habits, and Mindsets

Alongside academic supports for literacy and for English learners, district and school leaders in several districts saw social and emotional learning (SEL) and associated supports as significant factors in their stronger-than-predicted performance. Research in the science of learning and development shows that academic progress can be supported through instruction for SEL that encourages a growth mindset, Alongside academic supports for literacy and for English learners, district and school leaders in several districts saw social and emotional learning (SEL) and associated supports as significant factors in their stronger-than-predicted performance.

intrapersonal awareness, and interpersonal skills. It can be further fostered through supportive learning conditions that promote a sense of belonging and purpose, as well as through individualized resources and supports to address challenges within and beyond the classroom.⁸⁵ When these efforts also seek to be culturally responsive by supporting positive identity development and building on students' experiences, they can help achieve more equitable outcomes for diverse learners.⁸⁶

Among districts focused on SEL, schools had latitude to select approaches to suit their school context and needs. Schools in three districts were using Second Step, a curriculum designed to develop children's social-emotional skills—including mindfulness, bullying prevention, empathy, self-regulation, and community—with units and lesson plans for elementary and middle schools, and associated professional learning for teachers. Other programs included Character Counts, Conscious Discipline, and MindUP. Social and emotional curricula were typically research-based and aligned with the five domains established by the Collaborative for Academic, Social, and Emotional Learning: self-awareness, self-management, social awareness, relationship skills, and responsible decision-making. Some districts, like Clovis, had multiple interventions and curricula. (See "Student Interventions and Supports in Clovis.")

Student Interventions and Supports in Clovis

Schools in Clovis used a variety of interventions and curricula to support students' SEL, including Time to Teach and Character Counts. Clovis was also considering the districtwide adoption of Second Step for its elementary schools. One school had certified its staff in Digital Citizenship to counter growing concerns regarding cyberbullying. Clovis also supplemented these curricula with additional programs to address student needs for specific social-emotional support:

• Clovis Support and Intervention engages groups of six to eight students in several sessions with trained staff for guided discussions, akin to group counseling. Discussion topics have included bullying behaviors, addressing self-esteem in girls, grieving a death, and dealing with parent divorce. Students may self-refer, suggest topics, or form their own groups.

- Peer counseling is available for teens working through social and emotional challenges.
 Teachers at intermediate and high school sites teach students "soft counseling skills."
 Students at one school put together posters and a video on suicide prevention, teaching peers how to reach out in a crisis and direct classmates to school resources.
- A Behavior Consultation Team, formed in 2017–18, helps schools address the needs of students with challenging and disruptive classroom behavior. Comprising three psychologists and three instructional assistants and serving all 33 district elementary schools, the team collects data and meets with parents to develop a plan.

Because of suggestions from parents, Clovis has also invested heavily in transition teams to assist students' movement from elementary to intermediate and from intermediate to high school, when students are at risk of falling behind. Transition coaches build relationships with students the year before transition and, in the year after transition, support students in learning and integration into the new school. The district's teams of transition coaches are representative of the cultural and linguistic diversity of the district. They work with and advocate for students and communicate with parents, teachers, and counselors and thus serve as a powerful bridge both between grades and between school and home, addressing students' academic, emotional, and social needs.

Consistent with the district's "people, not programs" philosophy, transition teams take a "no boundaries" approach to engaging with students, adjusting their approach and frequency of engagement to meet students' individual needs. They support students' academic transition by helping them develop study habits, aid their social integration by helping them become involved in social and extracurricular activities, and develop their sense of the school as a safe place for learning. They also help students prepare for postsecondary transition. The program is aimed particularly at students from low-income backgrounds, English learners, migrant students, foster youth, and students experiencing homelessness, each of whom is flagged for inclusion in the program by default. Early data show increases in student performance. At one high school, the proportion of transition program students achieving a GPA of 3.0 or better after the first semester increased by 8 percentage points, from 21% to 29%, between 2016–17 and 2017–18.

Hawthorne initiated several strategies to address school climate and support students' social and emotional learning during the transition to the CCSS. A primary motivator was addressing the high rates of suspension that existed prior to 2014, particularly for African American male students. For example, the suspension rate for African American students in 2014–15 was 12%: by 2015–16, it had fallen to just 4%, although district officials note this was still higher than that of other groups and they were working to close the gap.

Hawthorne's SEL strategies are framed in terms of Positive Behavioral Interventions and Supports. (See "Building Culture, Climate, and Social and Emotional Learning in Hawthorne.") The district developed teams of teachers, a counselor, a psychologist, and a dean of students in every school to implement the strategy, setting expectations for students and developing incentives systems. Districtwide SEL curricula were introduced, and teachers received professional learning in strategies for rewarding students' positive actions and in alternative methods for dealing with challenging behaviors.

Building Culture, Climate, and Social and Emotional Learning in Hawthorne

Hawthorne has begun several programs to support students' social and emotional learning, motivated in part to address previously high rates of suspension, particularly for students of color. In partnership with a professor at the University of California at Riverside, the district established Positive Behavioral Interventions and Supports (PBIS) teams at each school, comprising a dean of students, a school psychologist, a counselor, and several teachers. The teams establish clear expectations for students, such as "Be Responsible" and "Be Respectful," and systems of rewards to encourage students to meet these expectations.

The strategy involves professional learning for staff and new approaches to student behavior. The emphasis has shifted to recognizing and celebrating positive behaviors, rather than punishing negative behaviors. A school psychologist explained that this change required a shift in mindset:

Initially when we started it, it was like, "Wait. What? You're going to take away my clip chart?" They were asking teachers to take away their old methodologies of reinforcing and punishing students. People were like, "So, we're just going to keep our kids. We're not going to send them to the office?" ... The first year and the second year [were] a little hard, but I think now [teachers] are understanding in the long run we're all doing the same thing. I feel like it's helping, especially as people are slowly buying in.

Hawthorne has supplemented its PBIS approach with professional learning, tailored to each school site, through Center X at the University of California at Los Angeles. Over a 4-year period from 2013–14 to 2017–18, the district's work with Center X involved:

- site-level professional learning sessions introducing the concept of varied cultural norms and inviting educators to reflect on how their practice might reflect certain cultural assumptions;
- monthly meetings of teacher cohorts who are collaboratively developing and reflecting on culturally responsive teaching strategies;⁸⁷ and
- coaching and professional development sessions for principals exploring questions such as, "How do I ... understand the inequity that sits in my schools?" and "How do I lead my staff to continuously have these conversations around equity?"

Finally, to develop trauma-informed practices, the district has partnered with the Los Angeles County Department of Education and the nonprofit Richstone Family Center. Through this initiative, the deans of students receive monthly professional learning on topics such as the origins of trauma and strategies for supporting students in the classroom. Several of these professional learning sessions have also been offered at selected school sites, helping educators understand the broader sets of issues—such as community and systemic violence, or stepparent custody issues—that students face outside of school. The district has also provided families with information about low-cost, bilingual support groups—for parents and for youth—on topics including parenting skills, anger management, and processing grief. This strategy was supplemented with professional learning that helped teachers take a strengthbased approach to cultural and linguistic differences; understand how educator practices may be founded on certain cultural assumptions; and have important but difficult conversations around race, ethnicity, and culture. A third strategy involved professional learning to build educator knowledge in the area of trauma-based practices and understanding the beyond-school challenges students face and how these challenges may impact learning.

Three years into implementing the new standards, many of the Hawthorne initiatives were relatively new and the district was still grappling with implementation challenges, including pushback from some educators. Nonetheless, district leaders reported that strengthening these efforts is a priority for the district moving forward. These initiatives were not regarded as having played a large role in the district's strong outcomes, but they reflect Hawthorne's commitment to further strengthening its practices in the area of social and emotional learning and school climate, and to fostering increased educational equity.

San Diego's approach involved both multi-tiered systems of support and restorative justice practices, which were also present in Long Beach and Sanger. Piloting restorative justice in San Diego schools with high suspension and expulsion rates, the district dismantled its previous "zero-tolerance" approach, in part because school leaders had been reluctant to enforce automatic suspension or expulsion for a range of behavioral infractions. In its place, teachers now commonly use classroom circles to build equitable classroom environments and engage in restorative processes (e.g., "harm circles," mediation, restorative conferencing) to address disciplinary concerns and promote healing for affected school community members. Although some educators initially worried that restorative justice was a "soft" approach to behavioral issues, pre- and post-policy surveys in pilot schools found dramatic improvement in measures of classroom climate. Survey items included whether students agreed with statements such as "School is important to me," "I can express myself without feeling judged," and "I feel connected to my classmates." San Diego has since developed a systemwide School Climate Bill of Rights (see Figure 7), and restorative justice practices were rolled out districtwide in 2017–18.

Figure 7 San Diego Unified School District's School Climate Bill of Rights



Source: Provided to the Learning Policy Institute research team by staff at San Diego Unified School District. See also: https://www.sandiegounified.org/san-diego-unified-approves-school-climate-bill-rights.

Multi-Tiered Systems of Support

Both academic and social and emotional learning in positive outlier districts were increasingly framed broadly in terms of multi-tiered systems of support (known as MTSS). The MTSS strategy combines two widely used systems: data-driven, academic interventions known as Response to

Intervention (RTI); and evidence-based interventions for behavioral and social and emotional learning, known as Positive Behavioral Interventions and Supports (PBIS). In these two approaches, Tier 1 practices support all students; Tier II offers interventions for students who require greater academic, behavioral, or emotional support; and Tier III supports are for students with specific or intense needs.

Both academic and social and emotional learning in positive outlier districts were increasingly framed broadly in terms of multi-tiered systems of support.

MTSS approaches were present to varying extents in all districts; however, the approach and depth of implementation differed across each. In Clovis, the district's LCAP included funding for a district representative to oversee implementation of tiered support, with services targeted especially at students from low-income backgrounds, English learners, foster youth, and students experiencing homelessness. These funds expanded the district's After School Education and Safety Program to five additional elementary school sites. In keeping with the district's relatively decentralized structure, district administrators asked each school to submit a proposed MTSS plan within 3 years, by the end of 2017–18.

San Diego's approach highlights how MTSS can be part of a broader equity strategy. MTSS was identified as a key lever for increased equity in the district. A senior district administrator explained how development of a holistic system of support served to create the conditions for student learning:

When we think about social-emotional learning ... it's the systems that wrap around the students to promote academic success. Then, at the end of the day, our goal as nurses, counselors, psychologists, mental health providers, and social workers is to bring the student back to the class so that they can have maximized academic support given the structures that we've created to support that academic instruction.

A key element of this strategy was an alignment of resources to improve counselor practice. The district developed a strategic vision and professional learning plan for counselors about the way in which students engage with SEL content, initially for grades 6–12 and with a view to expand it across all grades. The district also worked to have counselors embrace the academic dimensions of their role and shift deficit mindsets that could inhibit access to courses aligned to California university requirements and other robust learning experiences.

These changes were made in concert with structural changes such as an examination of school schedules. School leaders were required to review their schedules to see that all students had access to courses aligned to California university requirements, Advanced Placement and International Baccalaureate courses, and other requirements for college readiness. In revising schedules, district leaders focused on sequencing courses across each student's school career and on staffing to ensure

that students with the greatest needs had access to effective teachers. Requiring all students to satisfy California university entrance requirements has shown early success, with graduation rates for African American students increasing by 9% in the first year of implementation.

In addition, the schedule revisions in San Diego aim to increase teaching effectiveness for all students in multiple ways. They maximize the time spent between teachers and students, create collaborative planning time for teachers, and minimize the number of lessons each teacher must prepare—all geared to improve teaching, learning, and relationships. Students in need of interventions get intervention time during the school day, and the highest-need students are assigned to effective teachers.

Sanger has used MTSS as a key strategy in the adoption of the new standards. (See "Multi-Tiered Systems of Support to Advance Academic Achievement in Sanger.") Sanger adopted Universal Design for Learning (UDL) as a Tier 1 strategy to expand students' opportunities for academic engagement and piloted programs to support SEL, such as Second Step. The approach is equity focused, with UDL conceived by district leaders as a fundamental bridge between deepening student learning and expanding student opportunity by introducing teachers to multiple ways of engaging all students. Teachers engage students in specific content by organizing multiple pathways and modalities for learning (e.g., auditory, visual, kinesthetic), expressing their interests, and demonstrating their learning. Teacher learnings are then shared through the UDL blog on the district's website.⁸⁸

Multi-Tiered Systems of Support to Advance Academic Achievement in Sanger

Sanger's initiative to broaden and strengthen supports for struggling students has deep roots in its culture, with "Every Student, Every Day, Whatever It Takes" both a district mantra and a moral imperative. The district is tailoring a multi-tiered systems of support (MTSS) approach to increase and better integrate student supports and to address equity issues arising from the new standards for academic performance. This involves deepening the RTI and PBIS practices already established, and bringing together academic, behavioral, and social and emotional supports. (See Figure 8.)

Sanger used special education grants to support initial planning and to create a new position of Coordinator of Inclusive Practices along with a district MTSS team, and subsequent grants are used to run pilots in specific grade levels and schools.

The district has integrated its data systems to provide information to schools and teachers on students' academic status and behavior status, allowing schools to see the coincidence of these measures in order to design effective interventions.

To bring districtwide coherence to MTSS initiatives, Sanger has aligned them with its Effective Instruction and Professional Learning Community initiatives as district priorities for change. For example, MTSS strategies are integrated at the school level as the third of four questions regularly used in professional learning communities:

- What do we want students to know and be able to do?
- How will we know if they know it?
- How will we respond if they don't know it?
- · How will we respond if they do know it?

Sanger has also reduced professional-student caseloads for students with special needs, a key factor in schools' success in achieving early intervention and prevention. Caseloads for psychologists are one per two schools, and Resource Specialist Program teachers serve 8–20 students (down from 25–28 students in 2004).

Sanger's system of professional learning communities for teachers, principals, and district leaders also provides mechanisms for sharing information from pilot programs across school sites.

School-Wide Systems for Student Success Academic Systems **Behavioral Systems** Intensive, Individual Interventions Intensive, Individual Interventions Individual Students Individual Students 1-5% 1-5% Assessment-based Assessment-based •High Intensity ·Intense, durable procedures •Of longer duration 5-10% 5-10% Strategic Group Interventions Strategic Group Interventions Some students (at-risk) Some students (at-risk) ·High efficiency •High efficiency Rapid response Rapid response 80-90% Universal Interventions Universal Interventions 80-90% ·All settings, all students All students ·Preventive, proactive ·Preventive, proactive

Figure 8 Response to Intervention

Source: Provided to the Learning Policy Institute research team by Sanger Unified School District staff members. See also: http://www.sanger.k12.ca.us/Educational-Services/MTSS/.

The way in which Sanger has approached implementation of MTSS is key to its effectiveness. District leaders ensure that the community and teachers see the initiative as their own, rather than as a state mandate, by consistently conveying a vision of weaving this initiative into their established routines for RTI and PBIS, rather than stacking on something new. Figure 9 shows how Sanger incorporates MTSS into a cycle of continuous improvement, highlighting the ongoing use of data to identify both what's working and should be expanded and what's not working and should be cause for immediate action.

Figure 9 Multi-Tiered Systems of Support and Continuous Improvement in Sanger



Note: MTSS = multi-tiered systems of support; SAALT = School Academic Achievement Leadership Teams. Source: Provided to the Learning Policy Institute research team by Sanger Unified School District staff members. See also: http://www.sanger.k12.ca.us/Educational-Services/MTSS/pdfs/MTSS%20Feedback%20loop.pdf.

Sanger has allowed schools to customize MTSS to meet individual schools' needs. Schools can pilot initiatives, learn from these experiences, and refine their approach. This learning through doing approach also promotes professional learning among, and buy-in from, teachers. School teams review data for students with academic and/or behavioral challenges, design appropriate Tier 2 and Tier 3 interventions, and develop structures for integrating the three tiers of support within and beyond the classroom. Among these interventions are:

- a pilot high school suicide prevention program during the school day to address a disturbing surge in mental health crises;
- restorative justice approaches piloted in a middle school and high school to reduce suspensions or the time a student spends out of school, devoting personnel time to addressing the considerable staff demands of this model; and
- a team at the middle school that meets with groups of students on anger management and grief counseling and determines interventions for troubled students based on the nature and pattern of their violations. The team consists of four vice principals, two full-time psychologists, and one Student Assistant Program counselor.

Family and Community Engagement

Positive outlier districts engaged students' families and leveraged community resources to support student success. Extending their services beyond the classroom walls and into the community was recognized as important for supporting student learning. Districts extended their services both by supporting caretakers and by seeking family and community input about district issues. Ultimately, districts wove family and community engagement into many aspects of their work.

Supporting Families

Several districts offered services for parents and other caretakers, giving them opportunities to actively engage with schools and with their children's learning. In Chula Vista, officials described the role of liaisons who provided services and supports to students from military families. These partners work with the district's social workers to meet the unique needs of this group of children, who comprised 12% of the student population. The district also engaged "promotores"—local, Spanish-speaking residents who serve as liaisons between the community and five district-run Family Resource Centers. Located on school campuses in Chula Vista's most impoverished areas, they offer social services and connect families with community resources to help deal with homelessness, domestic violence, or money and employment issues.

Similarly, Sanger has an educational program for Spanish-speaking parents that has engaged large numbers of parents over recent decades. The Parent Institute for Quality Education is a national, certificate-granting program designed to help Spanish-speaking parents support their sons and daughters to achieve college and career readiness and success. Sanger's program annually graduates approximately 100 parents and is highly valued by parents in the community.

In San Diego, the district has expanded its supports for its most vulnerable communities. These supports include an extensive wellness program (i.e., eight school-based health clinics, seven additional wellness centers) that provides "coordinated district and community support services [that] are accessible and customized to fit the needs of the neighborhood in which it is located."⁸⁹ The district also notably maintains specific departments and initiatives that provide culturally responsive support and advocacy for marginalized groups. Many of these fall under the purview of the district's Office of Youth Advocacy, which facilitates "multiple opportunities for every student to graduate from high school and pursue worthwhile college and career goals."⁹⁰

Respondents in these districts also reported holding parent academies and classes to educate parents on how to support their students. In Chula Vista, parent academies had grown to serve around 600 parents, educating them about the CCSS. In Clovis, the district's parent academy addressed instructional strategies, including growth mindset, and provided dinner and child care to increase accessibility. Parent academies in Hawthorne included information on the California Assessment of Student Performance, and monthly parent meetings in Long Beach provided information to parents on strategies to support English learners.

Seeking Family and Community Input on Education

Positive outlier districts have actively involved families and community members in supports for their students. Often, this involvement included educating family and community members about the considerable changes taking place in education in the transition to new academic standards and asking for their input. In Clovis, the district held "LCAP dinners" twice a year. These seat

parents from all 43 schools at round tables alongside teachers, principals, area superintendents, and other officials for dialogue around district priorities and to voice issues. The dinners have seen diverse representation and increased engagement over town hall–style meetings. Initiatives such as the transition program, discussed earlier, originated from these meetings with parents.

Positive outlier districts have actively involved families and community members in supports for their students.

All districts have school boards, and in Hawthorne, the board provided an important link to community needs while also listening to district staff. Board members were described as active in the community, and several had children in Hawthorne schools, which some believed contributed to their dedication. One teacher commented.

[The board members] honestly are true-life real people.... They don't have agendas. They're members of the community. They're role models, and the best part is, they're willing to listen. They're not just here to say, "Well, this is what we want. This is what's going to happen." On the news, you see that everywhere. Here, they have an open-door policy with us.

Some districts went beyond asking for engagement on school issues and partnered with local business to help prepare students for life beyond high school through internships and other experiences. For example, in Gridley, students from Career Technical Education classes were very visible in the community, with a significant number belonging to the local Future Farmers of America chapter. Students from the program raised animals for selling at the county fair, and the community responded by purchasing the animals, providing valuable revenue that was returned directly to these programs. This community involvement further supports student learning.

Similarly, San Diego and Long Beach Unified School Districts engaged their high schools in Linked Learning, an approach that engages local businesses, industry, and community organizations to help create career pathways that build students' career experiences and skills. In Long Beach, for example, every school, from elementary to high school, has college and career goals for students, and all high schools offer Linked Learning pathways in collaboration with community partners. These pathways provide coursework around a specific industry, such as architecture, engineering, or health sciences. At the high school level, every content area designs curricula that connect to work-based learning projects related to career pathways.

The goal of the pathways is to engage students in experiential learning where they can apply subject matter to real-world contexts and to engage members of the community in the educational process. Business partners help to support students' college and career learning, with support ranging from businesses providing guest speakers who encourage students to learn more about

specific industries, to providing support to the district's Linked Learning pathways.⁹¹ For example, students develop professional skills through job shadowing, apprenticeships, and internships, all occurring in partnership between LBUSD and nearby businesses. This work with the community partners increased opportunities for community engagement within the district.

Putting It All Together

Figure 10

Districts often wove their work with families and communities into many of their approaches to student learning. San Diego provides evidence of a comprehensive approach to family and community engagement. Since 2016, the district has invested considerable resources in this approach. The district's work with the National Equity Project identified meaningful engagement as one of its five equity levers and conceptualized engagement as central to its mission of bringing about collaborative change. In addition to emphasizing students' behavioral, cognitive, and affective engagement in schools, the district has also committed to transforming its family and community engagement as part of its equity vision.

San Diego developed its Family and Community Engagement strategy (known locally as "FACE") after identifying that past unsuccessful community engagement usually took the form of information sessions at schools, which families rarely attended. To remedy this situation, the district created a new FACE office in 2016 staffed by nine credentialed teachers. The office relied on the following four key principles: (1) families as co-teachers and co-learners; (2) community–school partnerships; (3) environments worthy of families; and (4) families as co-leaders. (See Figure 10.)



San Diego Unified School District's Family and Community Engagement Vision

Source: Provided to the Learning Policy Institute research team by San Diego Unified School District staff members. See also: https://sdusdfamilies.org.

After creating this strategy, San Diego took several key steps to deepen family engagement. The district held multiple meetings at different times and locations and increased the availability of interpreting services to increase meeting accessibility and encourage broader participation from the community's linguistically and ethnically diverse parent population. The FACE office began a home-visiting project to build stronger family–school connections and engage families in goal-setting sessions around student data. The office also began new initiatives in "High Impact Home Strategies," in which district staff members teach parents research-based skills such as how to pose questions to elementary students to support literacy and to secondary students to assess school climate and academic challenges. The district created student ambassador positions to elevate student voice and help improve school climate and student engagement.

Families are also intentionally incorporated into student-centered learning cycles. Parents are encouraged to observe classroom lessons and practice learning strategies in classrooms with FACE resource teachers. Then, parents support students at home using these strategies. A FACE department member described how this family learning occurs:

FACE resource teachers call the students in to model a strategy alongside the parent as the resource teachers go around and coach. Then, the students go back to class. The parents are asked to try those strategies for the next 2 weeks, go back for a second meeting, review the strategies again, and learn new strategies. The same cycle repeats. At the end, they review the data. What have you noticed? Has your child improved in reading? Have you noticed any other things? That cycle moves on to another school and continues. So, it's like a continuous cycle of coaching and teaching strategies.

In sum, San Diego's family engagement strategically aligns student and parent learning toward common goals and strategies that support academic progress.

Implications for Policy and Practice

While the seven positive outlier districts we studied do not hold all the answers to improving schools, our quantitative analyses suggest they are among California's leaders in providing deeper learning opportunities for all students in ways that promote greater equity.⁹² Our goal was to understand the policies and practices that support this notable achievement.

The case study districts are of different sizes—ranging from 2,000 to 128,000 students—and they serve different geographic locations and student populations. In these different contexts, each took a unique path toward continuous improvement focused on student learning.

Chula Vista was an early adopter of the CCSS and focused on professional learning cycles at multiple levels, supported by wraparound services. Clovis, with its unique culture of competition and innovation, developed its own standards-aligned curricular resources, assessments, and a data-supported accountability system, together with a range of intervention services. Gridley emphasizes and provides supports for early literacy development, while Hawthorne's culture of close personal relationships and centralized support for collaboration has been joined by emerging efforts in positive behavior and social and emotional well-being. Long Beach has emphasized a districtwide instructional vision and an integrated approach to shaping instruction for deeper learning. San Diego's approach to systemic change is underpinned by a clear vision of, and levers for, increased equity, and an emphasis on the illuminating, rather than punitive, power of formative assessments to support instructional improvement. Finally, Sanger has developed a collaborative district culture and relationships, supported by professional learning communities, and leveraged these to build MTSS as a driver of instructional change.

Despite these differing paths, our analysis of the individual district cases revealed several commonalities in the key strategies and principles pursued across the districts.

Our cross-case analysis offers some lessons that district and school leaders may consider as they work to provide meaningful learning for all students. There are also potential implications for policymakers at the federal, state, and local levels about how to support the kinds of strategies and practices enacted by positive outlier districts that contribute to student learning.

Lessons Learned

Prioritize learning for every child: In positive outlier districts, leaders set a clear vision for teaching and learning, which they communicated throughout the district. Equity was a central part of this vision and served as a touchstone for student-centered decision-making. Although the district vision was universal—applying to all schools, staff, and students—leaders struck a balance between a clear vision from the center and delegating considerable responsibility to school sites for how to enact that vision.

Build relationships and empower staff: District leaders supported instruction and intentionally built trusting relationships with teachers. Teamwork and collaboration were elevated as shared values and were central to the way districts approached continuous improvement.

Value and support stability and continuity: Leadership, teachers, and other staffing at the district and school levels tended to be stable in positive outlier districts, with low rates of turnover. This stability contributed to the clarity of messages received from districts and communicated through structures such as instructional leadership teams and to the long-term coherence of programs. It also allowed districts to build on their successes, fine-tune their efforts over time, and build strong capacity.

Attract, develop, and retain well-prepared teachers and leaders: Although many are highpoverty districts, the positive outliers generally avoided the worst of California's severe teacher shortages and hired relatively few underprepared teachers. These districts proactively created strong pipelines for educator hiring, often through partnerships with universities and Grow-Your-Own programs. They also worked hard to develop and retain teachers. They were regarded as attractive places to work, largely due to positive working environments and support for teaching. They further developed talent within the district, creating a pipeline with outreach to and training for potential leaders, from teacher to principal to district administrator.

Build collective efficacy through shared instructional learning: Positive outlier districts use collaborative professional learning as a key to improvement, building upon existing structures, such as professional learning communities, to support teacher and administrator learning and problem-solving. Professional learning in several districts took place at both the district and school levels. Leaders were instructionally engaged through cross-role collaborations that facilitated the sharing of successful practices across schools, thus allowing successful practices to move throughout the district. Positive outliers also made investments in teacher coaching, often accompanied by professional learning cycles. These inquiries typically centered on analyzing student learning, using data to inform instruction, and building teacher capacity to drive improvement. Districts also established strategic partnerships with external professional development organizations, sustained over time to introduce and develop specific skills.

Take a developmental approach to instructional change: Positive outlier districts took a phased approach to the implementation of the new standards, focusing first on providing time for teachers to unpack the standards and understand their expectations, then engaging in professional learning to support instructional shifts. By building teacher capacity for instruction and engaging teachers in selecting and creating curriculum plans, materials, and assessments, districts helped teachers develop a deeper understanding of the standards and buy-in for the change to these standards. Positive outlier districts identified challenges in standards implementation. They listened to and learned from teachers' experiences and adjusted their approach where needed. This approach ensured that the standards and curriculum would take center stage, and that instruction would be teacher-led and student-centered, not textbook-driven.

Support collaborative, inquiry-based instruction and assessment focused on deepening understanding: Positive outlier districts supported teachers as they made standards-aligned instructional shifts that provided students with greater opportunities to engage in inquiry and collaborative learning in order to make meaning of their learning. The districts also increased the use of formative assessment to gauge student progress and inform instruction. This approach favored mastery of standards rather than coverage of curriculum.

Use data and evidence strategically to inform teaching and learning: Positive outlier districts used data and evidence to improve practice, not to punish teachers or students. Educators used multiple sources of data and evidence—about student needs, behaviors, and outcomes across social, emotional, and academic domains, as well as school and teacher practices—to inform teaching and learning, identify students in need of supports, and evaluate the effectiveness of programs and interventions. Data and evidence influenced decision-making at multiple levels, from district office to instructional leadership teams, in professional learning communities, and as part of coaching cycles. Several districts made investments in data systems and professional learning on data analysis to boost teacher and school leader capacity to analyze and interpret data.

Activate instructional supports for students based on their needs: All positive outlier districts used data to identify students for additional supports and targeted interventions, such as Reading Recovery and English Language Development instruction, to support their success. Additional supports for student learning, including for students with disabilities and English learners, were increasingly framed in terms of multi-tiered systems of support and encompassed both academic and social and emotional learning. Positive outlier districts also worked to develop strategies such as culturally responsive teaching and learning, trauma-informed teaching, restorative justice practices, and family engagement to support student learning in and beyond school.

Policy Recommendations

Policymakers at the federal, state, and local levels can support the kinds of strategies and practices enacted by positive outlier districts that contribute to supporting student learning. From these lessons, at least five areas for policy work emerge:

1. Develop a stable supply of well-prepared, instructionally engaged teachers and leaders.

The positive outlier districts focused on staffing and built pipelines and systems to recruit and importantly—keep good teachers and leaders. They sought and helped train strong candidates to hire, often in partnership with nearby schools of education; ensured supportive mentoring; and invested in ongoing professional learning. They identified and developed leadership talent among teachers to enable them to mentor, coach, lead school improvement, and, in some cases, move into principalships and central office positions. They treated educators as a valuable resource—not as interchangeable widgets—hiring carefully and supporting them once hired. District leaders joined teachers in focusing on instruction as schools worked to implement rigorous and meaningful learning opportunities for all students.

To ensure that all districts are able to build a similarly strong and stable educator workforce, **state and federal policymakers** have a responsibility to produce an adequate supply of wellprepared teachers and leaders. These policymakers can help expand high-retention pathways into teaching that research shows can both recruit and retain teachers. Building on service scholarships and forgivable loans that lower the cost barrier to entering teaching, such pathways include teacher and school leader residencies and Grow-Your-Own programs that recruit and prepare diverse candidates from the community who are committed to serve there.⁹³ Given growing teacher shortages in certain high-need fields (special education, math, science, and bilingual education) and locations, incentives focused on these needs are particularly critical. **Districts** then have the responsibility of careful selection, mentoring, and ongoing support. Districts should take a systemic approach to building a teacher and leader pipeline that is responsive to local needs. Making it a priority to hire and mentor well-prepared teachers who have the disposition and commitment to teach every child can reduce the risk of high teacher turnover and attrition, which is detrimental to student learning. Districts can also invest in the development of strong school leaders, who play an essential role in creating supportive working conditions and retaining teachers. Districts can provide opportunities for teachers to develop leadership skills, with opportunities to take on leadership roles as their skills and experience develop. Districts can also involve district and school administrators in ongoing professional learning and can create structures for collaborative learning and planning between teachers and administrators.

2. Support capacity-building for high-quality instruction and focused instructional change.

The positive outlier districts made sustained investments in implementing the new student learning standards as well as in instructional strategies designed to further deeper learning. These districts developed capacity for focused instructional change by engaging administrators in cross-role collaborations, investing in teacher collaboration through professional learning communities, and using professional learning cycles to implement new instructional strategies.

California's overall approach to implementation of the new standards and a new state accountability system created an environment in which the positive outlier districts could undertake a careful, holistic approach. California introduced the CCSS and the Smarter Balanced assessments while also providing resources that could be used to build capacity, avoiding a rushed, top-down punitive approach that created backlash in some other states.⁹⁴ The state is now in the process of developing a broader system of support, which should include access for all districts and schools to pedagogical expertise in each of the major disciplines as well as in meeting the needs of diverse learners who have historically been least well served by California schools, including English learners, students with disabilities, children who are homeless or in foster care, and African American and Latino/a students.

States can support teaching by selecting and developing high-quality assessments and using them for information and improvement, not for sanctions or punishment. They can allocate funds for professional learning and focus educators' attention on a whole-child⁹⁵ approach to education through accountability systems that take into account student outcomes across a wide variety of measures. These measures can include both status and growth on achievement measures and graduation rates, as well as indicators of opportunities to learn, such as suspension rates, school climate, and college- and career-readiness indicators.

Federal and state policies can invest in a strong, readily available infrastructure of high-quality professional learning opportunities that build the collective capacity of schools and districts to teach for 21st-century standards and to meet the full range of students' academic, social, and emotional needs.

Districts can support capacity by focusing not only on outcomes but on the learning of educators to help all children meet those outcomes. These include professional learning communities and coaching cycles to implement new instructional strategies and develop them in practice,

supported by observation and feedback. Districts can reach out to experts in areas that are the focus for improvement, as well as harness expertise among existing staff and invest in district teachers and leaders to support professional learning within the district.

3. Use assessments and data strategically to support continuous improvement.

Positive outlier districts used both rich assessments and a range of data and evidence to improve practice, not to punish students or teachers. In these districts, formative assessments informed instruction and helped teachers tailor supports to individual student needs. A range of data about student learning in relation to teaching practice allowed teachers and leaders to monitor the effectiveness of programs and interventions and continuously improve.

State and federal policymakers both have a role to play in developing productive assessments and appropriate uses of data. Federal policy should incentivize the development of performance-based assessments that can better reflect and measure deeper learning. This can be accomplished through both funding for assessment development and the use of appropriate standards for approving state plans. States can select and develop assessments that measure higher-order skills and support districts in using them, along with an array of data to support student learning. California has moved in this direction with the adoption of the Smarter Balanced assessments (now named the California Assessment of Student Performance and Progress), emphasizing advanced competencies such as critical thinking, the adoption of a multiple measures dashboard, and the Local Control Accountability Plan process. States can augment these with school climate surveys for students, staff, and families to inform school and district improvement efforts and triangulate with other data.

Districts and schools can use these assessment tools, analysis of student work, survey data, and other indicators—such as attendance rates, suspensions, and evidence of student needs—to improve school climate, to shape teaching and learning, and to identify and address student needs. Districts can support schools and teachers with professional learning and establish structures for data to be analyzed and used effectively in continuous improvement cycles at district and school levels.

4. Create coherent systems of support based on student needs, including academic, social, and emotional learning.

Positive outlier districts created systems of support for students, tailored to their specific needs. Consistent with research in the science of learning and development, these supports incorporated both academic and social and emotional learning supports and were increasingly framed as multi-tiered systems of support.⁹⁶ Social and emotional supports included social-emotional learning programs; wraparound services for health, mental health, and social supports; strategies such as culturally responsive teaching and learning; trauma-informed teaching and restorative justice practices; and parent engagement strategies to support student learning in and beyond school.

Federal and state policymakers can support these practices by coordinating agencies, programs, and funding to provide more streamlined and better integrated services to children to support their physical and mental health and welfare, as well as their academic, social, and emotional learning. They can also invest in the training of educators and associated professionals

so that they can develop practices and systems focused on the needs of the whole child, while ensuring that resources for developing effective programs for English learners, students with disabilities, children who are homeless or in foster care, and others with particular needs are readily available.

Districts can implement multi-tiered systems of support as a core strategy to meet all students' academic, social, and emotional needs, and foster inclusive student assignment policies. They can also increase support for both specialized and integrated English Language Development in mainstream classes. Districts can support programs to engage parents as partners in student learning.

5. Allocate resources for equity.

Positive outlier districts consciously allocated resources to meet a wide range of diverse pupil needs for additional supports. They also invested in an experienced, stable educator workforce and in professional learning to enable that workforce to become highly expert in meeting all students' needs.

Federal policymakers can encourage these practices by enforcing equity provisions in federal laws, such as the Every Student Succeeds Act, that require equitable distributions of resources and staff. **State policymakers** should allocate funds based on pupil needs and, when making investments, take into account the need for increasingly well-prepared educators and a wide range of wraparound services and integrated student supports. California's LCFF was designed for greater equity, providing additional funds to support districts with concentrations of students living in poverty, English learners, and those in foster care. Through the state's Local Control Accountability Plan, the state has also set expectations that districts will allocate funds internally to meet the needs of historically underserved students.

Districts should also focus on resource adequacy and equity—not only in how they allocate funds to school sites and programs, but also in how they build and resource supports for struggling students. In particular, districts can spend funds efficiently when they invest in expert teachers who are assigned to teach students with greater needs and to mentor the teachers in those contexts, when they design and fund effective programs for those students, and when they intervene early and effectively for students who may struggle.

Conclusion

By definition, the positive outlier districts in our study are the exception to the norm. They succeed in ways that are relatively rare in the system as a whole. Often, districts identified as performing at high levels are those that serve affluent, advantaged students with substantial home and school resources. These districts, however, offer few lessons to those working with a more socioeconomically diverse group of students and without extraordinary resources.

Our study sought to capture lessons from California districts succeeding with students from lowincome families and students of color as well as White students, going beyond what indicators of families' socioeconomic status would typically predict in a state that offers modest resources for schools. Among a much larger number of positive outliers in California, we chose to study districts from diverse contexts—geographically dispersed; large and small; urban, suburban, and rural—and found some common themes. These emphasize the importance of a common vision and practices stemming from an equity perspective, the benefits of investing in a strong educator workforce that is supported to work and learn collaboratively, and a range of strategies for building instructional capacity and supportive services that meet students' needs.

A goal of school reform and improvement is to increase the number of districts succeeding in educating all students well. This requires not only focused work on the part of schools and districts, but supportive policy environments that enable that work to be productive and widespread. This report offers some insights to develop policies and practices that can support deeper learning and equity from the statehouse to the schoolhouse.

Appendix A: Methods

This cross-case study is part of a larger, three-phase, mixed-methods study examining positive outlier districts in California in which—accounting for differences in socioeconomic status— students across racial/ethnic groups are consistently achieving at higher-than-predicted rates on California's assessments.

The overarching research question of this cross-case study is:

In districts identified as successfully outperforming expectations for multiple groups of students, what factors may account for the success of all students in the district and for that of students of color in particular?

Phase 1: Identification of Positive Outliers

Results from a multivariate, quantitative study of positive outlier districts in California helped identify districts for the individual case studies. As described more fully in a separate report,⁹⁷ this study used a statistical regression model for predicting and measuring student achievement to identify districts in which scores on the CAASSP were greater than predicted for African American, Latino/a, and White student groups from 2015 to 2017 in English language arts and math. The model accounted for indicators of socioeconomic status, including income, parent education, family structure, and employment, all of which are factors that are beyond the districts' control and that typically influence student performance. The measure of districts' performance used in this study was the residual of the regression model. The residual represents the difference between the actual and predicted performance of a district's students in a given racial/ethnic group given that group's socioeconomic characteristics within that district. A residual of zero indicates that the racial/ethnic group is performing at the average predicted level. Districts with residuals of greater than zero for African American, Latino/a, and White students did better than predicted, and we called them "positive outliers."

Phase 2: District Selection, Data Collection, and Case Study Analysis

In the second part of the study, we selected a demographically and geographically diverse set of seven districts from among the positive outliers, identified in the quantitative study. In these selected districts, we conducted individual case studies to examine the factors associated with their strong outcomes.

District selection

To select districts for these individual case studies, we began with the group of districts identified by our quantitative study in which African American, Latino/a, and White students consistently achieved at higher-than-predicted levels from 2015 to 2017 in both English language arts and math. This reduced the sample to those in which there were at least 200 African American and/or Latino/a students, to ensure adequate sample sizes and stability of the predictor variables.⁹⁸ Then, we considered additional criteria—graduation rates, suspensions, and relative rank on English language

arts and mathematics residuals from the regression analyses both overall and for African American, Latino/a, and White groups individually. These criteria helped ensure that we selected districts that had positive outcomes for all student groups on additional measures.

We also intentionally selected districts based on a district's urbanicity,⁹⁹ geographic location, and size to ensure that the final case study sites reflected a range of California districts. The participating districts are listed in Table A1.

Table A1Selected Positive Outlier Districts, 2016–17

District	Urbanicity	County	Student Enrollment
Chula Vista	Large suburb	San Diego	30,053
Clovis	Large suburb	Fresno	42,746
Gridley	Town distant	Butte	2,021
Hawthorne	Large suburb	Los Angeles	8,573
Long Beach	Large city	Los Angeles	76,428
San Diego	Large city	San Diego	128,040 ^ª
Sanger	Town fringe	Fresno	11,722

^a Includes students enrolled in SDUSD public schools and students enrolled in district charter schools.

Data sources: California Department of Education, (n.d.). DataQuest. https://data1.cde.ca.gov/dataquest/; National Center for Education Statistics. (n.d.). Common Core of Data. https://nces.ed.gov/ccd/ccddata.asp.

Data collection

We used a case study approach to investigate the factors supporting higher-than-predicted outcomes for students of color and White students in positive outlier districts. Case studies allow researchers to investigate real-life phenomena in context, generating understandings of a phenomenon and its interplay with its environment.¹⁰⁰ A two-person research team was assigned to each district. We used a multi-method research design with data from a range of sources, including documents and district and school interviews.

For all selected districts, research teams conducted a screening phone call with senior district leaders to gain an initial understanding of factors that districts identified as relevant to their success implementing the CCSS, to learn important background information, and to generate an initial list of potential sites and interviewees.

These interviews were coupled with data and document analysis. Among the sources were the California School Dashboard, Local Control Accountability Plans, Local Control Funding Formula data, and school Single Plans for Student Achievement. Research teams also reviewed a number of other documents provided during district and school visits, including school schedules and documents from after-school programs and professional learning communities. Researchers also drew on additional data sources as needed, including those from the California Commission on Teacher Credentialing, the California School Climate Survey, and the California Healthy Kids Survey.

During 2-day site visits in fall 2017 and winter 2017–18, researchers conducted 30- to 60-minute interviews at district central offices and school sites with district leaders, principals, coaches, teachers, and other staff and community members. Research teams identified potential sites for school-level interviews based on discussions with district offices. Purposive and snowball sampling were used to identify interviewees. In other words, researchers selected and interviewed several participants based on their positions and responsibilities, and then asked those participants to recommend others well placed to speak to CCSS implementation and the factors supporting greater-than-predicted outcomes for African American and Latino/a in the district. In addition, researchers sought to visit schools serving students of color and students from low-income backgrounds, and to interview staff able to speak to programs supporting achievement and increased equity in the district.

A total of 226 district- and school-level staff across the seven case study districts participated in interviews, as shown in Table A2. The majority of interviews were conducted individually, but in some cases, participants were interviewed in pairs or small groups. This strategy leveraged the knowledge and experience of district and school staff and allowed researchers to identify respondents who could speak to the implementation of the CCSS from various perspectives and positions across the district.

Interviewee Roles	Total Participants		
District Administrators	77		
Principals and Vice Principals	31		
Teachers, Coaches, Deans, and Counselors	99		
Others (e.g., school board members, parents, external consultants, teachers union leaders, etc.)	19		
Total	226		

Table A2Positive Outlier District Interview Participants

Interviews with district administrators and senior staff focused on strategies, steps, and tools they were using to shift instruction to the new standards, support teacher and administrator learning, use data to monitor and support school progress, meet student needs, engage the community, and allocate resources to support their improvement efforts. Interviewers also asked about challenges the district faced in this work and how they were overcome. We tailored the interview protocol based on the role of the interviewee and their tenure in the district. This differentiation ensured that some questions could be explored in more depth with respondents who were most likely to hold relevant and reliable knowledge on the topic of discussion. Each interview was audio recorded for transcription purposes if the respondent gave consent to do so.

Analysis

Case study analysis addressed themes identified from the literature and those that arose from the research data. These themes included human capital issues, resources, instruction, curriculum, professional learning, social and emotional learning, data and accountability, culture, parents and community, schedules, and organization. Research teams triangulated findings across multiple data sources and sought both confirmatory and disconfirmatory evidence to develop illustrations of the key factors that emerged as well grounded from the evidence. Each case study draft was reviewed internally by two members of the research team, checked by a district leader for accuracy, and revised based on feedback by two expert peer reviewers.

Phase 3: The Cross-Case Study Synthesis of Themes Across Districts

To draw out lessons across the seven individual case studies, we reviewed each individual case study to identify common themes. These themes emerged from our review of the research evidence on exemplary districts, as well as the district context described in the individual case studies. This analysis allowed us to identify common elements that contributed to district success in implementing new standards that require students to demonstrate in-depth learning.

Appendix B: Student Achievement in Positive Outlier Case Study Districts

To provide more information about our positive outlier case study districts, Table B1 shows the residuals for all students, as well as for several racial/ethnic groups in 2014–15, 2015–16, and 2016–17. Residuals are greater than zero in each category for English language arts and mathematics, indicating that the districts are doing better than predicted for all students and for each of the racial/ethnic groups.

The largest residuals in 2016–17 were found for Hawthorne, where students in mathematics scored 0.359 standard deviations higher than predicted by their socioeconomic status. This is a sizeable difference, equal to the difference between students scoring in the 50th and the 64th percentiles, respectively. For English language arts students, the residual score in Hawthorne was 0.31, also the largest in 2016–17 among the districts chosen. Other districts had overall residuals between .08 and .29, with positive results for each racial/ethnic group, meaning that all racial/ethnic groups outperformed predictions given their socioeconomic status in that district.

Table B1CAASPP Quantitative Model Residuals

Demographic	Chula Vista Elementary School District	Clovis Unified School District	Gridley Unified School District	Hawthorne School District	Long Beach Unified School District	San Diego Unified School District	Sanger Unified School District			
2014-15										
Math All Students	0.162	0.197	0.166	0.319	0.063	0.070	0.195			
African American	0.159	0.228	N/A	0.126	0.132	0.202	N/A			
Latino/a	0.163	0.245	0.262	0.258	0.081	0.039	0.205			
White	0.196	0.183	0.085	0.133	0.103	0.143	0.236			
ELA All Students	0.286	0.224	0.154	0.317	0.038	0.093	0.149			
African American	0.278	0.267	N/A	0.161	0.072	0.184	N/A			
Latino/a	0.274	0.259	0.257	0.302	0.039	0.053	0.158			
White	0.295	0.200	0.056	0.074	0.083	0.141	0.170			
			2015-	16						
Math All Students	0.137	0.143	0.188	0.289	0.041	0.058	0.237			
African American	0.077	0.178	N/A	0.131	0.114	0.184	N/A			
Latino/a	0.135	0.199	0.234	0.235	0.076	0.024	0.249			
White	0.183	0.149	0.144	0.050	0.047	0.133	0.307			
ELA All Students	0.223	0.140	0.216	0.277	0.056	0.065	0.208			
African American	0.144	0.121	N/A	0.123	0.099	0.149	N/A			
Latino/a	0.213	0.185	0.280	0.232	0.058	0.031	0.222			
White	0.253	0.139	0.147	-0.001	0.078	0.110	0.222			
2016-17										
Math All Students	0.187	0.199	0.095	0.359	0.140	0.083	0.220			
African American	0.191	0.244	N/A	0.264	0.183	0.180	N/A			
Latino/a	0.187	0.229	0.167	0.325	0.171	0.044	0.227			
White	0.179	0.197	0.038	0.158	0.156	0.160	0.220			
ELA All Students	0.288	0.267	0.135	0.313	0.112	0.084	0.166			
African American	0.291	0.272	N/A	0.249	0.132	0.158	N/A			
Latino/a	0.277	0.298	0.213	0.303	0.120	0.040	0.176			
White	0.269	0.252	0.039	0.106	0.165	0.139	0.155			

Notes: "Residual" represents the difference, measured in standard deviations, between the actual average performance of a district's students in a given racial/ethnic group and the predicted performance of the district's students in that racial/ethnic group based on the socioeconomic status of each group's families in the district. "N/A" means that we did not calculate the residual because fewer than 200 students were tested.

Source: LPI analysis of data from California Department of Education. (2018). California Assessment of Student Performance and Progress results. https://caaspp.cde.ca.gov/.

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- 74. Explicit Direct Instruction is a teaching practice in which lessons follow a structured pattern of teachers seeking to activate prior knowledge, develop a skill, and then provide guided practice, while frequently checking students for understanding. See: Dataworks Educational Research. (n.d.). Explicit Direct Instruction (EDI). https://dataworks-ed.com/research-edi/ (accessed 03/01/2019).
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- 79. The CLASSI system was first instituted in 1970, and has existed in its current form since 1994.
- 80. Each Clovis school site has a School Assessment and Review Team composed of the principal, several staff members, interested parents and community members, and students and may include some residents who do not have children at the school. The team serves as an advisory body to the school principal. See https://www.cusd.com/SART.aspx.
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