Maximizing the Use of New State Professional Learning Investments

to Support Student, Educator, and School System Growth

November 2015

State Guidance for Key District Stakeholders

JOSEPH BISHOP, LINDA DARLING-HAMMOND, AND ANN JAQUITH

About the Authors

Joseph Bishop *is a Senior Policy Advisor with the Learning Policy Institute.*

Linda Darling-Hammond *is the Charles E. Ducommun Professor Emeritus of Education at Stanford University and President and CEO of the Learning Policy Institute.*

Ann Jaquith *is the Associate Director of the Stanford Center for Opportunity Policy in Education at Stanford University.*

Acknowledgments

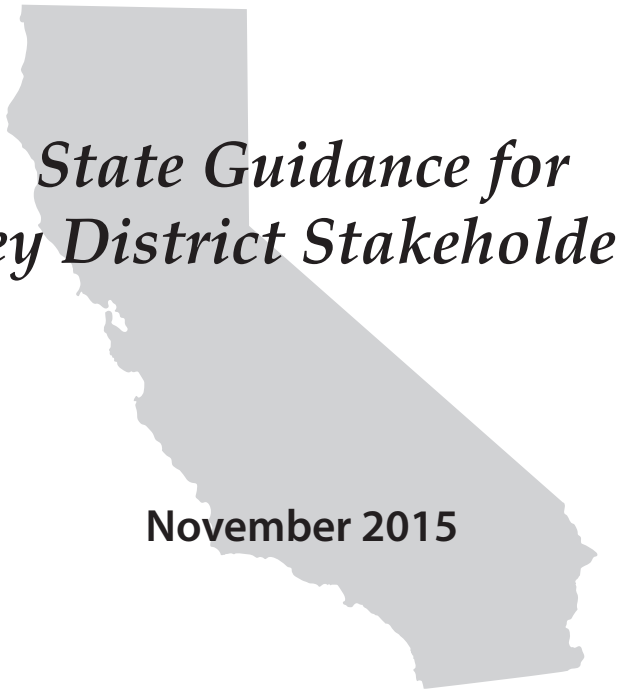
The state guidance document and executive summary were published by the Consortium for the Implementation of the Common Core State Standards and made possible through the support of the S. D. Bechtel, Jr. Foundation, the Charles and Helen Schwab Foundation, and the Silver Giving Foundation.

Design and layout by Sacramento County Office of Education production services

Learning Policy Institute / Stanford Center for Opportunity Policy in Education (SCOPE)

November 2015

Maximizing the Use of New State Professional Learning Investments to Support Student, Educator, and School System Growth



State Guidance for Key District Stakeholders

November 2015

TABLE of CONTENTS

Overview

Under SB 77, California has allocated significant resources to enhance professional learning systems statewide across all thousand school districts. From a total of $500 million in new general fund monies, $490 million is intended to go directly to districts to increase their overall professional capacity, especially the competence of teachers and principals within their school systems. These resources are intended to not only strengthen the capacity of schools, but also to improve the ability of educators to support learning around the newly adopted state academic standards. Those state academic standards include accompanying curriculum frameworks in Mathematics and English Language Arts (ELA)/English Language Development (ELD); the frameworks to accompany the Next Generation Science Standards (NGSS), as well as literacy in History/Social Studies and additional subjects, will be released soon.

To implement state academic standards, California has developed a wide range of useful materials for districts, which include the standards documents and guidelines for implementing them, curriculum frameworks for a majority of subject areas, professional learning modules, and approved instructional materials, along with professional learning networks like the California Subject Matter Project. (Descriptions of and hyperlinks to these resources can be found, in **Section III** of this document.) Districts are required to develop comprehensive plans aligned with their Local Control Accountability Plans (LCAP) to illustrate how new state dollars will be used to promote and improve professional practice to accelerate student achievement for low-income students, English language learners, and foster youth. Under the LCAP, districts are also obligated to

Ten million dollars of the state's professional learning investment is dedicated to developing a K–12 High-Speed Network for local educational agencies to foster district collaboration and network management.

State academic standards are used as a broad descriptor throughout the document to capture all current state content standards, including: California Common Core State Standards for Mathematics (CA CCSSM); California Common Core State Standards for English Language Arts/Literacy (CA CCSS ELA/Literacy) and California English Language Development Standards (CA ELD); Next Generation Science Standards (NGSS) and all additional subject areas (e.g., Career Technical Education, Health Education, History-Social Science, etc.).

consult with stakeholders and the exclusive bargaining agent before developing their plan and after it is drafted.

According to state law, districts have four options for using new professional learning funds:

- Induction for beginning teachers with a focus on relevant mentoring
- Professional development/coaching for teachers needing improvement
- Professional development related to the state academic standards
- Training on mentoring and coaching certificated staff and training certificated staff to support effective teaching and learning

There is no set timeline on when new professional learning funds need to be used. However, superintendents, county offices of education, administrators, school board members, educators, employee unions, support staff, and professional development providers all are charged with making the best strategic use of the state's one-time investment of public dollars.

This document, while crafted to help districts think through strategies to support all four allowable uses of funds, focuses primarily on how districts can approach professional learning in their implementation of state academic standards. These approaches are applicable to the professional growth of all educators, irrespective of their experience level or expertise and has been generated knowing there will be pressure on districts to determine how to best use new state money in a relatively quick fashion to strengthen alignment between delivering standards-based instruction and developing the instructional capacity of district educators.

Growing the instructional capacity of individual educators and of the system as a whole to make teaching and learning relevant, dynamic, and engaging for students depends on a cohesive arrangement of professional learning, including recruitment, preparation, induction, mentoring, and ongoing learning supports. Research finds that the best way to build instructional capacity in schools is through professional learning in which teachers and principals are encouraged to develop and share their expertise in collaborative relationships—a model that has not been traditionally available in many districts.[1] This paper addresses how effective professional learning of the educator workforce can in turn play a pivotal role, in partnership with key stakeholders like employee unions, in implementing the state's academic standards.

1 Darling-Hammond, L., R. Chung-Wei, A. Andree, N. Richardson, & S. Orphanos (2009). Professional Learning in the Learning Profession: A Status Report on teacher Development in the U.S. and Abroad. Published by the National Staff Development Council and School Redesign Network at Stanford University.

Developing a system of professional learning requires contributions from all key decision-makers involved in aligning people, time, and resources needed for student success and the continuous improvement of school systems. Divided into three sections, this guidance document has been crafted with a particular eye towards bridging professional learning with approaches for implementing the state academic standards, NGSS, and imminent Science and History/Social Studies frameworks. It includes:

I. Strategies for supporting professional learning

II. Key professional learning resources for districts

III. Developing LCAPs aligned with district professional learning strategies

Section I describes professional learning, specifies instructional capacity, and offers districts some strategies for developing a system of professional learning. It also offers suggestions to help districts navigate typical challenges that emerge when trying to implement state academic standards. **Section II** provides an organized collection of resources to help districts implement state academic standards and develop systems of professional learning. **Section III** offers suggestions for how to strategically connect district professional learning plans to Local Control Accountability Plans (LCAPs) to accelerate student and school system learning.

I. Strategies for supporting professional learning

Both teachers and administrators play integral roles in nurturing a robust system of professional learning organized around the careful alignment of people, time, and dedicated resources. Superintendents have a significant responsibility in helping shape a system of professional learning characterized by a strong, shared commitment to learning between colleagues and within the school community. Developing such a system is a complex undertaking, but the results for students and practitioners can be significant.

The goal of such a system is to ensure educators have a broad scope of expertise that includes deep and flexible knowledge of the content areas; an understanding of how children learn at different stages so a productive curriculum can be created that builds on students' prior knowledge and experiences; the ability to adapt instruction for the needs of English language learners and students with special needs; knowledge of how to assess learning continuously to determine students' needs and respond with effective teaching strategies; and the ability to collaborate with parents and colleagues to build strong schools for learning.[2]

A starting point for building a system that develops teaching capacity is to consider what professional learning is and how it occurs. The National Staff Development Council, now referred to as Learning Forward, defines professional learning as

> *a product of both externally provided and job-embedded activities that increase teachers' knowledge and change their instructional practice in ways that support student learning. Thus, formal professional development represents a subset of the range of experiences that may result in professional learning.*[3]

Meaningful professional learning is not a product, but is a process comprised of multiple opportunities for educators to learn and practice skills that advance their expertise. Both teachers and principals can benefit from ongoing professional learning that is closely tied to student learning and the realities of practice, and that builds off of the expertise of colleagues.

---

2 California Department of Education Taskforce on Educator Excellence. (2012). *Greatness by Design: Supporting Outstanding Teaching to Sustain a Golden State*. Retrieved at http://www.cde.ca.gov/eo/in/documents/greatnessfinal.pdf

3 Darling-Hammond, L., R. Chung-Wei, A. Andree, N. Richardson, & S. Orphanos (2009). Professional Learning in the Learning Profession: A Status Report on teacher Development in the U.S. and Abroad. Published by the National Staff Development Council and School Redesign Network at Stanford University.

Research in the field has demonstrated that effective learning for educators has, at minimum, the following four qualities:

1. Professional learning should be intensive, ongoing, and connected to practice.
2. Professional learning should focus on student learning and address the teaching of specific curriculum content.
3. Professional learning should align with school improvement priorities and goals.
4. Professional learning should build strong working relationships among teachers and provide time to collaborate.

It is equally important for districts to be intentional about supporting meaningful, ongoing, and practice-oriented learning for principals. The ability of principals to support teachers can affect whether or not teachers choose to remain in that school, and professional learning is a critical aspect of ensuring that teachers feel supported by school leadership.[4] Principals can learn how to foster and lead practices that grow instructional capacity by participating in job-embedded, professional learning experiences.

Effective principal learning includes three prominent features:[5]

1. A learning continuum operating systematically from pre-service preparation through induction and throughout the career, involving expert, veteran principals in mentoring less experienced others.
2. Leadership learning grounded in practice, including analyses of classroom practice, supervision, and professional development using on-the-job observations.
3. Collegial learning networks, such as principals' networks, study groups, and mentoring or peer coaching, which offer communities of practice and sources of ongoing support for problem solving.

The **appendices** include a fuller discussion of these aspects of professional learning, with specific examples from California districts about how they have organized professional learning to meet these criteria.

Not all professional development results in learning. Although they are widespread, one-shot, short-term workshops have been found to have little effect on teaching

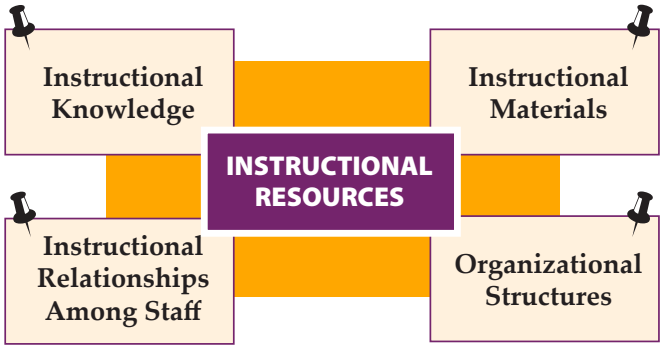
4 Tschannen-Moran, M. (2004). *Trust matters: Leadership for successful schools*. San Francisco: Jossey-Bass.
5 Darling-Hammond, L., LaPointe, M., Meyerson, D., Orr. M. T., & Cohen, C. (2007). *Preparing School Leaders for a Changing World: Lessons from Exemplary Leadership Development Programs*. Stanford, CA: Stanford University, Stanford Educational Leadership Institute.

practice and no effect on student learning gains.[6] However, there are approaches to professional learning that have been found to have a positive influence on practice and student learning. These approaches generally involve strategies for teaching specific content by engaging teachers in learning new methods and materials with enough time to dig deep, dive in, and develop curriculum and lesson plans with colleagues that they can try out with support and coaching. They usually also include time for reflection with other teachers on how these new practices affect student learning, often by examining student work for evidence of learning, getting feedback, and refining plans in an ongoing cycle of inquiry, practice, and review.

Even when these elements of professional learning are put in place, more needs to be done to ensure instructional quality. Instructional quality is dependent on both the knowledge and skills of individual educators *and* on the workplace conditions that allow effective practices to take root and flourish across classrooms.[7]

This instructional capacity relies on at least four kinds of interdependent resources:[8]

1. **Instructional knowledge** (including knowledge of content, pedagogy, and students), which can be built through professional learning;
2. **Instructional materials** (e.g., curriculum, instructional tools, textbooks, teaching materials, assessments—and know-how to use these materials);
3. **Instructional relationships among staff** that are characterized by trust, mutual respect, recognition of instructional expertise, and openness to interpersonal learning;
4. **Organizational structures** that support the identification, development, and use of instructional resources (e.g., common learning time for subject and/or grade-level teachers; formal instructional leadership roles and organizational mechanisms that foster teacher collaboration, learning from peers, and communication patterns that develop a shared understanding of teaching practices that are linked to student learning).[9]



6 Darling-Hammond, L., R. Chung-Wei, A. Andree, N. Richardson, & S. Orphanos (2009). Professional Learning in the Learning Profession: A Status Report on Teacher Development in the U.S. and Abroad. Published by the National Staff Development Council and School Redesign Network at Stanford University.

7 Darling-Hammond, L. Effective Teaching as a Civil Right: How Building Instructional Capacity Can Help Close the Achievement Gap. (2011) *Voices in Urban Education*, 31: 44-58).

8 Jaquith, A. (2009). *The creation and use of instructional resources: The puzzle of professional development*. Education. ProQuest Dissertations.

9 Jaquith, A. (2015). Site-Based Leadership for Improving Instruction. *The Educational Forum*, 79: 12-23.

Actions for developing a district system of professional learning

Translating state academic standards, curricular frameworks, and professional learning standards to meaningful learning for students may require districts to strengthen professional capacity in the district in order to broaden the teaching strategies that are currently in use in all classrooms. Selecting instructional methods that are well suited to the goals, content, and needs of the students is essential; such strategies might include direct instruction, independent or collaborative work, or an inquiry-based approach. California's quality professional learning standards and the California Professional Standards for Educational Leaders (CPSELs) offer guidelines for developing such practices that are well suited to particular learning goals.

Actions districts can take to develop and support practitioner-driven professional learning include:

1. ***Conduct a needs assessment with key local partners, including students, educators, and their associations to help determine the best use of district professional learning resources.*** It is important for district leaders to think about which key stakeholders to involve in conducting a self-assessment of current efforts and to look for information about activities that might not be on the radar of a district office, such as grade-level team planning during the lunch period or informal ways that teachers collaborate. In addition to surveying teachers and principals, district leaders may want to think about different ways to take stock of district needs. For example, informative surveys could be created with students to help gather data on how students are benefiting from instruction or if there might be ways to make learning more engaging. School site and district committees might also work together to curate responses to best inform a professional learning needs assessment process.

   Districts will benefit from considering multiple sources of data to determine where to focus professional learning and what areas are of greatest need for deep examination of improvement strategies. The National Center for Comprehensive Teacher Quality has developed an assessment tool that districts can use to begin to reflect and better understand current practices.

2. ***Work with California's new Curriculum Frameworks as a guide to curriculum planning for state academic standards.*** These frameworks offer support for the transition of instruction to the CCSS within ELA/ELD and Mathematics in addition to subject areas of physical education, science, career technical education, world languages, history/social science, health, and the visual and performing arts. The frameworks can also be adapted to meet district needs and used to connect standards to interdisciplinary approaches and practices.

3. ***Design professional learning around the major instructional shifts suggested by the state academic standards and address identified gaps in student knowledge.*** The instructional shifts require an inquiry-based exchange between students and teachers. (There are excellent resources on the three key shifts underlying state academic standards here and the NGSS here.) Those shifts focus on building subject area knowledge for student learners in areas such as Math, ELA/ELD, and NGSS, as well as applying that knowledge to a classroom lesson or generating new questions or scholarship that have not yet been answered.

   The state academic standards also expect students to see connections between different content areas and apply knowledge to different learning contexts (e.g., math concept to a social studies project). Professional learning may also need to address gaps in students' knowledge, such as ensuring students have the foundational skills for reading. As the ELA/ELD Framework points out, such knowledge forms "the foundation upon which other standards may be most richly achieved."[10]

4. ***Structure time in the day for teachers to reflect, collaborate, learn from each other, and lead.*** Build in time in which teachers can engage in team meetings, jointly design curricula, discuss and model instructional practices, and share their expertise. Districts will need to consider bargaining implications as part of any new strategies to restructure time in the day. This resource from the National Center on Time and Learning offers districts and schools very practical suggestions for rethinking time, roles, and the design of the school day to support professional learning. Some options for finding additional learning time include a late start or early release; re-purposing the use of grade level, staff, and administrator meeting time; or rethinking schedules and staffing.

   All learners, including educators, need opportunities to share what they know, discuss what they want to learn, and connect new concepts and strategies to their own unique experiences. Many effective professional learning initiatives involve teachers looking at state academic standards and curriculum frameworks, often within grade level or department teams, where they work together to design lessons, select and adapt materials, and implement instruction, followed by

10 California Department of Education. (2015). *English Language Arts/English Language Development Framework for California Public Schools, Kindergarten through Grade Twelve*. Retrieved at http://www.cde.ca.gov/ci/rl/cf/documents/elaeldfwintro.pdf

debriefing, evaluating student work, and fine tuning with colleagues in an ongoing cycle of inquiry.[11]

For example, The Instructional Leadership Corps, a statewide partnership among the California Teachers Association, the Stanford Center for Opportunity Policy in Education, and the National Board Resource Center at Stanford, is developing two-part professional learning opportunities for educators. Participating educators learn about the instructional shifts in the new standards and are asked to design and try out an instructional or leadership shift in their own context; they then bring back the results of that 'try out' to a second session in order to look at its effects on student or teacher learning. At that point, participants are encouraged to design a next instructional or leadership step, which they try out in a next cycle of inquiry, and so on.

5. ***Analyze standards-based tasks and student work to support meaningful professional learning experiences.*** The older standards and tests had little emphasis on higher order thinking skills, and many existing materials and lesson plans have not yet been rethought to reflect the greater cognitive demands of the new standards. Teachers who were accustomed to teaching to these standards and assessments may not know how to create assignments that ask students to think more deeply, reason with evidence, or make claims and provide support for these claims. One way to begin to broaden teachers' instructional repertoire is to use a tool, such as the Depth of Knowledge (DOK) wheel, to examine if the full range of thinking is expected of students in particular assignments. If higher order skills are not adequately represented, teachers should receive support to consider ways to augment these assignments so that students' abilities to think and communicate analytically are developed alongside basic skills.[12]

   Another way to deepen educator instructional capacity is for teachers to have dedicated time to analyze and evaluate student work on the practice tests and performance tasks from the Smarter Balanced Assessment Consortium (SBAC). Teachers in California who participated in scoring the SBAC performance tasks reported overwhelmingly that they feel better informed in planning curriculum and more confident in teaching the new standards as a result. There will be opportunities for districts to involve teachers in scoring the new assessments as part of the state's annual testing process, as well as in professional development settings.[13]

11 Cohen, D.K. and Hill, H. (1997). Instructional Policy and Classroom Performance: The Mathematics Reform in California. Paper presented at the Annual Meeting of the American Educational Research Association, Chicago, IL.
12 Webb, N, (2005). "Web Alignment Tool." Wisconsin Center of Educational Research. University of Wisconsin-Madison. 2 Feb. 2006. Retrieved at http://www.wcer.wisc.edu/WAT/index.aspx>.
13 WestEd and Stanford's Center for Assessment, Learning, and Equity (SCALE) organized the performance task scoring in California and other states, and will continue to offer this kind of scoring activity as professional development for teachers in the future.

Teachers can also use formative assessment tasks and lesson guidelines from SBAC's Formative Assessment toolkit to support their work with students, notably the formative units and lesson guidelines developed by Shell Centre for Mathematical Education linked to the key standards. The Innovation Lab Network Performance Assessment Bank is another helpful source of standards-based performance tasks embedded in curriculum units mapped to state mathematics and ELA standards and the NGSS. When possible, pairing teacher professional learning to the examination of student work can be especially effective to illuminate the relationships among curriculum, assessment, and instruction.

A complementary tool for examining student work for evidence of understanding, adapted from Project Zero, is called *Claim, Support, Question and Implication*. This routine for looking at student work helps teachers to look for evidence of student learning that resulted from an instructional shift and then think about next steps for their teaching.

6. ***Assess student talk in classrooms for evidence of understanding.*** Teachers can examine student conversations as a product of student thinking, so that they can adjust their practice as needed to elevate learning. For example, the Understanding Language Project's focus on the quality of student talk in classrooms has produced a Conversation Analysis Tool (CAT) that allows teachers to examine classroom discussions. It also offers criteria for considering the quality of the conversation and provides some instructional moves to strengthen student conversations. Understanding Language is offering several Massive Open Online Courses (MOOCs) this fall, and groups of teachers within a school can participate in MOOCs together.

7. ***Utilize coaching for teams.*** Some districts have hired school or district coaches (often teachers on special assignment) to counsel teachers in their classrooms and support these instructional changes in action. This strategy seems most promising when a) the coach has been well-prepared and has a clear role; b) coaches are able to work with teams of teachers rather than individuals; and c) coaches simultaneously work with principals, assistant principals, or other site administrators so that schools grow more opportunities for ongoing learning and intentional practice that do not rely upon the coach alone.

8. ***Develop principals' and teachers' skills in cultivating effective teams.*** Organizing and leading teams that work together effectively and that are able to identify and address students' learning needs requires specific leadership skills. These are skills that principals do not always learn in administrator credentialing programs and teachers are typically not exposed to in the teacher licensure process. But, since the work of instructional improvement in schools increasingly depends upon effective teamwork, districts need to develop ways to help principals and teacher leaders learn these skills. A number of tools for districts and principals interested in building professional learning teams and promoting trust within schools can be found here.

9. ***Identify classrooms that illustrate strong implementation of the standards and use those classrooms as sites for teacher and administrator learning.*** All districts have teachers who have developed expertise in various practices associated with the new standards. Supporting informal and formal ways for teachers to learn from each other, such as in the creation of real-time learning labs, in which teachers observe colleagues to learn to apply new instructional tools, can build capacity within and across schools. Effective learning labs create a different approach to coaching, allowing gifted educators to continue teaching, while allowing other teachers to gain practical insights from their peers.

10. ***Invest in induction programs that support mentoring for beginning teachers.***

Making intentional efforts to pair up beginning teachers with expert teachers both improves teaching practice within schools and helps support teacher retention. Intentionality can be achieved by linking induction for new teachers to the efforts of school site professional learning communities geared towards supporting standards-based teaching. Supporting induction within the context of collegial planning can prevent the isolation of teachers and their work from colleagues, an experience that can be especially difficult for newcomers who are left to succeed or fail on their own within the confines of their classrooms. Novices who have opportunities to observe their peers working with students to keep them engaged and on task, developing lesson plans, and modeling inquiry-based instruction and strategies for a positive classroom atmosphere can help make abstract concepts like 'instructional shifts' more actionable. Investing in professional learning for early-career teachers, and using expert teachers in the district to do so, can help create professional learning experiences

for both beginning and experienced educators, while also encouraging a collaborative, team-based culture within a school.

11. ***Leverage new and existing professional learning resources to sustain district capacity.*** An influx of new moneys can provide districts a real opportunity to think differently about budgeting and creating useful partnerships to avoid fragmented spending of district resources.[14] Districts can encourage partners, including the schools, to review current funding sources that are not yet, but could be, directed into a professional strategy and used to leverage partner dollars. They can also use the opportunity of developing a strengthened district professional learning plan as required by state law to become more familiar with federal and state funding opportunities that support professional learning.

    Beyond money, districts can consider other points of leverage, such as the existing expertise of their people. For instance, National Board Certified Teachers have particular instructional expertise that districts might be able to utilize. Districts can also consider using the National Board certification process as a strategy to strengthen the quality of teaching within a district. The San Francisco Unified School District has done so, developing a National Board Support Program inside the district to promote both teaching excellence and professional learning opportunities. As part of SFUSD's commitment to increasing its number of NBCTs, it has created enabling structures, such as staff to recruit and support NB candidates and an annual stipend given to NBCTs with a valid credential. Fresno Unified School District, in part inspired by San Francisco's example, is also dedicating resources to significantly increase the number of its NBCTs.

As districts seek to foster the development of a cohesive professional learning system and culture, they are likely to confront a range of challenges. The next segment of this paper highlights strategies for addressing these challenges.

Implementation challenges and district approaches to address them

Districts will inevitably confront challenges when trying to implement state academic standards. For example, a 2015 study of the implementation in eight California districts found, like other research, that while educators are confident in their mathematical content knowledge, they do not feel as prepared to develop standards-aligned lesson and unit plans or to provide effective instructional models.[15] The study found teachers have concerns about whether they have the right resources and materials to teach the curriculum and about the extent and nature of professional development. In addition,

14 Blank, M, Jacobson, R, Melaville, A, and Pearson, S. (2010). *Financing Community Schools: Leveraging Resources to Support Student Success.* Washington, DC: Coalition for Community Schools, Institute for Educational Leadership. Retrieved at http://www.communityschools.org/assets/1/AssetManager/finance-paper.pdf.

15 Perry, R. R., Finkelstein, N. D., Seago, N., Heredia, A., Sobolew-Shubin, S., & Carroll, C. (2015). *Taking Stock of Common Core Math Implementation: Supporting Teachers to Shift Instruction: Insights from the Math in Common 2015 Baseline Survey of Teachers and Administrators*. San Francisco, CA: WestEd; Carrasco, I.H., Glaab, L., & McLaughlin, M. (2014). Implementing Common Core State Standards in California: A Report from the Field. Retrieved at http://www.edpolicyinca.org/sites/default/files/PACE%20CCSS%20McLaughlin.pdf.

across these eight districts, both teachers and administrators registered concern about the need for more training to support students with disabilities.

Such challenges and struggles are to be expected as districts learn how to shift teachers' instructional approaches, figure out how to develop leaders' ability to support teachers in this work, and focus collective efforts on improving the learning outcomes for all students. Indeed, the degree of struggle indicates the enormity of learning and change that implementing the standards requires. Meanwhile, districts across the state are also working creatively to address these various implementation challenges as they arise. We can learn from their efforts and work-in-progress.

This section details some specific strategies that districts—urban and rural, large and small—are developing to address the implementation challenges that are emerging as they use the state academic standards and accompanying frameworks to guide instruction and assess student learning. We name several typical challenges and provide some promising strategies that are in use in districts to address them. Where possible, we highlight relevant resources for addressing each challenge and learning from other districts' approaches. (See **Section II** and the **appendices** for more resources.)

Challenge: Design and facilitate professional learning experiences that support teachers' abilities to shift their instruction to align with CCSS/NGSS expectations

In many districts, trainings on the instructional shifts in ELA/ELD, mathematics, or science are offered in the traditional format of stand-alone events. Structures and approaches to help teachers use the content from these trainings in their classrooms are also needed.

There are examples of schools across the state and country that have developed approaches to support teachers' ongoing learning needs related to shifting instruction. More rare, however, are districts that have developed structures and approaches that elicit teacher-identified learning needs and provide ongoing support for them. Another set of challenges exists around rethinking the way unions and districts talk about teachers' rights and working conditions at the bargaining table, and how conversations might evolve to explore ways to collaborate to support student learning and educator professional growth.

Strategies: In one rural district in California, Evergreen Union School District, the superintendent decided to leverage the concept of teacher-driven professional learning that he was familiar with from his district's participation in the Teacher-Based Reform Program (T-BAR) led by California State University, Chico as part of the statewide Improving Teacher Quality Initiative. Participation in the T-BAR project gave this district a model for soliciting teacher-identified professional learning needs and selecting worthy initiatives to fund. In response to the Local Control Funding Formula, the Evergreen Union School District decided to distribute a portion of

district professional development funds for 2014–2015 following the application and selection model used in the T-BAR project. Teacher teams were encouraged to submit applications for funding that identified problems of instructional practice related to CCSS/NGSS implementation and describe how they would address problems through ongoing professional learning to develop interventions that they would try out in their schools and classrooms.

Challenge: Supporting principals to both learn what the instructional shifts look like and how to create school conditions that support teachers to continuously refine their instruction in such a way that deepens learning for all students

In many districts, the professional development provided to teachers occurs separately from the professional development provided to principals. In these cases, several problems can arise: a) principals may learn little about what the instructional shifts are and thus have difficulty supporting them, and b) principals may not be able to observe how teachers interact with the ideas that are presented or hear teachers' questions, concerns, or confusions. This means principals miss out on important information that could help them to better support teachers' implementation of the shifts in their school.

Strategies: In addition to having opportunities to learn alongside teachers about the instructional shifts, principals also need opportunities to learn how to create school-based conditions that will support teachers' ongoing learning.

The San Francisco Unified School District is developing an array of principal learning supports to address this problem. In addition to including principals in its district professional development for teachers, principal-specific supports are also provided. These supports take several forms:

1) Direct support to networks of school instructional leadership teams comprised of the principal, teacher leaders, and, in some schools, coaches to develop their team's capacity to learn with and from each other, to analyze student tasks for the level of thinking the tasks require, and to develop their team's capacity to look at student work together for evidence of understanding and adjust instruction accordingly.

2) The re-imagined use of twice-monthly principal meetings so that principals are organized into small learning communities that participate in monthly, district-facilitated school visits. These visits allow them to observe classrooms for evidence of CCSS/NGSS instructional practices and discuss specific strategies they can use to strengthen the quality of CCSS/NGSS-aligned instruction in their schools. Principals are asked to bring artifacts and results from the instructional leadership moves they enacted in their schools to their monthly principal meetings. These specific instructional leadership moves are an outgrowth of their site visit learning experiences.

Challenge: Choosing a focused professional learning approach to CCSS/NGSS implementation

Given the number of demands on a district that implementing the state academic standards requires, it can be difficult to design a focused approach to CCSS/NGSS implementation that does not overwhelm teachers and principals.

Strategies: Utilizing a team approach at the district level to support the design of common core implementation, especially in large districts with many departments, can be helpful. For example, San Juan Unified consulted with the teachers' union to develop an implementation strategy for the Common Core and established a special district work group to inform these efforts. Enormous interest in the work group led to involving all 100 participants in the program in designing the implementation of standards for their grade levels and content areas.

Smaller districts, as well as districts that span elementary and high school, can also benefit from having a district team that is intentionally comprised of members with different expertise and perspectives. For instance, a district CCSS implementation team might include administrators from several different district departments—such as curriculum and instruction, assessment and accountability, special student populations, and human resources—as well as principal supervisors, principals, and teachers who teach both single subject, multiple subjects, and special student populations. One responsibility of such a team might be to ensure that the district CCSS/NGSS implementation

plan is coherent, manageable, and designed to support the various learning needs of all educators in the district. A variety of districts, such as Sanger Unified School District, Pasadena Unified School District, and Porterville Unified School District, are experimenting with cross-role district teams designed to support more effective CCSS implementation to prepare students for college and career.

Challenge: Meeting the particular learning needs of English language learners and special education students, while providing a more cognitively demanding curriculum that increases the level of students' thinking

Some districts struggle to design standards-based learning experiences for English language learners and special education students that are cognitively demanding and enriching for these students, and do so as part of an integrated approach to instruction. This can include avoiding a stand alone strategy that separates students based on language or cognitive need from their peers.

Strategies: The California Curriculum Frameworks, particularly the decision to include the ELA and ELD framework in a single framework, are helping educators to better meet the particular needs of English language learners.

By making an explicit connection between learning language and learning subject area content, the ELA/ELD framework goes a long way toward helping teachers meet the specific learning needs of English language learners (ELLs) and of ensuring that learning language is not divorced from subject area learning. To this end, the Understanding Language (UL) project offers a variety of open-resource tools and materials for educating ELLs, including online, interactive courses on topics such as supporting English language learners to construct arguments. In one such course, UL teaches participants how to use its Conversation Assessment Tool (CAT), which provides criteria teachers can use to assess the quality of student talk in their classrooms. In this course, teachers are asked to conduct small investigations into their classroom practice by using this tool to analyze the content of their students' conversations and consider adjustments to instruction that could strengthen the quality of these conversations. When groups of teachers in a school take this course together, their opportunities for learning increase.

The CDE has created standards guidance documents geared for working with special education students. Some districts, such as Elk Grove Unified and Sanger Unified are strategically bringing together teams of special education teachers to strategize about how to best meet the needs of their students.

For example, Sanger Unified School District (SUSD) has spent the past two years investing in developing the expertise of its Special Education Department to become more thoughtful in how to design and provide CCSS instruction for special education students in adherence with the principles of Universal Design for Learning. SUSD's goal

is to have its special student populations meaningfully engaged in learning skills and content in every classroom. Sanger has developed the expertise of its Special Education Department by sending cross-role teams—comprised of special education teachers, school psychologists, program managers, Resource Specialist Program teachers, and special education district administrators, along with representative general education teachers—to CAST in Boston to learn about the theory and practice of Universal Design for Learning.

In addition, SUSD has further supported the team's learning by conducting a two-year pilot project in which the team has designed and practiced using the principles of Universal Design for Learning and linking these principles to specific state academic standards and objectives. This Fall, SUSD's Special Education Department is leading a district-wide implementation of the UDL principles for all general education teachers, K-12. To help manage this district initiative, SUSD has created a new, full-time position in the General Education Department—the Coordinator of Inclusive Practices and Support.

Elk Grove had an effective district approach to support special education students in place prior to the adoption of CCSS/NGSS, and recently, has further developed its system of supports for students. For over twenty years, Elk Grove has used Collaborative Academic Support Teams—comprised of special education specialists (e.g., school psychologists, behaviorists, mental health specialists, and speech and language therapists), administrators, and general education teachers—to assess the particular needs of struggling students and design student-specific intervention plans. The size of this team can range from 5-12 people. Struggling students in every Elk Grove school are assessed by the team several times during the year.

Through the team's focused efforts to examine the needs of individual students, Elk Grove educators found that many students, formerly identified as "special education students," were actually best supported with intense and focused instructional interventions, such as focused literacy support. By monitoring students' progress on assessments at regular intervals, the Collaborative Academic Support Team found that it was better able to support its students. With the arrival of CCSS, Elk Grove has continued to strengthen its approach to supporting special education and general education students by paying increased attention to how its curriculum develops the skills students need to access the CCSS/NGSS.

The absence of critical *academic enablers*, such as students' executive functioning skills, motivation to learn, level of engagement, and having a meaningful connection to school often prevent students, who are otherwise capable, from learning. Because Elk Grove sees developing students' social and emotional learning skills as necessary for achieving state academic standards, especially the speaking and listening standards, it is training all of its Pre-K-12 educators in how to develop these skills that enable academic learning.

Challenge: Designing, leading, and facilitating educator teams and professional learning communities that continuously learn together to improve instruction so that the needs of all students are met

Recent studies show that creating "dense networks of information and exchange among teachers"[16] can help improve instruction and student learning. The quality, type, and frequency of such collaborations among educators are increasingly found to be an important dimension of workplace environments where excellent teaching grows and thrives.[17]

Strategies: It is critical that districts develop the capacity to promote, convene, lead, and facilitate educator teams that are designed for learning. Grouping teachers according to grade-level or subject area does not in itself create *teams*. A team is "a collection of individuals who are interdependent in their tasks."[18] Defining interdependent tasks for educator teams in a profession overwhelmingly characterized by independent and isolated work requires particular leadership knowledge and skills.

Districts may need to invest in the intentional development of these specific leadership skills. Growing effective teams can be especially important when the time available to identify and resolve challenges is short and solutions are not straightforward, but rather involve complex operations and require an array of expertise.[19] In studies of team effectiveness conducted in business organizations, research has found that how a team is designed effects team behavior, and it shows leaders can support the effectiveness of teams and their ability to self-manage by creating "better design conditions" for teamwork, such as: 1) providing a clear direction; 2) determining team composition carefully; 3) making the task work interdependent; and 4) assisting groups to manage themselves.[20]

16 Johnson, S.M. (2011). Delivering on the Promise of Public Schooling. *Voices in Urban Education*, 31: 20-27.
17 Johnson, S.M., Kraft, M.A., Papay, J.P. (2012). How Context Matters in High-need Schools: The Effects of Teachers' Working Conditions on Their Professional Satisfaction and Their Students' Achievement. *Teachers College Record*, 114(10), 1-39.
18 Cohen, S. and Bailey, D. (1997). What makes teams work: Group effectiveness research from the shop floor to the executive suite. *Journal of Management*, 23(3), 239-290.
19 Edmondson, A.C, (2012). *Teaming: How Organizations Learn, Innovate, and Compete in the Knowledge Economy*. Jossey-Bass.
20 Wageman, R. (2001). How Leaders foster self-managing team effectiveness: Design choices versus hands-on coaching. *Organization Science*, 12(5), 559-577.

Increasingly, a variety of educator networks (e.g., ELL Network; California Collaborative; CORE Districts; and Instructional Leadership Corps) and school redesign projects (e.g., California Institute for School Improvement, Linked Learning Districts, Sanger Unified School District, T-BAR 2) employ these team-based approaches and are developing teams comprised of educators in a variety of roles and with intentionally selected expertise. They are described in greater detail in **the appendices**.

II. Key professional learning resources for districts

This section offers a menu of resources to help districts in their efforts to connect professional learning to meaningful standards implementation. While it is not an exhaustive list of resources, it provides a helpful starting point for districts looking for ways to strengthen the ability of teachers to work and learn from their peers in promoting instructional approaches that promote not only student content acquisition, but also skills development like critical thinking, creativity, collaboration, and communication. *Resources are organized around each state academic standard and include a section dedicated to highlighting statewide professional learning networks.*

State academic standards and professional learning

The CDE has a number of excellent resources, including a website dedicated to the Common Core and a Quality Schooling Framework to help guide instructional planning and decision-making for schools and districts. Additionally, the CDE has developed new curriculum frameworks in English Language Arts/English Language Development and Mathematics to help implement state academic standards. Practitioners can expect similar frameworks in Science and history/social studies to be released soon. These frameworks can be used as a starting point for lesson planning and instruction.

The state has also developed and published a grade-level curriculum document, *A Look at Kindergarten Through Grade Six in California Public Schools: Transitioning to the Common Core State Standards in English Language Arts and Mathematics,* as well as a companion guide for 7th and 8th grades:

A Look at Grades Seven and Eight in California Public Schools.

These include substantial material to support the transition to the CCSS. The guides provide teachers, parents, administrators, and others with an overview of what students are expected to learn in English Language Arts/English Language Development and Mathematics in California's public schools at each grade level. The online publications contain all content areas (history/social science, science, physical education, health, visual and performing arts, world languages, and school library). As the CCSS are put into practice over the next few years, new curriculum frameworks, professional development opportunities, and standards-based instructional materials and assessments will continue to be developed.

To complement the curriculum frameworks, the CDE has also developed a set of thirteen online professional learning modules to deepen educator understanding of the CCSS. Modules are available for both individual study and group activity, web-based and school-based delivery, and are based on the *California Standards for the Teaching Profession* and the *Learning Forward Standards for Professional Learning*.

Topics include instructional strategies to support all learners, including English learners, students with disabilities, and underperforming students; instructional strategies that promote creativity, innovation, critical thinking, problem solving, and collaboration and communication skills; the integration of subject area content knowledge; and instructional leadership and coaching. The CDE has refined its existing Professional Development Opportunities Web site to identify activities aimed at transitioning to the CCSS.

Common Core State Standards Systems Implementation Plan for California (DOC; 10MB; Revised 30-Apr-2014) | PDF (Revised 30-Apr-2014)

Significant Milestones Timeline

The CCSS systems implementation plan is a living document that identifies major phases and activities in the implementation of the CCSS throughout California's educational system.

State academic standards implementation

CA CCSS Systems Implementation Guide

This resource, designed to support local CCSS implementation, provides suggestions and resources organized by the seven guiding strategies of the CCSS Systems Implementation Plan for California.

Common Core Channel

Videos and related resources to provide information and support for implementing the CCSS.

Smarter Balanced Assessment System

Information about the new generation of student assessments, including information about Technology Readiness, Practice Tests, the Digital Library, Interim Assessments, and Summative Assessments.

CCSS Update Listserv

Join the CCSS Update Listserv to receive information regarding the implementation of the CCSS, including resources and opportunities to participate.

California Spotlight

This is a feature of the CDE CCSS Update Listserv to highlight and share Web sites, curriculum, lessons, units, communications, and other online resources developed by California schools, districts, and county offices of education to support the use of the CCSS.

Science academic standards

Next Generation Science Standards Overview for CA

The CDE website provides a summary of the California Next Generation Science Standards (CA NGSS) by grade level Disciplinary Core Ideas (DCI): Life Sciences, Earth and Space Sciences, and Physical Sciences or by grade level Topic (e.g., Chemical Reactions, Structure and Function, or Space Systems).

Next Generation Science Standards Implementation Resources

The NGSS EQuIP Professional Learning Facilitator's Guide is a series of 10 modules that are designed to provide guidance on building the capacity of educators and education leaders to use the EQuIP Rubric for Science.

Next Generation Science Standards Initiative

Part of a four-year demonstration project to support eight California school districts in implementing the Next Generation Science Standards (NGSS), the Initiative is led by WestEd's K–12 Alliance in partnership with the California State Board of Education and Achieve; the Initiative is also a component of the California Department of Education's NGSS implementation plan. The Initiative consists of leadership training for teachers and administrators, teacher professional development in content and pedagogy to meet the shifts required by NGSS, and support to develop and implement a K–8 districtwide NGSS implementation plan. Participating districts also form a cross-district learning community to share best practices and address problems of practices.

The participating districts include: Galt Joint Union Elementary School District, Kings Canyon Unified School District, Lakeside Union School District, Oakland Unified School District, Palm Springs Unified School District, San Diego Unified School District, Tracy Unified School District, and Vista Unified School District.

English Language Arts academic standards

2014 Revision of the English Language Arts/English Language Development Framework

Information about the revision and State Board of Education-adopted chapters of the English Language Arts/English Language Development (ELA/ELD) Framework to align with the CCSS.

2015 ELA/ELD Instructional Materials Adoption (K-8)

Information about the adoption of ELA/ELD instructional materials for kindergarten through Grade 8. The list of adopted materials is scheduled to be available in November 2015.

Achieve the Core

Free, high-quality resources compiled by Student Achievement Partners, writers of the CCSS, for educators implementing the CCSS, including professional learning modules, handouts, presentations, sample lessons, lesson videos, and much more.

Introduction to ELA/Literacy Shifts

Understanding Text-Dependent Questions

Using the ELA/Literacy Publishers' Criteria to Better Understand the Standards

National Council of Teachers of English (NCTE) Resources on ELA Instruction

The National Council of Teachers of English (NCTE) provides resources for teachers and administrators working with the CCSS.

Basal Alignment Project

The Basal Alignment Project provides a collection of replacement lessons to the most commonly used basal readers. Use these high-quality, CCSS-aligned questions and materials with your existing textbook.

Anthology Alignment Project

The Anthology Alignment Project provides free, teacher-developed CCSS-aligned lessons for anthology readers in Grades 6–10. The lessons can be used immediately in the classroom and for professional development.

IRA – ELA Common Core State Standards

International Reading Association (IRA) offers a variety of tools to help you in the process of implementing the CCSS for ELA and literacy.

Literacy Implementation Guidance for the ELA Common Core State Standards

Guidance on seven issues that have proven challenging in implementing the CCSS for ELA: use of challenging text, the foundational skills in the standards, comprehension, vocabulary, writing, disciplinary literacy, and diverse learners.

ELA Resources - The Common Core Conversation

The website directs practitioners to an extensive library of resources and professional learning networks all intended to support CCSS ELA instruction.

Curricular resources to support English language learners

Understanding Language Project

An initiative aimed to heighten educator awareness of the critical role that language plays in the state's academic standards. The initiative seeks to improve academic outcomes for English language learners (ELLs) by drawing attention to critical aspects of instructional practice and by advocating for necessary policy supports at the state and local levels. The initiative team, housed at Stanford University, has developed and presented papers and webinars addressing language and literacy issues, and is developing sets of teaching resources that exemplify high-quality instruction for ELLs.

English Language Arts Unit: Persuasion Across Time and Space

This unit shows instructional approaches that are likely to help English language learners meet the state academic standards. The unit includes more than 230 pages of resources, complete with full student handouts.

Supporting ELLs in Mathematics

These resources from the Understanding Language project are designed to illustrate how the CCSS in Mathematics can be used for EL instruction. Materials cover three grade spans and include templates for teachers to design their own tasks to support mathematics learning and language development for English learners.

The Teaching Channel Video Series Playlist: English language learners

This video series was produced in conjunction with Stanford University's Understanding Language initiative and examines the key shifts found in the CCSS. The videos highlight opportunities to grow students' disciplinary knowledge and English language skills in heterogeneous classrooms.

Improving Education for English Learners - Webinar Series Archive

WestEd's SchoolsMovingUp hosted a free webinar series focused on English language learners, with nationally recognized researchers and professional development providers speaking on topics covered in the CDE publication, Improving Education for English Learners: Research-Based Approaches.

Colorín Colorado

A national website serving educators and families of English language learners (ELLs) in Grades PreK-12, Colorín offers free research-based information, activities, and advice to parents, schools, and communities around the country.

Curricular resources tied to Mathematics academic standards

California Common Core State Standards-Mathematics (CaCCSS-M) Resources

Resources from the CaCCSS-M Task Forces, composed of members of the California Department of Education, California Math Council, California Mathematics Project, and California County Superintendents Educational Services Association's Mathematics Subcommittee of the Curriculum and Instruction Steering Committee, that professional development providers can use to strengthen teachers' content knowledge to teach the newly adopted mathematics standards. Includes links to information and resources for teaching.

CCSS Professional Learning Modules for Educators

Information about the CCSS professional learning modules.

Kindergarten through Grade Eight Learning Progressions

Kindergarten through Grade Twelve Standards for Mathematical Practice

2013 Revision of the Mathematics Framework

The California State Board of Education adopted the *Mathematics Framework* on November 6, 2013. This version of the *Mathematics Framework* will remain posted while it is edited for publication.

Math in Common

As academic standards in education change, it is vital that teachers are prepared to integrate key shifts into their practices. Through the Math in Common® initiative involving the Bechtel Foundation, California Education Partners and WestEd, in this effort, ten school districts serving over 300,000 California youth are developing and enacting thoughtful plans to implement Common Core State Standards for Mathematics in grades K–8.

Together, districts are part of a community of practice in which they share their progress and successes, as well as their challenges and what they have learned. Participating districts include Dinuba, Elk Grove, Garden Grove, Long Beach, Oakland, Oceanside, Sacramento City, San Francisco, Sanger, and Santa Ana.

2014 Mathematics Instructional Materials Adoption (K–8)

Programs adopted by the State Board of Education

Grade-Level Curriculum

The grade-level curriculum documents are organized by individual grade levels and include information about the CCSS. There are also archived webinars for the kindergarten through Grade 6 documents, which highlight the curriculum across the featured grade level with special focus on the CCSS.

Achieve the Core

Free, high-quality resources compiled by Student Achievement Partners, writers of the CCSS, for educators implementing the CCSS, including professional learning modules, handouts, presentations, sample lessons, lesson videos, and much more.

Introduction to the Math Shifts

Deep Dive into the Math Shifts

Publishers' Criteria for the Common Core State Standards in Mathematics, Grades K–8

High School Publishers' Criteria for the Common Core State Standards for Mathematics

Progression Documents for the CCSS Mathematics Standards

Narrative documents describing the progression of a topic across a number of grade levels, informed by research on children's cognitive development and by the logical structure of mathematics.

The Illustrative Mathematics Project

The project aims to illustrate each of the standards using high-quality reviewed tasks from teacher leaders. The site provides guidance to all stakeholders implementing the CCSS by illustrating the range and types of mathematical work that students will experience, and other implementation tools.

Inside Mathematics

This site features classroom examples of innovative teaching methods and insights into student learning, tools for mathematics instruction, and video tours of the ideas and materials on the site. Their expanding list of resources include connecting to the CCSS for mathematics. To illustrate the CCSS for mathematical practice, links are provided for each individual practice standard correlated to excerpts of mathematics lessons, demonstrating examples of successful strategies to launch and sustain the practice of standards in the classroom.

The Mathematics Common Core Toolbox

The Charles A. Dana Center at the University of Texas at Austin and Agile Mind, Inc. have created a resource designed to support districts working to meet the challenge and the opportunity of the new standards. Here you will find tools and instructional materials that help to better understand and implement the CCSS for Mathematics.

Math Common Core Coalition

The Coalition works to provide expertise and advice on issues related to the effective implementation of the CCSS for mathematics. Members of the coalition include National Council of Teachers of Mathematics (NCTM), the National Council of Supervisors of Mathematics (NCSM), the Association of Mathematics Teacher Educators (AMTE), and the Association of State Supervisors of Mathematics (ASSM).

The MARS Mathematics Assessment Project

The Mathematics Assessment Resource Service (MARS), a collaboration between the Shell Center team at the University of Nottingham and the University of California, Berkeley, is working to design and develop assessment tools to support U.S. schools in implementing the CCSS for Mathematics, including lessons, tasks, tests, and professional development.

History and Social Studies Academic Standards

California History Social Science Project (CHSSP) at UC Davis

Serving a statewide network of scholars and K-12 teachers, headquartered in the Department of History at the University of California, Davis, CHSSP works with close to 4,000 K-12 teachers in person and online, with an approach to instruction that integrates content, disciplinary understanding, and explicit support for English language proficiency, framed in an inquiry model of historical investigation. All CHSSP programs and resources are aligned with the Common Core State Standards and both the English Language Development Standards and the History-Social Science Standards for the state of California.

Stanford History Education Group (SHEG): A consortium of Stanford faculty, graduate students, post-docs, and visiting scholars, SHEG is a research and development group that provides outreach to educators in California and across the nation. The network offers an extensive number of resources pulling from the Library of Congress to create a new generation of history assessments, including an exciting new project called Reading Like A Historian. Reading Like a Historian has developed tailored resources for teachers aligned to the CCSS, and a curriculum that engages students in historical inquiry and lessons on historical thinking linked to U.S. and World History.

Resources for Administrators

School site leaders

Instructional Practice Guide

These resources are framed around the key shifts required by the CCSS that can be used to facilitate conversations between teachers and coaches about aligning content and instruction. By using these tools to reflect on practice, clear connections can be made between Common Core-aligned lesson planning and classroom instruction conversations, which can supplement information from other, established observation protocols that focus on planning and preparation, classroom management and environment, and professional responsibilities.

Resources for Mathematics, English Language Arts, English Language Development, and Literacy Resources for Special Education, Preschool, and After School.

Instructional Practice Guide

This guide includes coaching and lesson planning tools to help teachers and those who support teachers to make the key shifts in instructional practice required by the CCSS.

Achieve Publications

Achieve publishes national and state reports, as well as policy briefs, surveys, and white papers that focus on preparing all students for college and careers. All of these publications are available to the public for free in PDF format.

Implementing the CCSS: The Role of the Elementary School Leader Action Brief

Implementing the CCSS: The Role of the Secondary School Leader Action Brief

Implementing the CCSS: The Role of the School Counselor Action Brief

Implementing the CCSS: The Role of the School Librarian Action Brief

National Association of Secondary School Principals (NASSP) Common Core Resources

NASSP has compiled a number of resources to help school leaders as they work to meet the challenge of implementing the CCSS.

National Association of Elementary School Principals (NAESP) Common Core State Standards Resources

A list of implementation resources, including items specifically for elementary school principals, compiled by the NAESP.

District & County Administrators

California County Superintendents Educational Services Association (CCSESA)

This site offers communication tools to help disseminate information about the CCSS. Information includes PowerPoint presentations about the CCSS for mathematics and English language arts (ELA), a general overview, and information about international benchmarking of standards.

Common Core State Standards: Implementation Tools and Resources

A list of tools and resources, primarily developed by the CCSSO and the lead writers of the standards, to point states to promising practices and tools to support CCSS implementation.

Spotlight on the Common Core State Standards – What Do District Administrators Need to Know?

Brief by Education Northwest reviews actions district administrators should consider taking now to prepare their schools for CCSS implementation.

CCSSO - The CCSS Initiative

Information and resources to support the implementation of the CCSS provided by the Council of Chief State School Officers (CCSSO).

Common Core State Standards: Implementation Tools and Resources

A list of tools and resources, primarily developed by the CCSSO and the lead writers of the standards, to point states to promising practices and tools to support CCSS implementation.

Teacher Educators

California State University's New Generation of Educators Initiative

The initiative intends to ensure that graduates of California State University (CSU) teacher preparation specializing in math and science instruction enter the classroom truly ready for the demands of teaching. It is led by a working group of Arts and Sciences and Education faculty and Deans, and K-12 partners. This working group supports CSU teacher preparation programs to provide teacher candidates with coursework and clinical experiences designed to ensure that teachers master the skills they will need to start strong from their first day in the classroom.

Instructional Leadership and the CCSS Module

This is a 1.5 hour module designed to guide the school-level instructional leader in beginning the work of understanding and implementing the CCSS.

Professional Learning Resources and Networks

Teaching in alignment with the Common Core takes practice, effort, and patience. Teachers, and those responsible for supporting teachers, can accelerate this process through effective professional learning programs and systems. The resources in this section offer both California and national partners resources and suggested networks of educators that can help educators to strengthen standards instruction.

The Instructional Quality Commission of California has developed a number of tools organized by grade level and content area for implementing the content standards, including frameworks and resources adopted by the California State Board of Education. Those tools and the resources listed in this section are intended to help districts align the components of learning systems that start with standards and include curriculum, instruction, and assessments aligned to support student attainment of the standards.

Achieve the Core Professional Development Resources

Free, high-quality resources compiled by Student Achievement Partners, writers of the CCSS, for educators implementing the CCSS, including professional learning modules, handouts, presentations, sample lessons, lesson videos, and much more.

California Institute for School Improvement (CISI) at UC Davis

The center provides education leaders at the school and district level with the accurate, unbiased, up-to-date policy and research information impacting the day-to-day work of schools, including a host of resources related to Common Core implementation. CISI supports superintendents, principals, and curriculum and instructional leaders through monthly policy and research resource digests, annual workshops, and more. Currently, CISI services many school districts and county offices across California.

California Subject Matter Project (CSMP)

Representing a network of nine discipline-based statewide projects that support on-going quality professional development, the CSMP supports activities and programs designed by university faculty, teacher leaders, and teacher practitioners to improve instructional practices that lead to increased achievement for all students.

Integrated Professional Learning Systems at UC Davis

Supported by a Teacher Quality Program State Grant, PLS' charge is to engage K-12 school districts in a facilitated process to develop an educational system that puts professional growth at its center. This process is intended to help identify, generate, and put into use the full spectrum of resources that are needed in effective educational systems, as well as to ensure the use of research evidence for program design.

IPLS district partners are developing a sustainable infrastructure for building their individual, school, and district-wide system capacities. This is needed in order to ensure efficient, effective, and equitable implementation of California-adopted academic standards in a way that will lead to success for all educators and students.

Instructional Leadership Corps

This collaboration between the California Teachers Association, Stanford Center for Opportunity Policy in Education (SCOPE), and the National Board Resource Center aims to build a statewide network of accomplished classroom teachers and other education leaders who will support the implementation of schoolwide professional learning on the state academic standards.

Sobrato Early Academic Language for English Learners (SEAL)

The Sobrato Early Academic Language Model is designed as a comprehensive model of intensive, enriched language and literacy education designed for English language learners, starting in preschool and continuing through third grade.

Stanford ELL Leadership Network

A collaboration between researchers at Stanford University and site and district level practitioners, the network supports the following seven small-to-middle sized districts in Central and Northern California in improving academic outcomes for ELLs: Corning Union Elementary School District, Fairfield-Suisun Unified School District, Firebaugh-Las Deltas Unified School District, Napa Valley Unified School District, Sanger Unified School District, Tahoe Truckee Unified School District, and Ukiah Unified School District.

Network participants have identified three intertwining lines of work for improving instructional outcomes for ELLs:

1. Analysis of longitudinal ELL data to identify weaknesses in student performance
2. Examination of systems-level practices to identify institutional barriers to ELL achievement
3. Observation of classroom instruction and professional learning communities (PLCs) to identify and develop best practices

Looking ahead, the next section shows how districts can effectively execute a crosswalk in their LCAPs between shared beliefs and values about what achievement goals are possible for all students, and its relationship to professional learning goals. One key sticking point discussed in greater detail encourages districts to not only design a sound professional learning plan, but also more importantly, one that is actionable.

III. Developing LCAPs aligned with district professional learning strategies

State law requires districts to show how new professional development resources allocated by the state will be incorporated into Local Control Accountability Plans (LCAPs) by outlining a process for purposeful and meaningful stakeholder involvement. The expectation is for professional learning to be articulated as a key component of the district and school board's vision for school system progress, especially for low-income students, foster youth, students with disabilities, and English language learners.

Creating a seamless connection among district priorities

To avoid generating a number of separate plans that feel disconnected (e.g., district strategic plan, LCAP, professional learning plan) it is important for districts to make a conscious effort to establish a clear alignment between the district's mission with its professional learning goals as a way to support the strategic use of LCAP dollars intended to bolster efforts for the success of all students, especially students with complex classroom needs.

While a good plan is important, it is even more critical that districts create a usable plan to help implement a practitioner-driven professional learning strategy in an effective fashion.

Ideally, the process for assessing needs, developing goals, identifying services, and creating a professional learning plan generates a sense of focus, purpose, and motivation to support the plan's implementation. Included in the section are a number of helpful resources for districts with examples of LCAPs that have developed innovative ways to engage multiple stakeholders, while meeting community learning goals associated with meeting state academic standards and improving student achievement.

Recommendations for developing district plans[21]

The LCAP process is intended to foster a cycle of district continuous improvement; engage local stakeholders in identifying its priority student learning goals; and support more transparent, effective, and efficient allocations of local resources. As such, LCAP development and retooling is meant to stimulate improved programs and services for students at the local level.

Strategies: Three district LCAPs highlighted below offer excellent examples of not only strong plans for thoughtfully integrating state academic standards with professional learning strategies, but also well-articulated ways for engaging key local stakeholders in the development of professional learning plans, like union leaders, parents, students, and community organizations.

Sacramento City Unified School District

The district has made their LCAP accessible for a multilingual audience (Hmong, Russian, Spanish, Vietnamese) acknowledging the importance of communicating and engaging with key stakeholders who may not be native English speakers.

Garden Grove Unified School District

Building upon a focus on state academic standards that support deeper learning in the classroom, the district has developed an ambitious set of goals linking academic content to professional learning.

ABC Unified School District

The district follows a process inclusive of all of its stakeholders, including students. For example, the district met with the Board student representatives of all high schools to review the LCAP and provide input in the development of its 2015-2016 plan. The LCAP is available in English and Spanish.

For districts looking for more tools to help create thoughtful plans similar to the district examples of Sacramento, Garden Grove, and ABC, WestEd has prepared a guide to strategic planning for districts that can be of use in developing LCAPs that integrate professional learning plans to meet the district's obligations around new professional learning dollars. Making clear cross-walks between student learning goals and professional learning goals will ensure that district plans are cohesive and useful, and ultimately tied to student learning.

While assembling a strong district professional learning plan is important, what is even more important is sound implementation of the plan. LCAPs are only a tool intended to help guide implementation. District leaders should be thinking about how planning

21 WestEd. Strategic Planning Terms for School Districts. Retrieved at http://lcff.wested.org/wp-content/uploads/2014/03/StrategicPlanningTerms.pdf.

documents can be translated into operationalizing the district's professional learning vision, which will likely include the development of timelines, budgets, strategy meetings, and increased staffing time necessary to follow through on implementation.

1. **Vision:** *What is our district story?*

A brief description of the ideal experience for students in your district. This is the "north star" that provides the long-term direction and inspiration. What will this district contribute to the lives of students, families, communities, employers, and society more generally? The nature of the learning desired for students should inform the kind of learning needed for the adults in the system to support that vision.

2. **Goal:** *Where, more specifically, are we going?*

A fundamental issue the district chooses to address. Goals provide direction for how to pursue a larger, more abstract vision. Although goals may represent desired ends, they are not necessarily attainable or quantifiable. They represent the intermediate picture of "*where*" the district is going given the needs of students.

3. **Outcome:** *What will we see happening for students when we get there?*

A clear, concrete statement of what will be different or improved for students. What will they know, accomplish, or be able to do differently? Outcomes represent "*what*" the district is trying to accomplish. It is about what kids are doing and not about what adults are doing. Outcomes should be based on identified goals and will guide decisions about a district's actions, services, and expenditures.

4. **Actions and Services:** *How will we get there?*

A specific set of strategies—actions and services relate to the delivery of instruction, administration, facilities, pupil support services, technology, etc. This is "*how*" the District will act to achieve its desired outcomes for students. Actions and services are not highly detailed tasks, but programs or practices that guide decisions about resource allocation (time/attention, money, expertise, etc.). What major steps will be taken, and who will take them? Actions and services should be adopted based on evidence about how they are likely to support desired outcomes for students. Districts may choose to adopt new services, improve service quality, expand the quantity of available services, or do a combination of all three in support of state academic standards.

5. **Metrics:** *What information and tools will help us measure our progress?*

Metrics clearly state what districts will measure to determine: (a) how well their efforts/strategies are achieving desired outcomes for students, and (b) to what extent they are implementing key strategies in an effective manner. These measurements allow districts to communicate annual progress, analyze successes and challenges, and make appropriate modifications to actions and services.

Metrics for Measuring Outcomes of Professional Learning[22]

There are many ways districts can think about the impact of professional learning efforts. Professional learning activities such as the number of opportunities staff has to learn about CCSS implementation; the amount of time created, freed up, and allocated to jointly planning standards-based curriculum; amount of coaching or other supports (access, time, or other metrics); or time spent reflecting on results, analyzing student learning, and assessments, etc. can be pulled into three areas for thinking about evaluating the progress of district initiatives.

1. *Process evaluations* examine levels of participation (how many educators participated in professional learning opportunities of various kinds); the number and qualifications of the implementation staff (e.g., numbers of and training for coaches); feedback from participants in professional learning (e.g., staff ratings of the quality, helpfulness, or applicability of professional learning opportunities, as well as recommendations for next steps), the levels of administrative support for the program (e.g., funding, time, and opportunity to jointly plan and/or observe other teachers); and/or whether the tool, approach, or program is being implemented as designed (i.e., with fidelity).

2. Impact evaluations combine the components of a process evaluation with a determination of whether and to what extent the tool, approach, or program results in the desired short- and long-term outcomes. These might include numbers of standards-aligned lessons or units designed and implemented; perceptions of heightened knowledge and confidence on the part of educators; evidence from classroom or other assessments of gains in student learning linked to the focus of professional learning.

3. Cost-benefit analyses are a plausible, but rarely used method of evaluating professional learning activities. They entail a comparison between the cost of professional development (time and materials) and the costs/benefits of changes in outcomes for children (e.g., less grade retention, less need for special education placements, greater graduation rates, and so on).

22 Archibald, S., Coggshall, J., Croft, A., & Goe, L. (2011). High quality professional development for all teachers: Effectively allocating resources. National Comprehensive Center for Teacher Quality: Washington, DC.

Professional learning plan development resources for districts

The CDE has created a number of resources to aid districts in their efforts to develop sound, actionable LCAPs. They can be used to help school leaders articulate a collaborative process and meaningful plan for helping districts improve their practices, and to ensure the most effective use of professional learning dollars.

CA State Board of Education LCFF Resource Page
http://lcff.wested.org/category/reading-room/

Professional Learning Planning Process for Districts
http://lcff.wested.org/wp-content/uploads/2014/03/LEA-Planning-Cycle.pdf

Stakeholder Engagement
http://lcff.wested.org/stakeholder-engagement/

Goals and Progress Indicators
http://lcff.wested.org/goals-and-progress-indicators/

How to Make Plans User Friendly
http://lcff.wested.org/actions-services-and-expenditures/

IV. Conclusion

The strategic allocation of human, financial, and time resources to guarantee that all educators have access to high-quality professional learning opportunities is heavily dependent on the strengths and needs of a school system. Effective professional learning systems are often part of a larger patchwork, process, and vision of whole system change. 'Whole system' thinking focuses on motivating students and educators to achieve new goals or see individual growth, continuous improvement of instruction and learning, team work, and ways to build up the strengths of everyone in the school system. It is often the driving force behind successful schools and school systems. Coincidentally, those organizational models emphasize some of the most common characteristics of quality professional learning: capacity building, group work, instruction, and systemic solutions aimed directly at changing the culture of school systems.[23]

The guidance offered in this paper has been developed to offer insight into what research and practice tell us about the principles of quality professional learning, and their connection to the tenets of school system improvement. Most meaningful professional learning efforts share common characteristics, fueled by practitioner-driven expertise, cross-role collaboration, and partnerships between employee unions and community partners to deepen district capacity. As districts forge ahead with new or strengthened professional learning efforts, it will be critical for the state to continue to aid districts in their efforts to operationalize the seven elements of California's Quality Professional Learning Standards (QPLS): meaningful use of data, content and pedagogy, equity, design and structure, collaboration and shared accountability, resources, alignment, and coherence.

State support for districts must be designed with great intentionaliy, knowing no short-cuts exist to long-lasting teacher and principal professional growth and improvement in student achievement. Each attribute of effective professional learning is dependent upon optimal workplace conditions for strengthening the knowledge-base of students, educators, and districts. Similar to the long-term thinking in reports like *Greatness by Design*, we should think about the time span to build strong statewide professional learning systems between schools and districts in terms of decades, not a few months or years. A commitment to the professional capacity of California's education community needs to be built and sustained over time and beyond single budget, election, and policy cycles.

23 Fullan, M. (2011). *Choosing the Wrong Drivers for Whole System Reform*. Victoria: Centre for Strategic Education. Retrieved August 7, 2012, from http://www.michaelfullan .ca/home_articles/SeminarPaper204 .pdf.

Appendix A: Overview of effective elements of professional learning for educators to support state academic standards implementation

Scholars across the globe recognize that the knowledge teachers need to reach all students in today's schools has increased considerably.[1] But teacher expertise cannot spread in schools without strong elements of school leadership at the school-site from principals. Research confirms what practitioners and others in education have long known: strong, focused school-site leadership is a critical component in student and school success, including school improvement. It is critical in setting direction, developing people, and redesigning the organization.[2] The next section highlights key features of professional learning for teachers, principals, and school systems, recognizing the different dimensions of school communities attentive to capacity-building and human capital development.

If executed with intentionality and purpose, professional learning takes place in a continuous fashion throughout an individual's career, rich with mentoring, collaboration, and opportunities for professionals to grow in ways that will foster both educator and student learning.[3]

Effective elements of professional learning for teachers[4]

1. Professional learning should be intensive, ongoing, and connected to practice.

Today, as in previous decades, most professional development for teachers comes in the form of occasional workshops that typically last less than a day and focus on discrete topics (such as classroom management, computer-based instruction, student motivation, assessment, the teaching of phonics, etc.), with their connection to the classroom left to teachers' imaginations. Such episodic workshops disconnected from practice do not allow teachers the time for serious, cumulative study of the given subject matter or for trying out ideas in the classroom and reflecting on the results.

Intensive, ongoing professional learning that is connected to practice might involve teachers learning about strategies for employing a particular instructional shift (e.g., using text evidence to substantiate claims or increasing the amount and quality of academic talk students produce during class) in their teaching. Then, teachers need to try that strategy within the context of their own classroom and examine the results in collaboration with colleagues, perhaps during weekly grade level team meetings. When teachers are expected to collaboratively examine the results of trying out such shifts, such as the student learning that resulted or the specific instructional moves used,

1 Darling-Hammond, L ., & Bransford, J. (2005) . *Preparing teachers for a changing world: What teachers should learn and be able to do.* San Francisco: Jossey-Bass.

2 Kearney, K . (2010). *Effective Principals for California Schools: Building a Coherent Leadership Development System*. San Francisco: WestEd. Retrieved August 7, 2012, from http://www .wested .org/online_pubs/EffectivePrincipals.pdf

3 Marzano, R. (2003). *What works in schools: Translating research into action.* Alexandria, VA: ASCD.

4 Darling-Hammond, L., R. Chung-Wei, A. Andree, N. Richardson, & S. Orphanos (2009). Professional Learning in the Learning Profession: A Status Report on Teacher Development in the U.S. and Abroad. Published by the National Staff Development Council and School Redesign Network at Stanford University.

for evidence of student misunderstanding and for opportunities to refine instruction, a cycle of continuous learning through intentional action and reflection occurs.

2. Professional learning should focus on student learning and address the teaching of specific curriculum content.

Professional learning is most effective when it addresses the concrete, everyday challenges involved in teaching and learning specific academic subject matter, rather than focusing on abstract educational principles or teaching methods taken out of context. For example, teachers themselves judge professional development to be most valuable when it provides opportunities to do "hands-on" work that builds their knowledge of academic content and how to teach it to their students, and when it takes into account the local context (including the specifics of local school resources, curriculum guidelines, accountability systems, and so on).

Equally important, professional development that leads teachers to define precisely which concepts and skills they want students to learn, and to identify and plan how to address the content that is most likely to give students trouble, has been found to improve teacher practice and student outcomes. It also can be useful for groups of teachers to analyze and discuss student-performance data and samples of students' course work (science projects, essays, math tests, and so on), in order to identify students' most common errors and misunderstandings, reach common understanding of what it means for students to master a given concept or skill, and find out which instructional strategies are or are not working, and for whom.

3. Professional learning should align with school improvement priorities and goals.

Professional development tends to be more effective when it is an integral part of a larger school reform effort, rather than when activities are isolated, having little to do with other initiatives or changes underway at the school. If teachers sense a disconnect between what they are urged to do in a professional development activity and what they are required to do according to local curriculum guidelines, texts, assessment practices, and so on—that is, if they cannot easily implement the strategies they learn because the new practices are not supported or reinforced—then the professional development tends to have little impact.

4. Professional learning should build strong working relationships among teachers and provide time to collaborate.

Many schools have not yet developed a strong set of practices enabling professional collaboration. Historically, schools have been structured so that teachers work alone and are rarely given time together to plan lessons, share instructional practices, assess students, design curriculum, or help make decisions about how this work will be accomplished.

These principles of professional development are in action in many districts. The following chart gives examples for each principle, with links to descriptions of how California districts are implementing productive practices.

Professional Learning for Teachers	Suggestions for Implementation in Schools and Districts
1. Professional learning should be intensive, ongoing, and connected to practice.	Districts and schools might consider building in time for professional learning, including thinking about how to use time effectively that supports deeper learning instruction. This might include developing a cohesive professional learning plan spanning 6-12 months, **giving teachers a choice of where they might choose to deepen their practice**. Options for implementation might include a late start or early release; buying additional time; re-purposing the use of grade level and/or staff meeting time, and working with the local union to bargain for more professional learning time. **Example**: Santa Ana Unified works in partnership with educators in the district to support content and skills development, such as backward planning, cause and effect writing, primary sources, essential questions, teaching specific genres and writing assignments, along with oral language activities and academic language use tied to district curriculum mapping.
2. Professional learning should focus on student learning and address the teaching of specific curriculum content.	Professional learning units can analyze student work samples to better understand patterns in student learning and specific content, but should give teachers lead-time to collect student work. Additionally, observing and filming practitioners in the classroom can offer another tool for improving practice. This can be done in subject-area or grade-level teams. **Example:** Long Beach Unified School District has developed a multifaceted way of providing content-driven feedback to teachers through two avenues: multiple measure data systems linked to teacher evaluation systems across grades and educator learning networks that use these data.
3. Professional learning should align with school improvement priorities and goals.	Providing opportunities for teachers to review school site plans and then choose their focus of professional development aligned to the school improvement goals enables teachers to ensure their professional learning needs are met and contributes to the goals and priorities of the school community. For example, if the school improvement plan includes an increased focus on reading across the curriculum, a high school science teacher could indicate her/his professional learning goal as learning to better support students' academic language development. At the central office, districts can support school principals to ensure professional learning is connected to school improvement priorities. **Example:** San Francisco Unified School District has a district-wide principal leadership initiative, with a concentration on its elementary schools to support gains in student achievement. Principals have relied heavily on balanced literacy instruction as a means to offer insights into other ways school leaders can support instructional practices consistent with the shifts needed to implement the CCSS and NGSS.

Professional Learning for Teachers	Suggestions for Implementation in Schools and Districts
4. Professional learning should build strong working relationships among teachers and provide time to collaborate.	Grade-level or subject matter teams can be encouraged to create team goals around aspects of the state academic standards. These goals can be used to guide the choice and content of professional learning opportunities that teams can engage in together. This could include supporting each other's learning and improvement of practice. One specific implementation scenario might involve a middle school math team looking to improve its practice around project-based learning. As a team, they would develop professional learning goals around this topic. Subsequent professional development would help them to reach these goals as a group, which could involve participating in an Understanding Language MOOC. Another is to look together at sample student conversations across their classrooms for evidence of academic language output and strategize about other instructional moves. Building strong working relationships among teachers, especially where such relationships do not exist, requires leadership. Principals may need to learn how to create the school-based conditions that will support effective teacher collaboration. Districts can assist principals in learning how to lead effective teacher collaboration. One way is to teach principals how to lead and support teacher teams that are designed for learning how to improve instruction. Another way is by organizing a cross-school network of instructional leadership teams comprised of principals and teachers and to help them jointly lead instructional improvement at their sites.

Appendix B: Elements and California district examples of effective professional learning for principals[1]

Few jobs have as diverse an array of responsibilities as the modern principalship, and any of these roles can distract administrators from their most important role: supporting quality instruction. The demands of the job, particularly in large schools, far exceed the capacity of most people. As a result, the urgent demands of the moment too often supersede the long-term, challenging work of improving instruction.[2] [3]

Three types of principal learning experiences

Here are three principal learning experiences aimed at the continuous improvement of instruction and student learning that districts might consider:

1. Principals learning with teachers
2. Principals/administrators learning how to support teachers enacting instructional changes tied to state academic standards, which can be led by district or within school
3. Principals receiving support/coaching in how to effectively lead and enact distributed approaches to leading instruction through Instructional Leadership Teams

Effective principal professional development focuses on building the principal's capacity to address essential issues related to teaching and learning.[4] Therefore, principal learning is directly linked not only to his or her own growth, but also to teacher development, instructional improvements, and increasing student achievement.

An example of a principal professional learning program in San Francisco exposes school leaders to effective instructional approaches and uses a reflective process to show principals how to offer meaningful feedback to teachers in their schools.

> *In San Francisco Unified School District, elementary principal supervisors worked with school principals to get into classrooms to look at literacy instruction connected to CCSS implementation. A principal supervisor first accompanied principals on these visits. They discussed the level of literacy instruction observed and compared their observations to a set of criteria that indicate levels of implementation quality.*

1 Sparks, D., & Hirsch, S. (2000). Learning to lead, leading to learn: Improving school quality through principal professional development. Dallas, TX: National Staff Development Council.
2 Darling-Hammond, L., LaPointe, M., Meyerson, D., Orr. M. T., & Cohen, C. (2007). *Preparing School Leaders for a Changing World: Lessons from Exemplary Leadership Development Programs*. Stanford, CA: Stanford University, Stanford Educational Leadership Institute.
3 Marks, H., Louis, K.S., & Printy, S. (2002). The capacity for organizational learning: Implications for pedagogy and student achievement. In K. Leithwood (Ed.), Organizational learning and school improvement (pp. 239–266). Greenwich, CT: JAI.
4 Sparks, D., & Hirsch, S. (2000). Learning to lead, leading to learn: Improving school quality through principal professional development. Dallas, TX: National Staff Development Council.

Then, in between the monthly principal meetings, principals were expected to visit classrooms and document the literacy practices in-progress. Principals were asked to bring their observation notes, pictures, and other evidence of the level of implementation they observed. In so doing, principals honed their observation skills and trained their eyes to look for evidence of student learning. Over a sixth month period, in monthly principal meetings, principals were asked to find evidence of both low-level and high-level implementation and bring this evidence to the principal meetings where they discussed what constitutes higher level implementation and shared strategies for working with teachers who were implementing in a low-level way. This approach to principal learning can help principals become more comfortable and skilled in giving pointed feedback to teachers as well as knowing what key ingredients to look for that indicate quality instruction.

In addition to offering extensive, high-quality learning opportunities focused on curriculum and instruction as illustrated in the SFUSD example, effective professional learning for school leaders can offer supports in the form of mentoring, developing principals' networks and study groups, structuring collegial school visits, and providing peer-to-peer coaching. Effective principal learning includes three prominent features:[5]

1. **A learning continuum operating systematically from pre-service preparation through induction and throughout the career, involving mature and retired principals in mentoring others.**

Developing the leadership and instructional capacity of principals, like teachers, requires an integrated, ongoing system of growth opportunities for principals. Purposely invested resources—all kinds of resources—not just money, but also time, materials, expertise, and even autonomy in this pursuit, with a special emphasis on instructional leadership as a primary target of investments in school principals, can help position new principals on a trajectory for success at the school-site level. Mentorship from other principals and participation in principal networks is also a key resource when thinking about building a learning continuum for school leaders.

2. **Leadership learning grounded in practice, including analyses of classroom practice, supervision, and professional development using on-the-job observations.**

Principals benefit when they participate frequently in district-supported professional development that fosters educationally rich peer observations and visits to other schools, participation in principals' networks and conferences, and participation in professional development activities with teachers.[6] Guided "walkthroughs" of schools to look at particular practices in classrooms and consider how to evaluate and improve learning and teaching–and how to make strong practices available to other teachers–can

5 Darling-Hammond, L., LaPointe, M., Meyerson, D., Orr. M. T., & Cohen, C. (2007). *Preparing School Leaders for a Changing World: Lessons from Exemplary Leadership Development Programs*. Stanford, CA: Stanford University, Stanford Educational Leadership Institute.
6 Clark, Ian. (2009). An analysis of the relationship between K-5 elementary school teachers' perceptions of principal instructional leadership and their science teaching efficacy. Retrieved from the University of Minnesota Digital Conservancy, http://purl.umn.edu/50780.

be particularly effective. Engaging in professional development with teachers when new practices are being introduced also allows principals to understand more deeply the instructional shifts they will be supporting and the challenges they will help teachers to address.

3. **Collegial learning networks, such as principals' networks, study groups, and mentoring or peer coaching, that offer communities of practice and sources of ongoing support for problem solving.**

Connecting school leaders to powerful experiential learning opportunities grounded in what research suggests about powerful teaching, learning, and leadership practices can make theoretical professional learning opportunities more relevant to the daily work of principals. In an applied learning model, principals are likely to find school visits, principals' networks, professional reading, and research helpful to improving their practice.

Because teachers also find applied learning critically important and models of practice are essential, principals and district leaders should learn strategies to help teachers learn new practices *in* practice. District and site leaders can learn to identify the teachers who instantiate the kinds of practices the state academic standards are seeking to develop. Then, leaders can find ways to get other educators into these classrooms for short and long visits to see, analyze, and learn those practices; videotape these classrooms and ask the teachers to demonstrate and explicate the practices; and tap these teachers to lead professional learning opportunities at staff meetings and to be part of collaborative planning teams at the school site.

Looking ahead, these three features of effective professional learning for school leaders, combined with the four characteristics of quality human capital development methods for teachers can offer a strong, complementary connection to California's Quality Professional Learning Standards.

Professional Learning for Teachers	Suggestions for Implementation in Schools and Districts
1. A learning continuum operating systematically from pre-service preparation through induction and throughout the career, involving seasoned and retired principals in mentoring others.	The preparation of principals may best initially be learned through programs like principal residencies, which support development through "observing, doing, commenting, and questioning, rather than simply listening" under the guidance of experienced exemplary principals who can serve as mentors and guides.[7] The mentoring of aspiring and new principals should be continuous and purposeful as districts think about ways to 'grow their own' leadership capacity. **Example**: In Chula Vista, principals are supported through "principal peer mentoring" networks in which they develop the leadership skills they need to effectively lead their schools.
2. Leadership learning grounded in practice, including analyses of classroom practice, supervision, and professional development using on-the-job observations connected to readings and discussions and organized around a model of leadership.	Central office and site leaders can identify teacher leaders and can find ways to get other educators into these classrooms for short and long visits to see, analyze, and learn practices; videotape these classrooms and ask the teachers to demonstrate and explicate the practices; and tap these teachers to lead professional learning opportunities at staff meetings and to be part of collaborative planning teams at the school site. **District Example:** The San Diego County Office of Education is working with principals to show them how to provide helpful feedback to teachers on each district's instructional framework.
3. Collegial learning networks, such as principals' networks, study groups, and mentoring or peer coaching, that offer communities of practice and sources of ongoing support for problem solving.	Districts need to: 1) foster two-way communication between principals and the district office; 2) articulate clear goals for instruction and student achievement to schools; 3) provide the necessary resources to accomplish these goals; 4) recognize the value of developing principal peer-to-peer relationships and sharing resources and leadership strategies among principals; and 5) create regular, facilitated opportunities for principals to learn with and from each other about their common work. **District Examples:** The CORE districts are one example of a cross-district network that is facilitated; the Linked Learning Districts are another. Chula Vista offers an example of a principal coach network, whereas SFUSD is developing several networks of school instructional leadership teams coached by district staff to more effectively lead school improvement for CCSS implementation.

7 Walker, A., & Stott, K. (1993). Preparing for leadership in schools: The mentoring contribution. In B. J. Caldwell & E. M. A. Carter (Eds.), The return of the mentor: Strategies for workplace learning (pp. 77–90). London: Falmer.

Appendix C: California's Quality Professional Learning Standards (QPLS)[1]

Aligned with an extensive body of research on professional learning for teachers and principals, California has developed a set of seven, interdependent essential elements of professional learning standards that cut across specific content knowledge, pedagogical skills, and dispositions. These standards serve as a foundation for the content, processes, and conditions essential to all educator professional learning. For districts hungry for tools for exploring new ways to have a meaningful impact on student learning through coordination of time, resources, and people, they can be used as evidence-based elements and indicators to use when they make decisions about how to create and/or improve professional learning in their own systems.

The key elements, shown below, are more fully explicated in the standards document, along with indicators of what these practices would look like in action. Examples of how some California districts have been applying these principles to professional learning for Common Core and NGSS implementation are outlined below and on the following page.

California Quality Professional Learning Standard (QPLS)	School District or Statewide Example
1. Data	Long Beach Unified School District The district has developed a highly technical online professional development system known as "MyPD" in which educators can access not only an extensive menu of curricular resources and an electronic portfolio of work, but also track personalized data that can be used to inform an individual educator's practice by tracking multiple forms of student evidence.
2. Content and Pedagogy	San Juan Unified School District With a department and team dedicated to curriculum and instruction, the district specializes in working with schools and educators to develop tailored instruction not only to meet student needs, but also to provide real-time support and training to educators in the district.
3. Equity	Whittier City School District Placing a heavy emphasis on supporting educators and schools who are supporting the success of each and every child, the district has developed comprehensive and effective "Response to Intervention" models for students who are struggling academically, socially, or emotionally.

1 California Department of Education & State Board of Education (2014). The Superintendent's Quality Professional Learning Standards: Approved by the State Superintendent of Public Instruction. Retrieved at http://www.cde.ca.gov/pd/ps/documents/caqpls.pdf.

California Quality Professional Learning Standard (QPLS)	School District or Statewide Example
4. Design and Structure	Chula Vista Elementary School District Using a district-developed core features of classrooms that promote learning, the district has created a strong network of principal, teacher, and school-site professional learning academies all designed to support student learning and educator capacity.
5. Collaboration and Shared Accountability	Garden Grove Unified School District The district's comprehensive human capital development strategy, which begins with teacher preparation and continues through opportunities for educator growth and leadership development, is heavily dependent upon its partners and a positive working relationship with its teacher union.
6. Resources	The California Department of Education has an extensive database of materials related to the CCSS and curriculum, instructional resources, and professional learning resources and implementation toolkits for practitioners that is highlighted in Section II of this guidance document.
7. Alignment and Coherence	Sanger Unified School District The district has made a number of changes to develop a better-aligned system of professional learning. Those changes include a number of key shifts related to fostering a student-centered, collaborative, shared system of accountability. Improvement has occurred slowly and steadily over the past decade by "sustaining a singular focus on student learning and nurturing the implementation of a small number of keystone practices over many years."