The Effect of Professional Learning Activities on Implementation of California’s Quality Professional Learning Standards in Alignment With the Local Control Funding Formula Priority 2

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The Effect of Professional Learning Activities on Implementation of California’s Quality Professional Learning Standards in Alignment With the Local Control Funding Formula Priority 2

A Dissertation by

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Irvine, California
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Submitted in partial fulfillment of the requirements for the degree of Doctor of Education in Organizational Leadership

April 2017

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April 2017
The Effect of Professional Learning Activities on Implementation of California’s Quality Professional Learning Standards in Alignment With the Local Control Funding Formula Priority 2

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ABSTRACT

The Effect of Professional Learning Activities on Implementation of California’s Quality Professional Learning Standards in Alignment With the Local Control Funding Formula Priority 2

by Sadie Pinotti

Purpose: The purpose of this Delphi study was to identify the professional learning activities that experts perceive are necessary for local education agencies (LEAs) to effectively implement California’s Quality Professional Learning Standards (QPLS) in alignment with the Local Control Funding Formula (LCFF) Priority 2. The study also examined the degree of importance that the identified professional learning activities will have and those most likely to be implemented.

Methodology: This study involved descriptive statistics using a Delphi study method. The Delphi panel consisted of 18 experts in the field of education and professional learning activities. The Delphi study consisted of 3 rounds of electronic questionnaires. The first round consisted of an open-ended question to elicit professional learning activities that may be necessary for LEAs to utilize in order to effectively implement California’s QPLS in alignment with the LCFF Priority 2. Round 2 requested the expert panelists to rate the degree of importance and likelihood of implementation for each activity that was collected in Round 1. Lastly, Round 3 requested that the panelists review and compare their ratings with the median panel rating for each activity and change their ratings if they so desired.

Findings: The analysis of quantitative data from the Delphi panel’s ratings indicated that 37 professional learning activities were considered to be of high priority in this study.
Secondly, 24 professional learning activities received consensus on high rankings of importance, and 9 professional learning activities received consensus on high rankings of likelihood of implementation. Finally, 8 professional learning activities received consensus on high rankings of importance and likelihood of implementation.

**Conclusions:** Based on the research findings, 7 conclusions were drawn.

**Recommendations:** Further research is advised in the following areas: (a) replication of this study using a different panel with the same criteria, (b) a study to identify the effectiveness of specific professional learning activities that were identified to have high importance in this research, and (c) a phenomenological study at two or more school sites to examine the experiences and perceptions of teachers when engaging in collaborative professional learning activities at their schools of employment.
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CHAPTER I: INTRODUCTION

Certainly there are few areas of American life as important to our society, to our people, and to our families as our schools and colleges.

—President Ronald Reagan, 1981

In 1983, the National Commission on Excellence in Education highlighted the urgent need to reform one of America’s foundational democratic principles, the national public education system. The report, *A Nation at Risk: The Imperative for Educational Reform*, cautioned the American people that more and more young people emerge from high school ready neither for college nor for work. This predicament becomes more acute as the knowledge base continues its rapid expansion, the number of traditional jobs shrinks, and new jobs demand greater sophistication and preparation. (National Commission on Excellence in Education, 1983, p. 20)

There were a number of responses to the commission’s call for action; however, most notable was the implementation of the federal No Child Left Behind (NCLB) Act of 2001. The act, which originally had the commitment of providing an equitable education to all children in America, became known for informing this effort through a standardized test accountability system that some deemed as unfair and unreliable (Darling-Hammond, Wilhoit, & Pittenger, 2014; National Council on Education Standards and Testing, 1992). In fact, multiple researchers have agreed that in order to address the needs and challenges posed by globalization and the information technology evolution, reform to the public education system must focus on teachers and their ability to teach students 21st-century skills rather than a single standardized measurement (Braun, 2008; California Department
of Education [CDE], 2012; Darling-Hammond, LaFors, & Snyder, 2001; Merriman & Nicoletti, 2008).

As a result, since 2012, many states across the nation, including California, have adopted the Common Core State Standards (CCSS) to instill uniformity in curriculum and instruction, and to emphasize the teaching of higher level thinking skills (CDE, 2012). Concurrently, in 2011, the California Department of Education (CDE) released the report *A Blueprint for Great Schools*, which recommended the establishment of a more transparent school funding system, empowering local communities to better respond to the needs of their constituents, and professional learning standards for teachers to guide their instructional practices. Two years later, the Local Control Funding Formula (LCFF) was enacted, and in March of 2015, the Quality Professional Learning Standards (QPLS) were released by the CDE (2015c).

With new academic and professional learning standards and a more transparent funding system in place, the most recent report from the CDE (2015a), *A Blueprint for Great Schools: Version 2.0*, reiterated the need to focus on providing teachers with the necessary knowledge and skills to prepare students for the 21st-century workforce. In turn, this will require local education agencies (LEAs) to reevaluate their investment in professional learning opportunities for teachers, identifying activities that create the greatest outcomes for students. As reported in a national study, *What Matters Most: Teaching for America’s Future*, “Teaching is the most important element of successful learning. Teaching quality will make the critical difference not only to the futures of individual children but to America’s future as well” (National Commission on Teaching & America’s Future, 1996, p. 2).
Background

As the world embarked upon the 21st century and individuals were competing for employment within the international globalized workforce, harsh realities came to light about how unprepared Americans were due, in part, to an ineffective public education system (Davidson, 2012; National Commission on Excellence in Education, 1983; Timar, 1994). Hilliard (2013) stated, “In 2010, at a time when the nation’s unemployment rate was still well over 8 percent, more than half of American employers reported difficulty filling positions because of a lack of suitable skills” (p. 4). Unlike the beginning of the 20th century when agriculture and factory labor created vast opportunities for individuals with less skill, employers in 2010 desired a higher skilled and more educated workforce (Hilliard, 2013). Yet, while globalization and the information technology revolution created a dramatic shift in the individual skills that were necessary for employment, America’s public education system remained stagnant in its instructional practices (Merriman & Nicoletti, 2008).

Public Education Reform

In 1983, when the business community’s demand for higher skilled employees began to rise, a national report, *A Nation at Risk*, was released by the U.S. Department of Education (National Commission on Excellence in Education, 1983). The report highlighted the urgent need for public education reform in response to the risk that individuals in our society who do not possess the levels of skill, literacy, and training essential to this new era will be effectively disenfranchised, not simply from the material rewards that accompany competent performance, but also from
the chance to participate fully in our national life. (National Commission on Excellence in Education, 1983, p. 7)

Recommendations for accomplishing reform included (a) strengthening minimum high school graduation requirements, (b) adopting more rigorous and measurable standards, (c) utilizing time during the school day more effectively, and (d) improving the preparation of teachers (National Commission on Excellence in Education, 1983). Over the next 30 years, these recommendations led to reforms in academic standards, accountability systems, and school finance that continue today.

**No Child Left Behind (NCLB).** The 2001 federal NCLB Act was implemented with the goal of providing an equitable education to all children in America. The process by which NCLB would accomplish this goal was modeled after the alleged success of accountability states, such as Texas and North Carolina, which established measurable student performance standards and aligned those standards with consequences for LEAs (Lee & Reeves, 2012). Unfortunately, the success of these accountability states has been viewed by many as contradictory and in some instances believed to further isolate LEAs that were in need of talented teachers and serving disadvantaged student populations (Braun, 2008; Carnoy & Loeb, 2002; Lee, 2008; Lee & Reeves, 2012). In addition, gains in student achievement were not being seen consistently across other national accountability measures, such as the National Assessment of Educational Progress (NAEP) and Program for International Student Assessment (PISA; Darling-Hammond et al., 2014). As a result, public education reform began to focus on a new set of national standards, an accountability system that included multiple sources of measurement, and,
within California, a school finance system that would empower local communities to better respond to the needs of their constituents (CDE, 2011, 2012, 2015a).

**Greatness by Design.** Following multiple and varied policy initiatives aimed at improving public education nationally, the CDE and California Commission on Teacher Credentialing (CTC) turned to a group of expert stakeholders to assist in identifying solutions for the continued challenges within the state public education system (CDE, 2012). The stakeholder group became California’s first Task Force on Educator Excellence, and members were charged with “addressing some difficult questions: How do we recruit the very best people to the profession? How do we support them throughout their careers? And most importantly, how do we inspire them to do their best?” (CDE, 2012, p. 4). To outline recommendations for the state, *Greatness by Design: Supporting Outstanding Teaching to Sustain a Golden State* (CDE, 2012) was jointly published by the Task Force on Educator Excellence, the Superintendent of Public Instruction, and the CTC in 2012. The report acknowledged the insurmountable political strides that have been accomplished in order to improve outcomes for students while refocusing the lens of school reform on those responsible for implementation, the teachers. The report stated,

> Those who have worked to improve schools have found that every aspect of school reform—the creation of more challenging curriculum, the use of more thoughtful assessments, the invention of new model schools and programs—depends on highly-skilled educators who are well supported in healthy school organizations. In the final analysis, there are no policies that can improve schools
if the people in them are not armed with the knowledge and skills they need.

(CDE, 2012, p. 7)

Thus, recommendations within the report included improvements to teacher preparation practices but also the development of professional learning standards and opportunities for educators who have already entered the profession (CDE, 2012). Although reform for the California public education system was defined at the state level, authors of the book *A Culturally Proficient Response to the Common Core: Ensuring Equity Through Professional Learning* offered insight in that “the degree of commitment to a change initiative that a school or district holds is often the primary indicator of success or failure in reaching its student performance goals” (Lindsey, Kearney, Estrada, Terrell, & Lindsey, 2014, p. 47).

**Change Theory**

Often institutions, public or private, that enter into stages of reform bring about questions such as (a) how far does the institution lag behind generally accepted and desirable standards, (b) how can the reform process be accelerated, and (c) how can the adoption of new and desirable practices be sustained (Mort & Cornell, 1941)? Numerous researchers have dedicated their careers to uncovering the necessary components and processes for change theory that bring about desirable results (Billig, 2015; W. W. Burke, 2002; Cornish, 1977; Darling-Hammond & Bransford, 2005; Kotter, 2012; Manley, 2013). While multiple theories on change exist and have been cultivated over time, most authors agree that the institutional culture is a key element of the change process that must be given sufficient attention (Billig, 2015; W. W. Burke, 2002; Kotter, 2012).
Reflecting on unsuccessful attempts to implement change within the sector of public education, Ben Levin (2013) explained that often

the chief mistake . . . was the failure to engage the teaching profession in the reforms. Many teachers, especially the most capable, saw the reforms as something done to them that made their jobs worse. In our view, a successful strategy has to engage educators, and especially the most skillful and energetic ones, so that they become local leaders rather than resisters. (p. 101)

However, in addition to a keen understanding of change theory, the likelihood for state reform to be implemented and sustained at the local level is strongly impacted by the availability of financial resources (Crawford, Porterie, Scott, Hirsh, & Vander Ark, 2015).

**School Finance**

Opportunities for professional learning provided by LEAs are linked with school finance (Crawford et al., 2015). In 1979, when the people of California voted to enact Proposition 13, they drastically altered the school finance system by limiting the percentage of annual increases to local property taxes. Many individuals were proponents of this change because it was perceived that this act would support equalization in per-pupil spending (Policy Analysis for California Education, 2012; Timar, 1994). However, in a short period of time, the limits of Proposition 13 came to eliminate over 50% of local school revenue. This drastic decline provoked Assembly Bill 8, a piece of legislation that would allow for LEAs to receive categorical funds from the state budget (Bersin, Kirst, & Liu, 2008).
An additional consequence of this change in school finance infrastructure was that funding for professional development was substantially reduced or depleted entirely (CDE, 2011). With the impact of globalization, multiple government reports calling for additional support for increasing teacher knowledge and skills, and two lawsuits filed in 2010 (Robles-Wong v. State of California and The Campaign for Quality Education v. California) claiming that the current finance system was unconstitutional, it became clear that California’s school finance system must be reform (CDE, 2011, 2012; Darling-Hammond, 2010; National Commission on Teaching & America’s Future, 1996; Policy Analysis for California Education, 2012). As the authors of the report Getting Smart on Transformative Professional Development explained, “Education leaders have an obligation to establish a vision for professional learning, share it widely and devote resources to reaching it. Vision without the supporting resources will be an empty promise” (Crawford et al., 2015, p. 9).

In 2013, Senate Bill 97 was signed into law in California, establishing California’s LCFF (Darling-Hammond et al., 2014; Menefee-Libey & Kerchner, 2015). LCFF profoundly restructured the way in which LEAs were funded. The previous funding system provided a low per-pupil allotment and supplemented remaining resources from a number of restricted categorical grants; LCFF provides a base grant for each LEA according to its student average daily attendance (ADA). In addition, an extra 20% of the adjusted base grant is provided to LEAs for each low-income, English language learner (ELL), or foster care student, and a concentration grant is also available for those schools where at least 55% of the student population are disadvantaged (low-
income, ELL, or foster care; Darling-Hammond et al., 2014; Menefee-Libey & Kerchner, 2015).

While many California residents were encouraged by the idea of returning control of state funding to the LEAs, others were cautious and encouraged accountability measures to be put in place by the state (Menefee-Libey & Kerchner, 2015). As a result, provisions for a Local Control Accountability Plan (LCAP) were included in the law. LCAP requires LEAs to annually conduct an inclusive and transparent public planning process to identify specific goals and budget priorities in eight areas:

1. Basic services . . .
2. Implementation of Common Core State Standards . . .
3. Parental Involvement
4. Student Achievement . . .
5. Student Engagement . . .
6. School Climate . . .
7. Access to a Broad Curriculum . . . [and]
8. Other Student Outcomes. (Menefee-Libey & Kerchner, 2015, p. 4)

The fact that the LCFF and LCAP processes are still in their infancy makes drawing conclusions from research on their effectiveness problematic. However, well-known experts have suggested that the combination of reforms in school finance, accountability, and state standards may be the perfect storm for effectively restructuring California’s public school system for the first time in history (Darling-Hammond et al., 2014; Menefee-Libey & Kerchner, 2015).
State Standards

The National Council on Education Standards and Testing released a report, *Raising Standards for American Education*, in 1992 at the request of the national government and the nation’s governors. As discussed previously, the report was in response to the growing concern about America’s ability to produce a workforce capable of competing in the global economy (National Council on Education Standards and Testing, 1992). The authors of the report recommended moving away from a system where states operate in silos, working toward their own individualized state standards, and establishing national standards that would “promote educational equity, . . . preserve democracy and enhance the civic culture, and . . . improve economic competitiveness” (National Council on Education Standards and Testing, 1992, p. 3).

In 2010, along with many other states, California adopted the CCSS, the first set of national standards. Multiple reports have agreed that the CCSS, unlike standards utilized in the past, challenge students to obtain high-order thinking skills and will better prepare them for the 21st-century workforce (CDE, 2012, 2015a; Darling-Hammond et al., 2014). However, the most recent report from the CDE (2015a), *A Blueprint for Great Schools: Version 2.0*, cautioned, “To fully implement the California Standards, many teachers will need to learn new pedagogical strategies and integrate formative assessments into their teaching to support continuous improvement of their own instructional practices” (p. 7).

Quality Professional Learning Standards

In the report *Greatness by Design* (CDE, 2012), the Task Force on Educator Excellence recommended creating a “continuum of professional learning that brings
together the priorities of the state, district, schools and individual educator needs, along
with the unique needs of the culturally and linguistically diverse student population that
educators are serving” (p. 50). One of the methods by which the state would assist LEAs
in creating this continuum was by establishing state professional learning standards to
guide the relationship between student outcomes and educator effectiveness (CDE, 2012).
Consequently, in March of 2015, the CDE (2015c) released The Superintendent’s Quality
Professional Learning Standards. The seven QPLS in the areas of (a) data, (b) content
and pedagogy, (c) equity, (d) design and structure, (e) collaboration and shared
accountability, (f) resources, and (g) alignment and coherence are intended to serve as a
foundation for LEAs to establish professional learning activities that “span the career
continuum of an educator, which leads to improved educator knowledge, skills, and
dispositions and, ultimately, increased student learning results” (CDE, 2015c, p. 2).

While the LCFF is intended to provide more funding flexibility for LEAs and the
QPLS lay a foundation for educators to ensure that educator excellence positively
impacts student outcomes, it is not clear which professional learning activities are most
effective. The authors of “Educating Teachers for California’s Future” argued that
“teachers learn just as students do: by studying, doing, and reflecting; by collaborating
with other teachers; by looking closely at students and their work; and by sharing what
they see” (Darling-Hammond et al., 2001, p. 18). In addition, research has pointed to the
effectiveness of induction programs and the ineffectiveness of “one-shot workshops”
(CDE, 2012, p. 16).

A report by the National Commission on Teaching & America’s Future (1996)
highlighted the unique efforts of other countries with positive student outcomes to
promote teacher knowledge and skills. For example, in Japan and China, teachers are afforded between 5 and 20 hours per week to collaborate with their colleagues, develop curriculum, demonstrate lessons, discuss questions students might have, and inform their own learning (National Commission on Teaching & America’s Future, 1996). Information such as this has led multiple researchers to conclude that when planning opportunities for professional learning, LEAs must consider how teachers learn and provide multiple modalities for knowledge development, empowering them to be lifelong learners (CDE, 2012, 2015c; Crawford et al., 2015; Darling-Hammond & Bransford, 2005; National Commission on Teaching & America’s Future, 1996).

Statement of the Research Problem

The body of literature on globalization and its impact on the American public education system strongly indicates that, as a nation, the United States is failing to prepare its children to compete in the international workforce of tomorrow (Davidson, 2012; Merriman & Nicoletti, 2008; National Commission on Excellence in Education, 1983). Expert and public opinions have varied over time about strategies to address this concern; however, multiple reports released at the end of the 20th century created a growing awareness among policymakers of the need to craft national academic standards (National Commission on Excellence in Education, 1983; National Commission on Teaching & America’s Future, 1996; National Council on Education Standards and Testing, 1992). Concurrently, evidence from many studies overwhelmingly supported the conclusion that teachers and the quality of their instruction will also make the “critical difference not only to the futures of individual children but to America’s future as well” (National Commission on Teaching & America’s Future, 1996, p. 2; see also CDE, 2012,
As a result, it is imperative for states to identify well-defined, demanding standards and resources for teacher learning as the foundational step in promoting professional and educational equity (CDE, 2011; Darling-Hammond & Bransford, 2005; National Council on Education Standards and Testing, 1992).

In response to these report recommendations, California recently approved a number of statewide policies, which has set a new and integrated approach to school reform (Menefee-Libey & Kerchner, 2015; Policy Analysis for California Education, 2012). Implementation of the CCSS paired with LCFF is intended to provide local communities with the flexibility, which they previously lacked, to create better outcomes for students (Friedman & Mandelbaum, 2011; Policy Analysis for California Education, 2012). In addition, adoption of the QPLS shall serve as LEAs’ foundational guide for training teachers to learn “new pedagogical strategies and integrate formative assessments into their teaching to support continuous improvement of their own instructional practices” (CDE, 2015a, p. 7).

While there have been multiple and varied policy initiatives toward creating school reform, David Tyack and Larry Cuban (1995) explained that educational policy is uncertain. Further, it is the individuals who interpret and implement policy who are most influential in its success or demise in the field, and this responsibility may be unrealistic for site-based educators (Giddens & Stasz, 1999; Majchrzak & Markus, 2014). Therefore, while “teacher learning is a linchpin of school reform,” there is a lack of agreement among educators, policymakers, and the public regarding the type of
professional learning activities that will improve teacher learning (Darling-Hammond et al., 2014, p. 12).

Gary Fenstermacher and David Berliner (1985) defined staff development as “the provision of activities designed to advance the knowledge, skills, and understanding of teachers in ways that lead to changes in their thinking and classroom behavior” (p. 283). In practice, LEAs have organized a variety of activities for teachers to accomplish these goals; however, activities range from “hit-and-run” workshops, designed to introduce teachers to new ideas with little accountability, to portfolio evaluation, apprenticeships with master teachers, and school-university partnerships (Elmore, 2004, p. 94; see also Darling-Hammond, 2010; Darling-Hammond et al., 2001; National Commission on Teaching & America’s Future, 1996). In the face of globalization, there has been support for policy initiatives aimed at improving California’s student outcomes and an urgent need to provide teachers with lifelong quality professional learning activities to increase their knowledge and skills. Yet, there is no consensus among policymakers, educators, scholars, or the public on what professional learning activities shall be adopted to ensure that teachers are able to provide instruction, aligned with implementation of the CCSS, to increase student outcomes (Crawford et al., 2015; Joyce & Calhoun, 2015). Without consensus or transparency on future professional learning activities, teacher education will continue to be the “victim of inconsistent and conflicting state action” (Levine, 2010, p. 21).

**Purpose Statement**

The purpose of this Delphi study was to identify the professional learning activities that experts perceive are necessary for local education agencies (LEAs) to
effectively implement California’s Quality Professional Learning Standards (QPLS) in alignment with the Local Control Funding Formula (LCFF) Priority 2. The study also examined the degree of importance that the identified professional learning activities will have and those most likely to be implemented.

**Research Questions**

1. What professional learning activities do experts perceive are necessary for LEAs to effectively implement California’s QPLS in alignment with the LCFF Priority 2?

2. What degree of importance will the professional learning activities have on LEAs’ ability to effectively implement California’s QPLS in alignment with the LCFF Priority 2?

3. What is the likelihood of implementation of the professional learning activities that experts agree are necessary for LEAs to effectively implement California’s QPLS in alignment with the LCFF Priority 2?

**Significance of the Problem**

In the last 6 years, state and federal governments have enacted instructional and fiscal education policy reforms in response to multiple reports released at the end of the 20th century asserting that local flexibility and control are necessary features for a successful public education system (Cohen & Hill, 1998; National Commission on Excellence in Education, 1983; Warren, 1999). In fact, the current initiatives, CCSS and LCFF, are providing the general public with a hopeful and unified direction for improving student outcomes and meeting the workforce expectations of globalization (CDE, 2015a; Levine, 2010; Tye & Tye, 1999). Concurrently, however, a large body of research has highlighted that while comprehensive education policy is necessary for
establishing a framework for school reform, LEAs are better suited to know and meet the individualized needs of their communities (Cohen & Hill, 1998; Menefee-Libey & Kerchner, 2015; Warren, 1999).

Staff development has been the most common historical effort to ensure school site staff have the necessary knowledge, skills, and resources to respond to the needs of their community and implement current education policy (Darling-Hammond et al., 2014; Fenstermacher & Berliner, 1985; Warren, 1999). A study by the National Commission on Teaching & America’s Future (1996) found that more than 1,000 LEAs determined “that every additional dollar spent on more highly qualified teachers netted greater improvements in student achievement than did any other use of school resources” (p. 8).

Beyond the commitment to financially invest in teacher education, experts agree that the investment must be purposeful and aligned with state standards (CDE, 2012, 2015a; Crawford et al., 2015). In response to this recommendation, the CDE (2015c) released the QPLS in March 2015 with the guidance to create “a coherent set of professional learning policies and activities that span the career continuum of an educator, which leads to improved educator knowledge, skills, and dispositions and, ultimately, increased student learning results” (p. 3).

Consequently, the challenge facing educators today is to identify professional learning activities that align with the implementation of the new state standards, encompass the foundational principles of California’s QPLS, and are likely to be implemented considering the financial constraints of LCFF. The results of this study will provide individual LEAs with detailed strategies to guide statewide policy implementation for designing lifelong quality professional learning activities for
educators. In turn, highly trained educators will improve student academic outcomes and prepare the next generation of Americans to be productive members of the global economy (Darling-Hammond et al., 2001; Fenstermacher & Berliner, 1985; Hilliard, 2013).

**Operational Definitions**

**Average daily attendance (ADA).** A calculation (total number of student attendance divided by the total number of instructional days) used by the CDE to determine distribution of state and federal dollars to LEAs.

**Categorical funding.** State financial aid intended to support specific education programs and student populations.

**Common Core State Standards (CCSS).** Educational standards that describe what students should know in each grade level, kindergarten through 12th.

**Local Control Accountability Plan (LCAP).** A description of annual goals, created by each LEA in California, for each of the 10 state priority areas.

**Local Control Funding Formula (LCFF).** A formula that establishes base, supplemental, and concentration grants to fund the California public school system.

**Local education agency (LEA).** The local administration of traditional public schools or charter schools.

**Professional learning activities.** Strategies utilized by professionals to enhance skills and expertise in a particular profession.

**Staff development.** The process whereby employees of an organization enhance their knowledge and skills to advance their contribution to their organization.
Quality Professional Learning Standards (QPLS). Seven standards to promote quality teacher learning and development.

Delimitations

The recommendations for professional learning activities generated from this study were delimited to those of a select group of experts actively involved in California K-12 public education or practicing and designing professional learning for adults. The results provided by this panel do not predict the responses of a larger population. Rather, they represent the synthesis of opinion for the particular group of experts.

Organization of the Study

The remainder of this study is organized into four chapters, references, and appendices. Chapter II presents the review of literature related to the history of school finance, accountability, and professional learning in public schools. Chapter III describes the research design, methodology, and population used to collect data for this study. Chapter IV outlines the analysis of the data and a discussion of the findings. Lastly, Chapter V presents a summary, conclusion, and recommendations for LEAs to guide statewide policy implementation and design lifelong quality professional learning activities for educators.
CHAPTER II: REVIEW OF THE LITERATURE

A review of the literature was conducted to provide historical background and theoretical context for professional learning activities utilized by local education agencies (LEAs) to effectively implement education policy reforms, such as changes in state standards and school finance. The review is organized in four segments. Part I includes a discussion of globalization and how it has impacted public education in the United States, including a review of recent national and state educational policy measures intended to streamline the change process. This segment also provides a synthesis of professional research on change theory in schools. Part II includes a review of California school finance. Part III includes a review of California state standards and the transition to the national Common Core State Standards (CCSS). Finally, Part IV examines various definitions of professional learning, research on the effectiveness of professional learning in national and international schools, and recommendations for LEAs to consider when planning professional learning in schools that is intended to support the implementation of CCSS and improve student outcomes.

Review of the Literature

Globalization and Public Education Reform

Historically, researchers have agreed that the purpose of public education is to develop productive and thoughtful citizens for the workforce and society at large; however, “the question for American educators today is, ‘for what kind of future should American schools prepare students?’” (Merriman & Nicoletti, 2008, p. 10; see also Friedman & Mandelbaum, 2011; Levine, 2010). In recent history, the goals of public education have shifted from preparing students to enter into an existing and familiar
workforce, to preparing them to be employed in innovative and high-tech professions that may or may not exist currently (Lindsey et al., 2014). Authors of the national report *Context Matters: Teaching and Learning Skills for Work* (Giddens & Stasz, 1999) highlighted that educators must educate students today for a workforce that will utilize tools that have yet to be invented and will require skills that are currently undefined.

Three major events highlighted the impact of globalization on the U.S. economy during the 20th and 21st centuries. First, income inequality grew at an exponential rate following the middle part of the 20th century, a time when the incomes of unskilled and skilled workers were historically most aligned (Davidson, 2012; Goldin & Katz, 2009). Further, employment doubled in high-skilled occupations that required expert thinking and complex communications, while employment rose only slightly in positions that required a high school diploma or less, which became vulnerable to automation or outsourcing (Hilliard, 2013). Second, as noted by Claudia Goldin and Lawrence Katz (2009), in the book *The Race Between Education and Technology*, during the same period there was a shift in the race between technological change and education. Whereas education had previously surpassed technology during the first half of the 20th century, “technology sprinted ahead of a limping education in the last thirty (30) years” (Goldin & Katz, 2009, p. 292). Lastly, there was growing awareness of international economic and educational competition with other nations. In some instances, for the first time in history, the United States was being surpassed in productivity and attainments (National Commission on Excellence in Education, 1983).

In response to the rising demand for higher skilled individuals and an evolving global workforce, the U.S. Department of Education released a national report, *A Nation
at Risk, in 1983. The report echoed the concerns that Americans did not possess the education preparation, skills, and training necessary to enter or be competitive in the new professional environment (National Commission on Excellence in Education, 1983). In addition, the report identified learning and public education as “the indispensable investment required for success in the ‘information age’” (National Commission on Excellence in Education, 1983, p. 15). Specific recommendations within the report for accomplishing reform included (a) strengthening minimum high school graduation requirements, (b) adopting more rigorous and measurable standards, (c) utilizing time during the school day more effectively, and (d) improving the preparation of teachers (National Commission on Excellence in Education, 1983). While the concerns cited in A Nation at Risk had become all too familiar, the report’s focus on public education reform as a solution to the problem caused both the public and policymakers to make associations between the state of the economy and the quality of schooling in the United States (Superfine, 2013). As a result, over the next 30 years, public education reforms in academic standards, accountability systems, and school finance were undertaken at both the federal and state levels.

**No Child Left Behind (NCLB).** In 2002, the No Child Left Behind (NCLB) Act was signed into law by President George W. Bush. NCLB came with large congressional and public support at a time when it was becoming increasingly clear that school reform must be drastically different in order to serve a wide variety of learners to acquire the sophisticated skills they would need for the 21st century (Darling-Hammond et al., 2001). The act, modeled after state educational accountability measures in Texas, mandated state governments to develop and use a single state assessment in order to measure student and
school performance (L. M. Burke, 2012; Carnoy & Loeb, 2002). Specifically, student performance would be characterized by one of three achievement levels: (a) basic, (b) proficient, or (c) advanced. In addition, NCLB mandated that schools make adequate yearly progress (AYP) toward increasing the number of students who scored proficient on the national assessment in the areas of reading and mathematics, with the goal of 100% of American students scoring proficient by the 2013-2014 school year (L. M. Burke, 2012). Schools that did not attain their minimum annual AYP goals faced financial and organizational sanctions, underlying the notion that schools faced with consequences will be motivated to improve student achievement outcomes (Lee & Reeves, 2012).

While researchers agree that NCLB justly refocused the nation’s attention toward public school outcomes, there is also consensus that the law incentivized the development of less stringent assessments and standards, and a reduction in transparency about outcomes (L. M. Burke, 2012; CDE, 2011; Lee & Reeves, 2012). Henry Braun (2008), author of the journal article “Review of McKinsey Report: How the World’s Best Performing School Systems Come Out on Top,” described yet another unintended outcome of AYP as “a technically flawed indicator of school outcomes which discourages highly qualified teachers from transferring to schools serving large numbers of disadvantaged students” (p. 319). By 2012, on the 10th anniversary of NCLB being signed into law, it was apparent that schools across the nation would not meet the 100% proficiency goal and that the policy was broken (L. M. Burke, 2012).

As a result of the failed NCLB policy reform efforts, some policymakers and education researchers reflected upon the historical challenges and benefits of LEA
control (Darling-Hammond & Lieberman, 2013; Superfine, 2013). Reoccurring challenges with LEA control aligned with a public desire for accountability; however, many researchers agree that federal and state education policy reform rarely meets the unique needs of individual communities (Cohen & Hill, 1998; Tyack & Cuban, 1995; Warren, 1999). For example, Tyack and Cuban (1995) identified three features of reform that complicate the translation of policy into institutional trends: “the time lag between advocacy and implementation; the uneven penetration of reforms in the different sectors of public education; and the different impact of reforms on various social groups” (p. 55). Consequently, public education reform that followed NCLB began to focus on a new set of national standards, an accountability system that included multiple sources of measurement, and, within California, a school finance system that would empower local communities to better respond to the needs of their constituents (CDE, 2011, 2012, 2015a).

**Blueprint for Great Schools.** Following multiple and varied federal and state policy initiatives aimed at reforming public education and watching the global economy continue to grow and diversify, California State Superintendent of Public Instruction Tom Torlakson convened a 59-member transition advisory team. The team was tasked with advising the California Department of Education (CDE) on a new planning framework for the department (CDE, 2011). Recognizing extensive research that concluded that teacher quality is one of the most influential indicators for student achievement, the advisory team’s recommendations included development and use of teacher professional learning standards and the statewide dissemination of best practices in teacher development (Darling-Hammond et al., 2010; Levine, 2010; Manley, 2013; Merriman &
Nicoletti, 2008; National Commission on Teaching & America’s Future, 1996; Tyack & Cuban, 1995). In addition, the report recommended that California fully invest in the transition, with the rest of the United States, to adopting and implementing national academic standards, the CCSS. Further, the report suggested that California should shed its dependence on one statewide assessment accountability measure and identify multiple measures and opportunities for students to highlight their academic achievement (CDE, 2011).

**Greatness by Design.** One year following the CDE’s publication of *A Blueprint for Great Schools*, a second task force, called upon by the CDE and the California Commission on Teacher Credentialing (CTC), published a report titled *Greatness by Design* (CDE, 2012). Unlike *A Blueprint for Great Schools*, which summarized recommendations for action in a variety of education-related focus areas, the *Greatness by Design* 90-page report specifically sought to address complications related to the recruitment of new teachers and the need to develop new skills within the current teacher workforce (CDE, 2012). Concurrently, the implementation of the national CCSS was underway across the state, and the California State Board of Education had begun the process of collaboratively developing the California Assessment of Student Performance and Progress (CAASPP), a collection of interim, formative, and diagnostic statewide assessments that align with CCSS (CDE, 2016).

Aligning with an overwhelming number of researchers, the *Greatness by Design* report acknowledged that the desired impact of current school reforms in the areas of state standards and accountability depends on the ability of highly skilled teaching professionals to implement these reforms at the local level (CDE, 2012; Darling-
Hammond et al., 2001; Joyce & Calhoun, 2015; Levine, 2010; Manley, 2013; Merriman & Nicoletti, 2008; National Commission on Teaching & America’s Future, 1996). The report stated, “There are not policies which can improve schools if the people in them are not armed with the knowledge and skills they need” (CDE, 2012, p. 7). As a result, the report recommendations again echoed the need for state-established professional learning standards for teachers in order to inform more effective recruitment, professional development, and evaluation practices.

A Blueprint for Great Schools: Version 2.0. In 2015, after 4 years of implementation of CCSS and 3 years since the release of Greatness by Design, which acknowledged the unsurmountable impact of teacher implementation on education policy, another task force of California education practitioners, identified by the CDE, released A Blueprint for Great Schools: Version 2.0 (CDE, 2015a). The report confessed that although the state had previously had good intentions, “we now recognize we were using the wrong drivers for positive educational change” (CDE, 2015a, p. 2). Dean Anderson and Linda Ackerman Anderson (2010) defined drivers of change within organizational change theory as the context that creates the “impetus and motivation for change, and establish[es] a change effort’s relevance and meaning. They form the purpose for both those leading the change and those who are targets of the change” (p. 31). Therefore, in order to achieve the state’s desired results in the area of student achievement, the report recommended that the state focus on the following four drivers of change: (a) investing in and building educator professional capital, (b) emphasizing collaborative efforts based on shared aspirations and expectations, (c) supporting
effective pedagogy, and (d) developing systemic solutions to create a coherent and positive education system (CDE, 2015a).

Beyond change drivers, however, and in alignment with William Merriman and Augustine Nicoletti’s (2008) recommendation for educational reform movements to have a shared vision, the CDE (2015a) report recommended a new statewide mission statement and guiding principles, allowing for an emergence of a belief that educators want to excel, trusts them to improve when given the proper supports, and provides local schools and districts with the leeway and flexibility to deploy resources so they can improve . . . engaging students, parents, and communities as part of a collaborative decision-making process around how to fund and implement these improvement efforts, and provides supplemental resources to ensure that California’s English learners (ELs), foster youths, and students in poverty have the learning supports they need. (p. 6)

Yet, even with a clear vision and well-defined change drivers, multiple researchers agree that organizational change cannot occur overnight. Rather, organizational change is an ongoing process by which the environmental, economic, and cultural imperatives must be examined and refined (D. Anderson & Anderson, 2010; Darling-Hammond & Lieberman, 2013; Elmore, 1990; Manley, 2013; Merriman & Nicoletti, 2008; Mort & Cornell, 1941; Superfine, 2013; Tyack & Cuban, 1995; Tye & Tye, 1999).

**Change Theory**

Comprehensive organizational reforms, especially within government agencies, such as public education, are often initiated at the state level. Yet, many researchers and practitioners agree that lessons from historical restructuring efforts suggest that an
individual school’s capacity for change must also be considered in the educational reform process (Darling-Hammond et al., 2001; Mort & Cornell, 1941; Tye & Tye, 1999). Further, Richard Elmore (1990) explained that “states can neither create nor support such will or such capacity (for change) simply through the development of mandates that require local compliance” (p. 272). Instead, leaders and researchers must look to what characteristics and processes make change efforts within organizations successful.

Three respected researchers, Kurt Lewin, Wyatt Warner Burke, and John Kotter, have each presented theories for change that have shaped the way in which public and private institutions address organizational reforms. W. W. Burke (2002) and Kotter (2012), for example, proposed a necessary sequence of actions that shall be followed in order to complete the change process successfully. Figure 1 presents W. W. Burke’s (2002) process, while Figure 2 presents Kotter’s (2012) process. On the other hand, Lewin, starting in 1938 at the University of Iowa, conducted a sequence of leadership studies that examined how the style of leadership, such as democratic or autocratic, impacted societal reaction to change (Billig, 2015). While the researchers reached different conclusions regarding what they believed to be the appropriate process necessary to achieve organizational change, all identified organizational culture as one of the most impactful factors on whether the desired change is actually attained (Billig, 2015; W. W. Burke, 2002; Kotter, 2012).

Kotter (2012) stated, “When new practices made in a transformation effort are not compatible with relevant cultures, they will always be subject to regression” (p. 148). W. W. Burke (2002) work and Billig’s (2015) analysis of Lewin’s research, concurred that culture is most important because of its powerful influence on human behavior.

Further, beyond culture, the researchers agreed that identification of a common goal or vision, guided by a coalition of members from within the culture, can improve the likelihood of change efforts being sustained over time (Billig, 2015; W. W. Burke, 2002; Kotter, 2012).

Many researchers and practitioners today agree with the sentiments of W. W. Burke, Lewin, and Kotter when considering successful implementation of statewide education policy change efforts in local schools (Darling-Hammond & Lieberman, 2013; Elmore, 2004; Manley, 2013; Mort & Cornell, 1941; Tye & Tye, 1999). Highlighting the important impact that culture has on an organization’s change effort, Elmore (1990) explained,

Such beliefs, and the patterns of interaction between people that they produce, help yield a school’s social order. This social order determines the way in which its participants behave in schools, and this, generates the school’s climate. There is good reason to be concerned with such matters. A widening range of research suggests that these beliefs determine how those associated with a school react to and feel about it, and that this in turn determines the importance they will assign school in their lives and the kind and amount of effort they will devote to it.

(p. 171)

Therefore, within school systems, the role of the individual teacher and the culture of the staff community have undeniable impact on change efforts and must be considered in order to attain success (Manley, 2013; Mort & Cornell, 1941; Superfine, 2013; Tyack & Cuban, 1995). While the research indicates that implementation of any change theory process shall be individualized to the organization that undertakes the change effort,
based on its culture and collectively identified goals, the likelihood for state reform to be implemented and sustained at the local level is strongly impacted by the availability of financial resources (Crawford et al., 2015).

**School Finance**

Access to professional learning opportunities within the public education system is directly linked with school finance (Crawford et al., 2015). Beginning in the late 1970s, there were a number of public electoral decisions that directly impacted the funding of California’s public education system. First, in 1979, the people of California voted to enact Proposition 13. The proposition drastically altered the school finance system by setting the statewide property tax rate at 1%, limiting the percentage of annual increases to local property taxes. In addition, Proposition 13 reassigned the vast responsibility for public education fiscal decision making to the state department of education, rather than the local school districts or county offices of education (Chambers, Levin, & DeLancey, 2006; Sonstelie, 2007; Warren, 1999). Many California residents were proponents of these changes because it was perceived that this proposition would provide less influence by school board members, who were sometimes perceived to be corrupt, and support equalization in per-pupil spending (Policy Analysis for California Education, 2012; Timar, 1994; Tyack & Cuban, 1995).

Shortly after its enactment, Proposition 13 came to eliminate over 50% of local school revenue. This drastic decline provoked Assembly Bill 8, a piece of legislation that allowed for LEAs to receive categorical funds from the state budget for specific programs, curriculums, and student populations (Bersin et al., 2008). According to the research of Thomas Timar (1994), the concept of categorical funding stemmed from
the textbook version of an ideal school finance system . . . one that balances horizontal and vertical equity interests. Such state school funding plans reduce overall fiscal disparities among the majority of students while attending to the special learning needs of some. (p. 143)

However, in implementation, the combination of low per-pupil funding and an exceptionally high proportion of state revenues being redistributed to restricted categorical purposes created hardships for schools to allocate resources on fundamental needs, such as school facilities, and sufficient reporting processes to show compliance with current regulations (CDE, 2011).

An additional consequence of this change in school finance infrastructure was that funding for professional development was substantially reduced or depleted entirely (CDE, 2011). In the report *A Blueprint for Great Schools*, the CDE (2011) acknowledged that “the knowledge base for skilled teaching and leadership is no longer readily available to many of California’s educators, especially in poor districts” (p. 7). With the impact of globalization, multiple government reports calling for additional supports to increase teacher knowledge and skills, and two lawsuits filed in 2010 (*Robles-Wong v. State of California* and *The Campaign for Quality Education v. California*) claiming that the current finance system was unconstitutional, it became clear that California’s school finance system must be reformed (CDE, 2011, 2012; Darling-Hammond, 2010; National Commission on Teaching & America’s Future, 1996; Policy Analysis for California Education, 2012).

California was not the first state in the nation to recognize the need for public school finance reform. Further, it was not the first state to develop a weighted student
formula funding system. Massachusetts, for example, adopted a weighted student
formula funding system in the 1990s (Darling-Hammond et al., 2014). This action, along
with investments in professional development, early childhood education, and new state
standards and assessments, caught the favorable attention of many researchers and
lawmakers as they continued to see gains in statewide student achievement (Darling-
Hammond et al., 2014).

Three key events took place that afforded California Governor Jerry Brown the
opportunity to sign Senate Bill 97 into law in 2013, establishing California’s LCFF.
First, the success attained by other states that followed this type of a funding model set a
precedent that fiscal reform was a possibility (Darling-Hammond et al., 2014). Second,
there was statewide acknowledgement that current regulatory requirements were stifling
local innovation (Goldin & Katz, 2009; Policy Analysis for California Education, 2012;
Timar, 1994; Warren, 1999). Lastly, the passage of Proposition 30 in 2012, which
generated approximately $6 billion in new state income and sales tax revenues for the
Education Protection Act (EPA), gave California the first of many small budget surpluses
since the late 1970s (Bankman & Caron, 2014; Dickinson, 2013; Education Legal
Alliance Adequacy Committee, 2015).

Whereas the previous funding system provided a low per-pupil allotment and
supplemented remaining resources from a number of restricted categorical grants, LCFF
provides a base grant for each LEA according to its student average daily attendance
(ADA). In addition to this base amount, an extra 20% of the adjusted base grant is
provided to LEAs for each low-income, English language learner (ELL), or foster care
student. Lastly, a concentration grant is also available for those LEAs in which at least
55% of the student population is identified as disadvantaged (low-income, ELL, or foster care; Affeldt, 2015; Darling-Hammond et al., 2014; Menefee-Libey & Kerchner, 2015).

While the establishment of LCFF profoundly restructured the way in which LEAs were funded overnight, implementation of the new law was extensive because public school funding is the largest allocation in the California state budget (CDE, 2015b). With more than 40% of the state’s general fund, or $45 billion, allocated to kindergarten through 12th-grade education, the Legislative Analyst’s Office (LAO) estimated that approximately $76 billion was spent on K-12 education in the 2014-2015 school year; once federal and private funds were added (CDE, 2015b).

Many California residents were encouraged by the idea of returning control of state funding to the LEAs; however, a large percentage were also historically cautious and encouraged accountability measures to be put in place by the state (Menefee-Libey & Kerchner, 2015; Warren, 1999). As a result, provisions for a Local Control Accountability Plan (LCAP) were included in the law to outline and monitor the “increase or improve services for pupils in proportion to the increase in funds” (California Education Code, 2016, § 42238.07[a][1]). LCAP requires LEAs to annually present a 3-year strategic plan outlining specific academic and budget priorities in eight areas: basic services (Priority 1), implementation of CCSS (Priority 2), parental involvement (Priority 3), student achievement (Priority 4), student engagement (Priority 5), school climate (Priority 6), access to a broad curriculum (Priority 7), and other student outcomes (Priority 8; Affeldt, 2015; Menefee-Libey & Kerchner, 2015). Whereas the combination of finance reform and new accountability measures provided a more favorable landscape to improve educational outcomes for California’s students, a report
reviewed by Braun (2008) in by the *Journal of Educational Change* stated, “It is surely true that money is a necessary but not sufficient condition for success” in creating change within the public education system (p. 318). Instead, well-known experts have suggested that the combination of reforms in school finance, accountability, and state standards may be the perfect storm for effectively restructuring California’s public school system for the first time in history (Darling-Hammond et al., 2014; Menefee-Libey & Kerchner, 2015).

**State Standards**

In 1983, authors of the report *A Nation at Risk* caught the attention of the U.S. government and the public when they reported,

> More and more young people emerge from high school ready neither for college nor for work. This predicament becomes more acute as the knowledge base continues its rapid expansion, the number of traditional jobs shrinks, and new jobs demand greater sophistication and preparation. (National Commission on Excellence in Education, 1983, p. 20)

Further, the authors of the report cited learning as the “indispensable investment required for success” (National Commission on Excellence in Education, 1983, p. 15). In response, then-President George H. W. Bush and the nation’s governors held a summit on public education at the University of Virginia in 1989 (Finn, Petrilli, & Vanourek, 1998). At the conclusion of the 2-day summit, federal and state government leaders proclaimed that educational goals and accountability measures shall be established in order to define and monitor student academic progress (Klein, 2014).

After failed attempts to obtain agreement in writing national educational goals, the responsibility fell to the state governments, and these goals transformed into what are
now referred to as academic state standards for students (National Council on Education Standards and Testing, 1992; Vinovskis, 1999). Arthur Wise and Linda Darling-Hammond (1983) explained that while standards define academic achievement levels for students, “broadly speaking, standards are intended to improve the quality of education by focusing the attention of teachers” and their actions (p. 5). This definition aligned with national reports released shortly after the summit, which cautioned that the nature of student preparation and learning environments must change significantly in order to gravitate away from the minimum expectations that the public had settled for and that this must be accomplished by changing the way in which teachers teach (National Commission on Teaching & America’s Future, 1996; National Council on Education Standards and Testing, 1992).

As states developed and defined their state standards, aligned accountability measures arrived in 2002 when Present George W. Bush signed the No Child Left Behind statute into law (L. M. Burke, 2012). The law mandated annual assessment of students in Grades 3 through 8 and once again in high school to determine if they were academically performing in alignment with the grade-level standards. However, it was not long after state standards were finalized and accountability procedures were implemented that skepticism began to grow regarding the variance in standards among the states, the validity of a singular assessment result to measure student progress, and unintended incentives to develop less stringent standards and assessments (Braun, 2008; L. M. Burke, 2012; Carnoy & Loeb, 2002; Darling-Hammond, 2010; Goldin & Katz, 2009; Lee & Reeves, 2012). As a result, when the opportunity to develop new standards and accountability measures presented itself, researchers, politicians, and the public
recommended consideration of national standards and the abandonment of the nation’s singular focus on statewide summative assessment measures (L. M. Burke, 2012; Darling-Hammond et al., 2014; Dunkle, 2012; Lindsey et al., 2014; Superfine, 2013).

In 2009, the Council of Chief State School Officers (CCSSO) and the National Governors Association (NGA) committed to developing a set of standards that would help prepare students for success in career and college (K. Anderson, Harrison, & Lewis, 2012; CDE, 2014). In collaboration with a variety of state-level school officials (excluding Texas and Alaska), content experts, and feedback from the public, the CCSS were drafted and reported to be unlike state standards utilized in the past (CDE, 2014; Rothman, 2011). They were reported to challenge students to obtain high-order thinking skills, offer “a logical learning progression over time” in English language arts and mathematics, and better prepare students for the 21st-century workforce (Rothman, 2011, p. 27; see also CDE, 2012, 2015a; Darling-Hammond et al., 2014; Lindsey et al., 2014; Porter, McMaken, Hwang, & Yang, 2011).

Along with many other states in the nation, California adopted the CCSS in 2010 with the anticipation that this new system, with clearer expectations for student achievement, would promote educational equity and universal access (CDE, 2014). However, a report released in 2012, entitled Building and Sustaining Talent: Creating Conditions in High-Poverty Schools That Support Effective Teaching and Learning, cautioned,

These standards will demand a new level of rigor, both for students and for teachers. States and districts can’t expect teachers to figure out how to effectively teach these new standards in isolation. . . . Only through attention to leadership
quality, to teacher and leader training and development, and to building collaborative school climates will districts and states ensure the success of the standards. (Almy & Tooley, 2012, p. 2)

Researchers have acknowledged that while approval of the CCSS and its beginning stages of implementation was a monumental step in the right direction for America’s public schools, the standards did not define how LEAs should transition their communities to the new learning environment or how teachers should provide instruction and incrementally assess student progress (CDE, 2012, 2014, 2015a; Dunkle, 2012; Leo & Coggshall, 2013; Lindsey et al., 2014; Manley, 2013). For example, local communities continue to be responsible for researching and selecting instructional curriculums, individual teachers are responsible to plan instruction by merging the CCSS with the locally chosen curriculum, and until the recent release of the interim assessment blocks by the CDE, individual teachers were also responsible for designing and delivering formative assessments to continuously evaluate student knowledge (Lindsey et al., 2014; Manley, 2013).

A second example that highlighted the need for greater transparency between CCSS state policy and teacher implementation came in 2012, 2 years after the authorization of CCSS, when the Center for the Future of Teaching and Learning, in collaboration with Belden Russonello Strategists LLC, convened six focus groups of teachers (Leo & Coggshall, 2013). The teachers resided in either Sacramento, San Francisco, or San Diego and were representative of instructors from all grade levels (kindergarten through 12th grade). The focus groups were requested to explore the following questions: (a) How familiar are teachers with the CCSS? (b) What are their
beliefs about their own expertise and ability to teach their subject matter under the CCSS? And (c) what changes in practice do they think will be necessary to satisfy the new standards (Leo & Coggshall, 2013)? The results highlighted that the majority of focus group participants “had little familiarity with the details of CCSS” and were skeptical of the level of success that would be achieved without further guidance being provided from state and local educational leaders (Leo & Coggshall, 2013, p. 2).

In April 2014, the CDE responded to these concerns when it released the guidance document *Common Core State Standards Systems Implementation Plan for California*. The plan included three phases for implementation of CCSS: (a) the awareness phase, (b) the transition phase, and (c) the implementation phase (CDE, 2014). First, the awareness phase was defined to include initial planning of systems implementation and the establishment of collaborative opportunities. Second, the transition phase would require LEAs to develop foundational resources, evaluate local needs, and cultivate new professional learning opportunities for staff. Lastly, the implementation phase would expand professional learning opportunities and align curriculum, instruction, and assessments across educational offerings (CDE, 2014). It was anticipated that these three phases would be completed by November 2015; however, many researchers and government agencies have reported that there is still a great need for teacher support and training in the area of CCSS implementation (Almy & Tooley, 2012; CDE, 2012, 2015a; Dunkle, 2012; Fullan & Hargreaves, 2012; Manley, 2013; McKinney, 2013). Reflecting on the recommendation of the Task Force on Educator Excellence to create a “continuum of professional learning that brings together the priorities of the state, district, schools and individual educator needs, along with the unique needs of the culturally and linguistically
diverse student population that educators are serving” (CDE, 2012, p. 50), one method by which the CDE proposed to assist LEAs in this area was to establish state professional learning standards.

**Quality Professional Learning Standards**

With the support of many researchers and practitioners for the development of professional learning standards for teachers, in March of 2015, the CDE (2015c) released the *Superintendent’s Quality Professional Learning Standards* (QPLS; Crawford et al., 2015; Darling-Hammond, 2010; Dunkle, 2012; Lindsey et al., 2014; Manley, 2013; National Council on Education Standards and Testing, 1992; Superfine, 2013). The introduction to the standards document, written by Superintendent of Public Instruction Tom Torlakson, explained that “the QPLS lay the foundation for creating a coherent set of professional learning policies and activities that span the career continuum of an educator, which leads to improved educator knowledge, skills, and dispositions and, ultimately, increased student learning results” (CDE, 2015c, p. 3). This belief was echoed by the authors of the book *A Culturally Proficient Response to the Common Core* (Lindsey et al., 2014), as they explained that “professional learning standards guide educators, individually or collectively, into growth opportunities that are interesting and productive. Professional learning is a major lever in supporting and shifting instructional practice, ultimately leading to student learning and well-being” (p. 83).

Seven quality professional learning standards were prioritized by the CDE (2015c) in the following areas: (a) data, (b) content and pedagogy, (c) equity, (d) design and structure, (e) collaboration and shared accountability, (f) resources, and (g) alignment and coherence. Brief descriptions, also provided by the CDE, may be reviewed in Figure
3. In addition to the specific standards and their descriptions, the document provided two additional levels of specificity for different purposes or audiences: (a) elements and (b) indicators (Trott & Mattson, 2016). At the 2016 California Educator Excellence Summit, Marcia Trott and Heather Mattson explained that each standard is further defined by three or four elements that are “building blocks for the standard,” and each element is “reinforced by indicators that further detail what quality professional learning looks like in practice” (pp. 11-12).

<table>
<thead>
<tr>
<th>Standard 1</th>
<th>Data</th>
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<tbody>
<tr>
<td>• Quality professional learning uses varied sources and kinds of information to guide priorities, design, and assessments.</td>
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<tr>
<th>Standard 2</th>
<th>Content and Pedagogy</th>
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<tr>
<td>• Quality professional learning enhances educators’ expertise to increase students’ capacity to learn and thrive.</td>
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<th>Standard 3</th>
<th>Equity</th>
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<tr>
<td>• Quality professional learning focuses on equitable access, opportunities, and outcomes for all students, with an emphasis on addressing achievement and opportunity disparities between student groups.</td>
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<tr>
<th>Standard 4</th>
<th>Design and Structure</th>
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<tr>
<td>• Quality professional learning reflects evidence-based approaches, recognizing that focused, sustained learning enables educators to acquire, implement, and assess improved practices.</td>
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<th>Standard 5</th>
<th>Collaboration and Shared Accountability</th>
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<td>• Quality professional learning facilitates the development of a shared purpose for student learning and collective responsibility for achieving it.</td>
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<tr>
<th>Standard 6</th>
<th>Resources</th>
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<tr>
<td>• Quality professional learning dedicates resources that are adequate, accessible, and allocated appropriately toward established priorities and outcomes.</td>
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<tr>
<th>Standard 7</th>
<th>Alignment and Coherence</th>
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<tr>
<td>• Quality professional learning contributes to a coherent system of educator learning and support that connects district and school priorities and needs with state and federal requirements and resources.</td>
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*Figure 3. Seven Quality Professional Learning Standards and the corresponding descriptions provided by the CDE. Adapted from The Superintendent’s Quality Professional Learning Standards, by California Department of Education, 2015c, p. 2, retrieved from http://www.cde.ca.gov/pd/ps/documents/caqpls.pdf.*
With the standards in place, two recent reports indicated that more still needs to be defined for equitable implementation of quality professional learning opportunities in schools (Crawford et al., 2015; Gulamhussein, 2013). Allison Gulamhussein (2013) explained, “This is not just about providing professional development but about providing effective professional development. Availability alone is not an issue” (p. 1).

In 2009, authors of the book *Professional Learning in the Learning Profession* stressed that in a recent study, researchers found that 90% of teachers who participated in the study reported participating in professional development; however, they also reported that it did not assist them in their professional duties (Darling-Hammond, Wei, Andree, Richardson, & Orphanos, 2009). If the amount or focus of professional learning opportunities being provided to teachers is not what is hindering teacher learning or effectiveness, authors of the report *Getting Smart on Transformative Professional Development* explained that instead “we should consider how teachers learn” and the professional learning delivery methods that are being utilized (Crawford et al., 2015, p. 2).

**Professional Learning Activities**

While the educational policy adoption of the CCSS and LCFF was intended to increase student achievement by providing high academic standards and increased local control of monetary resources, researchers have agreed “that the effective operation of these instruments would depend in considerable part on professionals’ learning—that is, teachers would have to learn new views . . . in order for the policies to affect practice” (Cohen & Hill, 1998, p. 9; see also Cochran-Smith & Lytle, 2009; Darling-Hammond, 2010; Warren, 1999). In order to accomplish effective implementation, LEAs and school
leaders have an obligation to provide a vision for professional learning at the local level and set an expectation for participation (Almy & Tooley, 2012; Crawford et al., 2015; Elmore, 2004). Further, they must dedicate resources and define the activities that will engage adult learners (Braun, 2008; Crawford et al., 2015). In 2015, the release of California’s QPLS laid “the foundation for creating a coherent set of professional learning policies and activities that span the career continuum of an educator” (CDE, 2015c, p. 3); however, after examining current research, there is a lack of studies that identify the professional learning activities that experts perceive as necessary for LEAs to effectively implement California’s QPLS in alignment with LCFF Priority 2, the CCSS.

Prior to identifying effective professional learning activities, professional learning must be defined. Within the report Why Professional Development Matters, Hayes Mizell (2010) explained that professional learning “is the strategy schools and school districts use to ensure that educators continue to strengthen their practice throughout their career” (p. 1). Similarly, over 25 years earlier, Fenstermacher and Berliner (1985) described staff development as “the provision of activities designed to advance the knowledge, skills, and understanding of teachers in ways that lead to changes in their thinking and classroom behavior” (p. 283). Although most would not refute these definitions, there is widespread skepticism regarding how to define effective professional learning (Buczynski & Hansen, 2010; CDE, 2012; Crawford et al., 2015; Darling-Hammond et al., 2009; Dunkle, 2012; Fenstermacher & Berliner, 1985; Joyce & Calhoun, 2015).

Within the national status report Professional Learning in the Learning Profession (Darling-Hammond et al., 2009), experts offered the following definition of
an effective professional learning system when discussing teacher development in the United States and abroad:

School leaders learn from experts, mentors, and their peers about how to become true instructional leaders. They work with staff members to create the culture, structures, and dispositions for continuous professional learning and create pressure and support to help teachers continuously improve by better understanding students’ learning needs, making data-driven decisions regarding content and pedagogy, and assessing students’ learning within a framework of high expectations. (p. 3)

Further, Cheryl Dunkle (2012) highlighted the need for effective professional development to “give participants some choice over the what, who, how, why, when, and where of their learning” (p. 81). More detailed definitions, such as these, have led researchers to redefine effective professional learning by considering how teachers learn rather than simply making the information accessible to teachers (Cochran-Smith & Lytle, 2009; Lieberman & Miller, 2011; Lindsey et al., 2014; Manley, 2013).

When reflecting on how adults learn new information, authors of the article “Educating Teachers for California’s Future” (Darling-Hammond et al., 2001) explained that “teachers learn just as students do: by studying, doing, and reflecting; by collaborating with other teachers; by looking closely at students and their work; and by sharing what they see” (p. 18). Twelve years later, the Center on Great Teachers and Learners released a report, Creating Coherence: Common Core State Standards, Teacher Evaluation, and Professional Learning (Leo & Coggshall, 2013), that outlined four key steps for creating a collaborative approach to adult learning during the implementation of
the CCSS. The four steps and brief descriptions are displayed in Figure 4. Further, the four steps are strikingly similar to recommendations made in 2015 in the introduction to the report *Getting Smart on Transformative Professional Development* (Crawford et al., 2015), displayed in Figure 5.

**Figure 4.** Four key steps for creating a collaborative approach to create coherence among educators during the implementation of CCSS. Developed from information in *Creating Coherence: Common Core State Standards, Teacher Evaluation, and Professional Learning*, by S. F. Leo and J. G. Coggshall, 2013, pp. 8-15, retrieved from Center on Great Teachers & Leaders website: http://www.gtlcenter.org/sites/default/files/CreatingCoherence.pdf.

In summary, Leo and Coggshall (2013) and Crawford et al. (2015) discussed that quality professional learning shall entail four key features. First, the delivery of adequate amounts of information must be frontloaded so the learner is informed on the topic.
Next, the learner must engage in collaborative activities with colleagues so that feedback may be provided and new practices may be discovered. Third, all learners shall be empowered with tools to evaluate individual and collective strengths and continuous areas of growth. Lastly, learners shall determine next steps to continuously refine their practices. While effective professional learning is continuously being redefined in order to better understand how educators are best prepared for their profession as a precondition for transforming public education, researchers have agreed that it is equally important to consider professional learning outcomes (Darling-Hammond et al., 2001; Fenstermacher & Berliner, 1985; Joyce & Calhoun, 2010; Sparks, 1994; Wagner, 2010).
Professional development and the effectiveness of the practices are not new discussion topics within American society; however, researchers have historically disagreed regarding whether effective professional development practices have been appropriately documented to prescribe recommended next steps for other practitioners (Buczynski & Hansen, 2010; Cochran-Smith & Lytle, 2009; Darling-Hammond & Bransford, 2005; Manley, 2013; Mizell, 2010). For example, in the journal article “Reviving Teaching With ‘Professional Capital’,” authors Michael Fullan and Andy Hargreaves (2012) highlighted that countries such as Finland, Singapore, Japan, Germany, and Canada, which have high student achievement, invest in “professional capital in their teachers, in all of their schools, day after day, year after year” (p. 30). Documented professional learning activities in these countries include extensive hours (approximately five to 20), collaborating with colleagues on analyzing curriculum, conducting research, planning instruction, observing colleagues, visiting other school sites, counseling students, and pursuing personal professional development opportunities (National Commission on Teaching & America’s Future, 1996). On the other hand, it has been noted that in the United States, “teaching has been a traditionally private profession and . . . typically we still do our work in isolation with limited opportunities to collaboratively define or articulate what the craft knowledge of teaching really is” (Dunkle, 2012, p. 60; see also Buczynski & Hansen, 2010). While there are extensive case studies from independent American public schools that document effective professional learning activities such as teacher mentorship, professional learning communities, comprehensive in-services, online learning, self-reflection and dialogue, viewing and discussing videos of instruction, and action research, Sandy Buczynski and
C. Boobi Hansen (2010) argued that there is an overarching lack of knowledge regarding which aspects of professional development, if any, are most effective (Crawford et al., 2015; Darling-Hammond, 2010; Dunkle, 2012; Joyce & Calhoun, 2015; Lieberman & Friedrich, 2010; Lindsey et al., 2014; National Commission on Excellence in Education, 1983; National Commission on Teaching & America’s Future, 1996; National Council on Education Standards and Testing, 1992; Wagner, 2010).

Although there is limited research regarding which professional learning activities are most effectively implemented, an extensive amount of research supports investing resources in teacher learning when implementing new policy initiatives, such as the CCSS policy initiative (Darling-Hammond et al., 2001, 2014; Elmore, 1990; Gulamhussein, 2013; Guskey & Huberman, 1995; Lieberman & Miller, 2011; Loveless, 2012; Stein, Smith, & Silver, 1999). One study in particular, conducted by Tom Loveless in 2012, showcased that the quality of standards alone would not have a positive impact on student achievement because in his investigation there were instances historically in which states with poor nationally rated standards had still made academic gains according to the National Assessment of Educational Progress (NAEP). Instead, Loveless (2012) highlighted that in order for the CCSS to have a positive effect on student achievement, high-quality professional development would need to be provided to educators. A second report, released in 2013 by the Center for Public Education, also analyzed and hypothesized how implementation of the CCSS would impact student achievement. In addition to reporting five main findings, which are displayed in Figure 6, the report concluded that teacher learning was “the linchpin between the present day and the new academic goals” (Gulamhussein, 2013, p. 6). Therefore, creating effective professional
learning activities that promote teacher learning in alignment with CCSS implementation goals is one of the greatest challenges LEAs and school sites face today (CDE, 2015a; Gulamhussein, 2013; Joyce & Calhoun, 2015).

<table>
<thead>
<tr>
<th>Finding #1</th>
<th>The Common Core standards focus on teaching for critical thinking, but research shows that most classroom instruction is weak in this area. Therefore, professional development needs to emphasize practices that will turn students into critical thinkers and problem solvers.</th>
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<tr>
<td>Finding #2</td>
<td>Most professional development today is ineffective. It neither changes teacher practice nor improves student learning.</td>
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<tr>
<td>Finding #3</td>
<td>Research estimates that pre-recession spending on professional development occupied between two to five percent of a typical district’s budget. However, many districts do not track their professional development spending at all, leaving them in the dark about their costs.</td>
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<tr>
<td>Finding #4</td>
<td>In switching to effective professional development, the most significant cost item for districts will be purchasing time for teachers to spend in professional learning communities and with coaches.</td>
</tr>
<tr>
<td>Finding #5</td>
<td>Support during implementation must address the dual roles of teachers as both technicians in researched-based practices, as well as intellectuals developing teaching innovations.</td>
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*Figure 6. Five major findings for providing effective professional development aligned with the CCSS. Developed from information in Teaching the Teachers: Effective Professional Development in an Era of High Stakes Accountability, by A. Gulamhussein, 2013, pp. 3-4, retrieved from http://www.centerforpubliceducation.org/Main-Menu/Staffingstudents/Teaching-the-Teachers-Effective-Professional-Development-in-an-Era-of-High-Stakes-Accountability/Teaching-the-Teachers-Full-Report.pdf.*
Conclusion

Over the last 33 years, since the release of *A Nation at Risk*, Americans have looked for opportunities to better prepare the nation’s students to competitively enter the global workforce (National Commission on Excellence in Education, 1983; Stewart, 2008). In the book *That Used to be Us: How America Fell Behind in the World It Invented and How We Can Come Back*, Thomas Friedman and Michael Mandelbaum (2011) explained,

> The merger of globalization and the IT revolution that coincided with the transition from the twentieth to the twenty-first century is changing everything—every job, every industry, every science, every hierarchical institution. . . . This merger has raised the level of skill a person needs to obtain and retain any good job, while at the same time increasing the global competition for every one of those jobs. (p. 56)

Researchers have agreed that schools must reform their current practices and identify opportunities to prepare students for a workforce that will require innovative skills that are not currently in practice or known (CDE, 2011, 2012, 2015a; Friedman & Mandelbaum, 2011; Giddens & Stasz, 1999; Levine, 2010; Merriman & Nicoletti, 2008).

The research has shown that the urgent call for national education reform would undoubtedly require comprehensive organizational reform and, in turn, consideration of each individual school’s capacity for change (Darling-Hammond et al., 2001; Mort & Cornell, 1941; Tye & Tye, 1999). Three change theorists—(a) W. W. Burke, (b) Lewin, and (c) Kotter—and many researchers have emphasized that school culture and its impact on human behavior should be given great consideration when contemplating and
implementing successful change efforts in local schools (Darling-Hammond & Lieberman, 2013; Elmore, 2004; Manley, 2013; Mort & Cornell, 1941; Tye & Tye, 1999). Sequentially, policymakers, researchers, and school leaders acknowledged the important and impactful role of the individual teacher on policy implementation at a school site level (Manley, 2013; Mort & Cornell, 1941; Superfine, 2013; Tyack & Cuban, 1995).

The review of literature demonstrated that beyond school culture, researchers and practitioners concur that the availability of resources is also extremely influential on whether schools are successful in implementing new policy efforts (CDE, 2011, 2012; Crawford et al., 2015; Darling-Hammond et al., 2014; Policy Analysis for California Education, 2012). Following a number of insufficient state propositions intended to resolve various challenges associated with California school finance, in 2013 the state adopted the first weighted student formula funding system, LCFF (Goldin & Katz, 2009; Policy Analysis for California Education, 2012; Timar, 1994; Warren, 1999). LCFF returned much of the monetary management of federal and state educational monies to the local communities, which some researchers argued is where the most informed decisions are made (CDE, 2015b; Menefee-Libey & Kerchner, 2015; Warren, 1999).

To meet the educationally related challenges presented by globalization, create greater equity, and raise high expectations in schools across the nation, the federal government set its focus on educational standards (K. Anderson et al., 2012; CDE, 2014; Klein, 2014; National Council on Education Standards and Testing, 1992). As a result, California, along with many other states in the nation, adopted the CCSS in 2010. The CCSS were believed to bring a focus on the thinking and performance skills necessary for
college and career readiness (Lindsey et al., 2014). The literature reviewed reported that shortly after the adoption, however, researchers and school communities began to acknowledge that the standards did not define how LEAs should transition their communities to the new learning environments or how teachers should provide newly defined instruction and incrementally assess student progress (CDE, 2012, 2014, 2015a; Dunkle, 2012; Leo & Coggshall, 2013; Lindsey et al., 2014; Manley, 2013).

In response to this challenge, the CDE (2015c) released the QPLS in 2015. The QPLS were intended to lay the foundation for creating a coherent set of professional learning policies and activities that would span the career continuum of an educator, although several reports in the literature review called for further clarification regarding what constitutes effective professional learning (Buczynski & Hansen, 2010; CDE, 2012; Crawford et al., 2015; Darling-Hammond et al., 2009; Dunkle, 2012; Fenstermacher & Berliner, 1985; Joyce & Calhoun, 2015).

It can be concluded from this literature review that there have been education policy initiatives that have recently gone into effect in an effort to support public schools in helping the next generation of students to be better prepared to enter the global workforce (K. Anderson et al., 2012; Chambers et al., 2006; Darling-Hammond et al., 2014; Porter et al., 2011; Sonstelie, 2007; Warren, 1999). It can also be concluded that teachers are a critical component in the implementation process of these policy and theoretical change efforts at a school site (Manley, 2013; Mort & Cornell, 1941; Superfine, 2013; Tyack & Cuban, 1995). Finally, based on studies presented in the literature review, it can be concluded that to improve teacher knowledge and increase student achievement, teachers shall engage in effective professional learning
opportunities so they may continuously refine and improve their professional practices (Cochran-Smith & Lytle, 2009; Cohen & Hill, 1998; Darling-Hammond, 2010; Warren, 1999).

This review of the literature provided a basis to understand the national urgency for educational reform, change theory as it applies to school communities, the history of state standards in the United States, and the influence of school finance on implementation of policy initiatives, such as national state standards. Additionally, the literature review provided the theoretical context for understanding how researchers define effective adult professional learning and how LEAs implement professional learning practices in public schools. Chapter III details the methodology that was used for this study, including the description of the design of the study, the data collection procedures, and data analysis. Chapter IV discusses the findings of this study, and Chapter V examines conclusions and recommendations for future studies.

**Synthesis Matrix**

Common themes and patterns across literature sources reviewed for this study were identified through the use of a synthesis matrix (Roberts, 2010). Five recurring variables are highlighted within the matrix: (a) globalization and public education reform, (b) change theory, (c) school finance, (d) state standards, and (e) professional learning. The synthesis matrix is provided for review in Appendix A and offers a visual representation of the literature analysis that was conducted to compare, contrast, and merge “disparate pieces of information into one coherent whole that provides a new perspective” (Roberts, 2010, p. 100). In addition, the synthesis matrix highlights the historical context by which literature was reviewed for this study.
CHAPTER III: METHODOLOGY

Overview

This chapter describes the research design used in this Delphi study that allowed a panel of experts to reach consensus regarding professional learning activities that experts perceive are necessary for local education agencies (LEAs) to effectively implement California’s Quality Professional Learning Standards (QPLS) in alignment with the Local Control Funding Formula (LCFF) Priority 2. In addition, the research examined the degree of importance for each professional learning activity and the likelihood of implementation.

This chapter consists of 10 sections: (a) purpose statement, (b) research questions, (c) research design, (d) population, (e) sample, (f) instrumentation, (g) data collection, (h) data analysis, (i) limitations, and (j) summary.

Purpose Statement

The purpose of this Delphi study was to identify the professional learning activities that experts perceive are necessary for local education agencies (LEAs) to effectively implement California’s Quality Professional Learning Standards (QPLS) in alignment with the Local Control Funding Formula (LCFF) Priority 2. The study also examined the degree of importance that the identified professional learning activities will have and those most likely to be implemented.

Research Questions

1. What professional learning activities do experts perceive are necessary for LEAs to effectively implement California’s QPLS in alignment with the LCFF Priority 2?
2. What degree of importance will the professional learning activities have on LEAs’ ability to effectively implement California’s QPLS in alignment with the LCFF Priority 2?

3. What is the likelihood of implementation of the professional learning activities that experts agree are necessary for LEAs to effectively implement California’s QPLS in alignment with the LCFF Priority 2?

**Research Design**

Futures research, using a forecasting Delphi technique, was utilized in this study. Michael Patton (2015) author of the book, *Qualitative Research and Evaluation Methods*, explained, “While most evaluation work involved looking at the effectiveness of past efforts to improve the future effectiveness of interventions, a futuring perspective involves anticipatory research and forward thinking to affect current actions toward creating desirable futures” (p. 236). Further, multiple researchers agree that futures research is particularly useful when current data are subject to interpretation and there is an urgent need to support individuals to bring about desired future circumstances (Cornish, 1977; Lauffer, 1982; Malhotra, Das, & Chariar, 2014).

The Delphi method, developed by Olaf Helmer and Norman Dalkey at the RAND Corporation in 1953, was originally used to study the probable effects of a nuclear attack on the United States (Lauffer, 1982). However, the technique did not become popular until almost a decade later when it was applied to large-scale technological forecasting and corporate planning (Lang, 1998). Utilizing successive questionnaires, the Delphi method obtained consensus among a group of experts regarding a future challenge (Lang, 1998; Malhotra et al., 2014; Webler, Levine, Rakel, & Renn, 1991). Armand Lauffer
(1982), author of the book, *Assessment Tools: For Practitioners, Managers, and Trainers* explained that since its initial development, researchers continue to utilize the forecasting Delphi process for one or more of these following objectives: (1) to determine likely future events, (2) to predict the likelihood of give future events occurring, (3) to predict the necessary conditions for a certain event to occur, and/or (4) to predict likely consequence of the occurrence of a given event. (p. 96)

The social scientist John Dewey described the Delphi technique as a pragmatic approach to social science research, which directly informs real-world implementation and decision making (Brady, 2015). Within educational studies, the most common use of the Delphi has been in projecting future goals (Brooks, 1979).

A key feature of the Delphi process is that each round is structured in a way to ensure that communication between a diverse group of expert panelists is anonymous (Lang, 1998; O’Keefe, Elshaug, Burgess, Peirce, & Nettelbeck, 2012; Webler et al., 1991). This feature of the process allows individuals to provide their expert opinion, “without fear of responses being impacted by unequal power dynamics, in-person group think, difference in social identities and values, or past history with one another” (Brady, 2015, p. 3; see also Brooks, 1979; O’Keefe et al., 2012). Additionally, creative thinking can be fostered between experts for whom it otherwise would not have been practical to collaborate in a face-to-face setting (Delbecq, Van de Ven, & Gustafson, 1975; O’Keefe et al., 2012; Rowe & Wright, 1999).

Currently, there are a range of Delphi techniques which are now in use, however most studies typically have three rounds of data collection and begin with an open-ended
questionnaire developed by the researcher (Brady, 2015; Hsu & Sandford, 2007; Lang, 1998; Rowe & Wright, 1999). The second round of the Delphi process allows expert panelists to provide feedback on all responses from the first round and rank the degree of importance and likelihood of implementation for each response. Finally, the third round seeks to find consensus by providing a third questionnaire summarizing data collected in Round 2 and requesting panelists to revise their judgements or provide explanations for outlying responses (Brady, 2015; Hsu & Sandford, 2007; Lauffer, 1982). As a result, the Delphi process is categorized as a mixed-methods approach to research because it collects and analyzes both qualitative and quantitative data.

Authors of the journal article, “Research Guidelines for the Delphi Survey Technique,” recommend that researchers who are preparing to utilize the Delphi technique should closely consider the level of consensus that will be employed (Hasson, Kenney, & McKenna, 2007). While consensus is improved over rounds by measuring the variance in responses of expert panelists “as a consequence of the panel experts ‘holding-out’, while the less-expert panelists ‘swing’ towards the group average” (Rowe & Wright, 1999, p. 372), the researcher must be aware of when to stop collecting data (Hasson et al., 2007). James McMillian and Sally Schumacher (2010), authors of the book, Research in Education: Evidence-Based Inquiry, recommended the use of descriptive statistics, specifically the interquartile range (IQR), to summarize the quantitative data and determine conclusive recommendations.

The Delphi method was appropriate for this study because (a) adequate historical information on the topic is unavailable, and as a result, a precise analytical research technique cannot be used; (b) the informed opinion of a group of experts who are
The following procedure, as recommended by Muckstadt and Isaac (1981) within the journal article “An Analysis of Single Item Inventory Systems With Returns,” was utilized in implementing the Delphi method in this study:

1. Select a panel of experts based on criteria.
2. Questionnaire One. Circulate the questions of the study to the panel members. Edit the results to a summary of recommendations.
3. Questionnaire Two. Have each member rate the resulting recommendations.
4. Questionnaire Three. Present the results of questionnaire two showing the preliminary level of group consensus to each item and each member’s earlier response. Members re-rate each item a second time now aware of the preliminary group trend. If an individual differs significantly from the group and chooses to maintain their position, the member is asked to provide a brief explanation.
5. The results of questionnaire three are tabulated and used for the final recommendations of the group. (p. 242)

By employing the Delphi technique to build consensus regarding developments in the future for public education; individuals can better prepare emotionally for the future and
generate a framework for confident and desired long-term strategies (Cornish, 1977; Malhotra et al., 2014).

**Population**

For the vast majority of circumstances where society attempts to predict and shape future events that will bring about desired developments, researchers must rely on the judgement of knowledgeable individuals (Cornish, 1977; Dalkey, 1968). This study utilized the Delphi process to forecast and obtain consensus regarding recommended professional learning activities that a group of experts perceive are necessary for local education agencies to effectively implement California’s Quality Professional Learning Standards in alignment with the LCFF Priority 2. This task is inherently complex due to the infancy of both sets of standards. As a result, experts in this study were selected from a larger population of kindergarten through 12th-grade California public school educators, researchers, and consultants knowledgeable about adult professional learning activities and education.

According to the most current and available California Department of Education (CDE, 2014-2015) DataQuest records, during the 2014-2015 academic school year, the population of California K-12 public school educators included 295,800 teachers and 25,819 administrators. In addition, this study sought the participation of theoretical experts from California research institutions. Utilization of the forecasting Delphi process for this population “provide[s] a touchstone for testing the worth of what is taught in schools” (Cornish, 1977, p. 209).
Sample

A critical element to the Delphi process is the selection of the expert panel because the panel will serve as a sample of the greater population for the study (McMillan & Schumacher, 2010). Multiple researchers agree that the Delphi expert panel “requires the involvement of panelists who are exceptionally knowledgeable about the substantive area being examined” (Lauffer, 1982, p. 94) and who are directly impacted by the issue (Brady, 2015; Hasson et al., 2007; Helmer & Rescher, 1959; Lang, 1998; Linstone & Turoff, 1975). With careful selection, the findings of a Delphi study, although made up of a compilation of subjective expert opinions, are considered to be more reliable than individual statements (Lang, 1998).

Historically, sample size in Delphi studies has varied greatly. According to Brockhoff (1975), Delphi studies with as few as four to 11 expert panelists have performed well. In fact, while there is no limit to the number of participants in a Delphi study, research indicates that few new ideas or improvements in results are achieved within a homogeneous group once the size exceeds 25 to 30 purposefully chosen participants (Brooks, 1979; Delbecq et al., 1975). Delbecq et al. (1975) reported that rather than sample size, the most influential factors in the reliability and validity of a Delphi study are the degree to which the expert panel is (a) personally involved in the problem of concern, (b) has pertinent information to share, and (c) is able to include participation in the questionnaires within its members’ schedules. Therefore, the heterogeneous panel of experts with 23 members met the research criteria for sample size because although they had different professions, they shared expertise in education and adult professional learning activities.
Selection Criteria for the Expert Panel

Participants in this study were selected using the snowball sampling strategy. The snowball strategy identifies experts based on a profile of attributes and experiences sought by the researcher. Those experts identified are also requested to provide the names of other experts who meet the same profile of attributes and experiences (McMillan & Schumacher, 2010; Patton, 2015). According to McMillan and Schumacher (2010),

Snowball sampling . . . is a strategy in which each successive participant or group is named by a preceding group or individual. Participant referrals are the basis for choosing the sample. . . . This strategy may be used in situations in which the individuals sought do not form a naturally bounded group but are scattered throughout populations. (p. 327)

In this study, potential theoretical and practical experts in the areas of education and adult professional learning activities were identified. These experts in turn made recommendations for additional potential theoretical and practical experts. All expert nominations met the same selection criteria for expert panelists, listed in Table 1. Other than broad geographical representation within the state of California, this study did not attempt to generalize or select expert panel participants to attain representation of each expert category compared to the entire profession. Therefore, nominations to the panel included teachers, administrators, researchers, and educational consultants.

The researcher received a total of 37 nominations for the expert panel. These individuals were initially contacted by the researcher via e-mail correspondence to request their participation in the expert panel from December 4, 2016, to February 1,
Table 1

Selection Criteria of Expert Panel

<table>
<thead>
<tr>
<th>Theoretical experts</th>
<th>Practical experts</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Had been or was currently working as a consultant or college researcher in the area of adult professional learning within California.</td>
<td>• Had applied adult professional learning techniques in a California K-12 or university setting within the last 3 years.</td>
</tr>
<tr>
<td>• Had conducted research in the field of adult professional learning.</td>
<td>• Had received formal training on adult professional learning and California’s academic content and performance standards.</td>
</tr>
<tr>
<td>• Had authored two or more publications in the area of adult professional learning and California’s academic content and performance standards.</td>
<td>• Had delivered two or more presentations on adult professional learning and California’s academic content and performance standards at a professional conference.</td>
</tr>
<tr>
<td>• Had delivered two or more presentations on adult professional learning and California’s academic content and performance standards at a professional conference.</td>
<td>• Had conducted action research in the field of adult professional learning and California’s academic content and performance standards.</td>
</tr>
</tbody>
</table>

2017; describe the study; and verify that they met two or more selection criteria for either the practitioner or theoretical category (Appendix B). Twenty-three geographically diverse experts agreed to participate in the study, representing 16 counties across California (Appendix C).

On January 22, 2017, the researcher e-mailed the panelists the “Consent to Participate in Delphi Study” memo and requested that they provide their consent to participate in the study by using an electronic survey link. The participation memo described the Delphi process, the research timeline, and study requirements (Appendix D). The Consent to Participate form was created electronically using an online application, Survey Monkey (Appendix E). On January 26, 2017, an e-mail was sent requesting that participants participate in a Delphi study initial test to confirm that
computer formats and search browser preferences were compatible (Appendix F). The Delphi Study Initial Test survey was created electronically using Survey Monkey (Appendix G). The use of Survey Monkey allowed the researcher to collect responses from the panelists electronically, determine participant response rate, and summarize the data to identify the mean, or average, for all responses. One hundred percent of the 23 panelists successfully accessed and completed the Delphi initial test. As with all sound surveys, pilot testing with a small group of individuals was necessary prior to implementation (Hasson et al., 2007). As a result, the Delphi initial test was field tested by a Brandman University doctoral faculty member who was familiar with Delphi studies prior to distribution to the expert panelists.

**Instrumentation**

Historically, the Delphi research methodology has been based on two distinct phases for gathering expert opinions. The first phase is exploratory, as experts explore the subject at hand and possible solutions (Adler & Ziglio, 1996). The second phase is evaluative and requires experts to assess the panelists’ views (Adler & Ziglio, 1996). The traditional data collection tool utilized in these phases is questionnaires because they provide for soliciting and obtaining honest opinions of expert panelists (Brady, 2015). As a result, the development and administration of the questionnaires are aligned.

The first round of the study provides the panelists with an exploratory questionnaire that consists of open-ended questions (Rowe & Wright, 1999). Rob Bijl (1992) explained the benefits of this aspect of the Delphi process by highlighting that “questionnaires with many open-ended questions stimulate the experts’ expression of arguments” (p. 247). In succeeding rounds, panelists are presented with the opportunity
to rate the responses of the entire panel by degree of importance and likelihood of implementation (Brady, 2015). The Delphi rounds cease when the panel’s responses produce consensus (Hasson et al., 2007).

The instrument used in this Delphi study for Round 1 consisted of an open-ended question that requested that expert panelists identify professional learning activities that they perceived as necessary for LEAs to effectively implement California’s QPLS in alignment with the LCFF Priority 2. The responses from the panelists were synthesized by the researcher to eliminate duplicate responses and then combined to create a comprehensive list of all responses (Clayton, 1997). The final list contained 38 professional learning activities. Next, the questionnaire used during the second round requested that the expert panelists rate the degree of importance on a scale of 1 (low) to 10 (high) and the likelihood of implementation on a scale of 0% (low) to 100% (high), in increments of 10, for each identified professional learning activity from Round 1. With the data captured in Round 2, the researcher identified the median response rate for each professional learning activity and incorporated it into the Round 3 questionnaire. Lastly, the Round 3 questionnaire requested that expert panelists review and compare their ratings from Round 2 with the median ratings of the entire expert panel. After reviewing the information, panelists were provided with the opportunity to modify their responses; however, it was emphasized that changing their responses was not required.

Each questionnaire was created electronically using the online application Survey Monkey. This delivery method was preferred to accommodate the geographically diverse and mobile population of expert panelists (O’Keefe et al., 2012). The success of a Delphi study is dependent upon the panelists having access and time to participate in the process,
and the online questionnaire format used in this study provided this accessibility (Hasson et al., 2007).

**Validity and Reliability**

The data collection procedures in this study aligned with research recommendations for the Delphi methodology and contained three rounds. Each round was structured by the Delphi study design and did not require the researcher to develop data collection instruments (Adler & Ziglio, 1996; Brady, 2015). However, due to the noninteractive nature of Delphi studies, researchers have recommended that detailed instructions are developed and provided to panelists for each round to improve the validity of the results (Majchrzak & Markus, 2014). Michael Adler and Erio Ziglio (1996) highlighted that clear instructions alone can increase the reliability of expert responses. As a result, the researcher increased the validity of this study by field testing the instructions, questionnaires, and examples provided in Rounds 1 through 3 with an individual who had experience in education and who did not participate in the study. Efforts such as these, “required up front to ensure that surveys produce reliable and valid information” (Majchrzak & Markus, 2014, p. 82), along with careful analysis and management of both qualitative and quantitative data by the researcher produce the methods necessary for sound data collection (Hasson et al., 2007).

**Data Collection**

Data collection for Delphi studies typically is completed using three rounds of questionnaires, created by the researcher (Hasson et al., 2007; Rowe & Wright, 1999). The questionnaires used in all three rounds of this Delphi study were created electronically using the online application Survey Monkey. To ensure the study and data
collection methods were ethical for use with human subjects, the researcher obtained approval from the Brandman University Institutional Review Board (BUIRB) through an expedited review process prior to collecting data (Patton, 2015). This was an appropriate method for obtaining approval from the BUIRB because this study posed minimal risk for participants beyond what would be experienced in their day-to-day activities (McMillan & Schumacher, 2010).

**Round 1**

On January 29, 2017, an e-mail was sent to the panelists (Appendix H). The e-mail greeted the panelists and reviewed that their participation in the study was anticipated to occur from January 29, 2017, to February 22, 2017; however, it was requested that the questionnaire for Round 1 be completed by February 3, 2017. The e-mail also contained the participants’ three-digit identification code, instructions for completing Round 1, a link to the Round 1 questionnaire (Appendix I), and a copy of the QPLS as an attachment. The instructions requested that the panelists review the attached QPLS and use the link provided to respond to the open-ended question, “What professional learning activities do experts perceive are necessary for local education agencies to effectively implement California’s Quality Professional Learning Standards in alignment with the Local Control Funding Formula Priority 2 (State Standards)?”

By February 11, 2017, 21 of the 23 panelists had responded to the Round 1 questionnaire, therefore creating a mortality rate of 8.7% and changing the sample size of the study to 21 panelists. The researcher compiled the responses in list format and edited the list to omit duplicates and recommendations that did not include activities. The final
list contained 38 professional learning activities and was used to develop the questionnaire for Round 2.

Round 2

On February 12, 2017, another e-mail was sent to the panelists (Appendix J). The e-mail greeted the panelists and requested that the questionnaire for Round 2 (Appendix K) be completed by February 17, 2017. The e-mail also contained instructions for completing Round 2, a link to the Round 2 questionnaire, and a copy of the QPLS as an attachment. The instructions requested that the panelists review the attached QPLS and use the link provided to rank each activity by two factors. First, using a scale from 1 to 10, with 10 being most important, participants were asked to identify the degree of importance for each activity. Second, using a scale from 0% to 100%, with 100% being most likely to be implemented, experts were requested to identify each activity’s likelihood of implementation. By February 19, 2017, 19 of the 21 panelists had responded to the Round 2 questionnaire, therefore creating a mortality rate of 9.5% and changing the sample size of the study to 19 panelists. The researcher compiled the responses, identified the median panel response rate for each activity, and used the information to develop the questionnaire for Round 3.

Round 3

On February 20, 2017, a final e-mail was sent to the panelists (Appendix L). The e-mail greeted the panelists and requested that the final questionnaire for Round 3 be completed by February 25, 2017. The e-mail also contained instructions for completing Round 3, a link to the Round 3 questionnaire (Appendix M), and a copy of the QPLS as an attachment. The instructions requested that the panelists use the link provided to
review and compare their ratings with the panel median rating for each professional learning activity from Round 2. Finally, each panelist was requested to take the opportunity to change any of his or her responses should he or she desire to do so. The design of the Round 3 questionnaire included “question logic,” a design feature in the Survey Monkey platform that directs participants to specific pages in the questionnaire depending on their response. As a result, if a participant indicated that he or she did not wish to change his or her response, that participant was directed to review and compare the results for the next professional learning activity. On the other hand, if a participant indicated that he or she did wish to change his or her response, that participant was directed to a new page that included the scales for rating the degree of importance and likelihood of implementation. By March 2, 2017, 18 of the 19 panelists had responded to the Round 3 questionnaire, therefore creating a mortality rate of 5% and changing the sample size of the study to 18 panelists.

**Experimental Mortality**

After each round, the researcher provided reminder e-mails to the expert panelists to complete the corresponding survey if they had not completed the survey at the requested time. In each round, there were experts who chose, for unreported reasons, to not continue to participate in this study. It is not uncommon that participants will cease participation in a research study while it is still taking place. This may occur for a variety of unforeseen reasons, such as a change in professional or personal commitments, and is referred to as experimental mortality (Jurs & Glass, 1971). In some instances, experimental mortality may threaten the validity of the study depending on the decline in participation within comparison groups (Jurs & Glass, 1971). For this study, the expert
panelists were categorized into two comparison groups of theorists and practical experts. Following Round 1, two theoretical experts declined further participation. At the conclusion of Round 2, one theoretical and one practical expert declined further participation. Lastly, one practical expert was unable to participate in Round 3. This resulted in the loss of three theoretical experts and two practical experts for an overall experimental mortality rate of 21.7%. However, the validity of this study was not compromised since the experimental mortality rate was consistent within each comparison group.

**Data Analysis**

Descriptive statistics were used in Rounds 2 and 3 to analyze the data in this study. Median scores, percentage scores, and IQRs were used to determine the degree of importance and likelihood of implementation for each professional learning activity recommended by the panel of experts in Round 1. The median score provided panelists with a measure of central tendency when comparing individual responses to the responses from the rest of the panel (McMillan & Schumacher, 2010). This measure is recommended when describing highly skewed data because it is unaffected by the actual values of the scores (McMillan & Schumacher, 2010). Secondly, the IQR was used to measure the dispersion within the data and provide a measure of variability. The IQR is identified by calculating the difference between the average of the first and third quartiles of the data set. Researchers have concluded that the lower the IQR, the greater the degree of consensus (Giannarou & Zervas, 2014). As a result, for the purposes of this study, the researcher used an IQR of 2 or less to identify consensus (Giannarou & Zervas, 2014). When calculating the IQR for likelihood of implementation, whole numbers (1-10) were
used rather than percentages to analyze the data. In addition, the researcher utilized a priority matrix (Figure 7) to provide a visual representation of the ratings for each adult professional learning activity from high to low for both significance and likelihood of implementation.

![Priority Matrix](image)

*Figure 7. Priority matrix provides a high-to-low visual representation of ratings received from the expert panel.*

The vertical axis of the priority matrix displayed the degree of importance on a 10-point scale, while the horizontal axis displayed the likelihood of implementation on a scale of 100% to 0%. For the purpose of this study, when the IQR was 2 or less, the
panelists had achieved consensus. This conforms to the Brooks (1979) definition of consensus as “a gathering of individual evaluations around a median response, with minimal divergence” (p. 378).

Limitations

The Delphi technique is widely used for forecasting and planning, in large part due to its flexibility, as it is best suited to the exploration of issues that involve a mixture of scientific evidence and social values (Lang, 1998). Although panelists remain anonymous throughout the data collection procedures, allowing for the results of a Delphi study to yield uncontaminated forecasting of all panelists, there are some inherent limitations to the technique:

1. The anonymity of panelists may deter individuals from participating in the study who wish to receive recognition for providing their views (Cornish, 1977).

2. Selection of the panelists must follow the procedures governed by the expert criteria rather than personal preference in order to ensure the experience of the panel is credible relative to the problem being studied (Adler & Ziglio, 1996; Bijl, 1992).

3. The absence of panelist interaction can allow for individuals to question whether interpretations of their ideas were accurate and inhibit task performance because of the lack of verbal clarification (Delbecq et al., 1975).

4. The structure of the questionnaires used may lead to cultural bias as they rely heavily on subjective definitions (Webler et al., 1991).

5. The recommendations of this Delphi study are limited to those of a select group of experts who are knowledgeable in the areas of education and adult professional learning activities.
6. The results are a synthesis of the panel’s opinion and do not predict the responses of a larger population (Malhotra et al., 2014).

The limitations described above are generalized to the Delphi methodology. Additional limitations to this study include the following:

1. The identification of expert panelists was determined through the study’s design and selection criteria. Revision of the study’s panel selection criteria may result in the selection of other panelists and may produce different results.

2. The Delphi methodology assumes that the panel selection criteria identify experts who are similarly qualified for forecasting future events. While the panel selection criteria confirmed a specific level of familiarity and knowledge of the topic, the experts’ educational background and professional experience may have provided an uneven basis for their predictions.

3. The researcher, with guidance from an advisor, developed the final list of professional learning activities used in Rounds 2 and 3. Although efforts were made to identify all activities mentioned in the panelists’ responses to the Round 1 questionnaire, the process may have unintentionally eliminated professional learning activities submitted by the panelists.

**Summary**

This chapter described the research design, population, sample, instrumentation, data collection procedures, data analysis, and limitations of this Delphi study. In summary, the research design allowed a panel of experts to reach consensus regarding professional learning activities that they perceived are necessary for LEAs to effectively implement California’s QPLS in alignment with the LCFF Priority 2. In addition, the
research examined the degree of importance for each professional learning activity and the likelihood of implementation.
CHAPTER IV: RESEARCH, DATA COLLECTION, AND FINDINGS

Overview

This study was designed to bring a panel of experts to consensus regarding the importance of professional learning activities that are necessary for local education agencies (LEAs) to effectively implement California’s Quality Professional Learning Standards (QPLS) in alignment with the Local Control Funding Formula (LCFF) Priority 2 and the likelihood of the implementation of these activities in practice. A Delphi technique was used to answer the study’s three research questions and to develop consensus among the panel members. Round 1 requested that the panelists list the professional learning activities that would be necessary for LEAs to effectively implement California’s QPLS in alignment with the LCFF Priority 2. Round 2 requested the panel to rate the degree of importance, using a scale of 1 (low) to 10 (high), for each professional learning activity and the likelihood of implementation of the activity, using a scale of 0% (low) to 100% (high).

This Delphi study allowed a panel of experts to reach consensus regarding professional learning activities that they perceived are necessary for LEAs to effectively implement California’s QPLS in alignment with the LCFF Priority 2. Median and percentage scores were used to determine the degree of importance and likelihood of implementation for each professional learning activity recommended by the panel of experts in Round 2, while the interquartile range (IQR) was used to measure the dispersion within the data and provide panelists with a measure of variability. For this study, consensus was determined by an IQR of 2 or less (Giannarou & Zervas, 2014).
When calculating the IQR for likelihood of implementation, whole numbers (1-10) were used rather than percentages to analyze the data.

This chapter consists of seven sections: (a) purpose statement, (b) research questions, (c) research method and data collection procedures, (d) population, (e) sample, (f) presentation of the data, and (g) summary.

**Purpose Statement**

The purpose of this Delphi study was to identify the professional learning activities that experts perceive are necessary for local education agencies (LEAs) to effectively implement California’s Quality Professional Learning Standards (QPLS) in alignment with the Local Control Funding Formula (LCFF) Priority 2. The study also examined the degree of importance that the identified professional learning activities will have and those most likely to be implemented.

**Research Questions**

1. What professional learning activities do experts perceive are necessary for LEAs to effectively implement California’s QPLS in alignment with the LCFF Priority 2?
2. What degree of importance will the professional learning activities have on LEAs’ ability to effectively implement California’s QPLS in alignment with the LCFF Priority 2?
3. What is the likelihood of implementation of the professional learning activities that experts agree are necessary for LEAs to effectively implement California’s QPLS in alignment with the LCFF Priority 2?
Research Method and Data Collection Procedures

This study utilized the Delphi method to allow for a panel of experts to identify professional learning activities that they believed are necessary for LEAs to employ in order to effectively implement California’s QPLS in alignment with the LCFF Priority 2. This methodology is often used by researchers to forecast future events based on the opinions of experts in the field of study (Brooks, 1979). Specifically, the Delphi method elicits individual opinions of panelists and refines those opinions to identify consensus through a series of surveys or questionnaires. This study utilized three electronic questionnaires that were created using the online application Survey Monkey. This delivery method was preferred to accommodate the geographically diverse and mobile population of expert panelists (O’Keefe et al., 2012).

On January 29, 2017, an e-mail was sent to the panelists reviewing that their participation in the study was anticipated to occur from January 29, 2017, to February 22, 2017 (Appendix H). The e-mail also contained the participants’ three-digit identification code, instructions for completing Round 1, a link to the Round 1 questionnaire (Appendix I), and a copy of the QPLS as an attachment. The instructions requested that the panelists review the attached QPLS and use the link provided to respond to the open-ended question, “What professional learning activities do experts perceive are necessary for local education agencies to effectively implement California’s Quality Professional Learning Standards in alignment with the Local Control Funding Formula Priority 2 (State Standards)?” By February 11, 2017, 91% of the panelists had responded to the Round 1 questionnaire. Twenty-one responses were recorded by the panelists. The researcher compiled the responses in list format and edited the list to omit duplicates and
recommendations that did not include activities. The final list contained 38 professional learning activities and was used to develop the questionnaire for Round 2.

On February 12, 2017, a second e-mail was sent to the panelists (Appendix J). The e-mail requested that the questionnaire for Round 2 (Appendix K) be completed by February 17, 2017. The e-mail again contained instructions for completing Round 2, a link to the Round 2 questionnaire, and a copy of the QPLS as an attachment. The instructions requested that the panelists review the attached QPLS and use the link provided to rank each activity by two factors. First, using a scale from 1 to 10, with 10 being most important, participants were asked to identify the degree of importance for each activity. Second, using a scale from 0% to 100%, with 100% being most likely to be implemented, experts were requested to identify each activity’s likelihood of implementation. By February 19, 2017, 90% of the panelists had responded to the Round 2 questionnaire. The researcher compiled the responses, identified the median panel response rate for each activity, and used the information to develop the questionnaire for Round 3.

On February 20, 2017, a third and final e-mail was sent to the panelists (Appendix L). The e-mail requested that the questionnaire for Round 3 be completed by February 25, 2017. The e-mail also contained instructions for completing Round 3, a link to the Round 3 questionnaire (Appendix M), and a copy of the QPLS as an attachment. The instructions requested that the panelists use the link provided to review and compare their ratings with the panel median rating for each professional learning activity from Round 2. Lastly, each panelist was requested to take the opportunity to change his or her responses.
should he or she desire to do so. By March 2, 2017, 95% of the panelists had responded to the Round 3 questionnaire.

**Population**

Experts in this study were selected from a larger population of kindergarten through 12th-grade California public school educators, researchers, and consultants knowledgeable about adult professional learning activities and education. According to the most current and available California Department of Education (CDE, 2014-2015) DataQuest records, during the 2014-2015 academic school year, the population of California K-12 public school educators included 295,800 teachers and 25,819 administrators. In addition, this study sought the participation of theoretical experts from California research institutions and educational consultants who provide support to public education institutions but are not directly employed by the institutions.

**Sample**

A critical element to the Delphi process is the selection of the expert panel because the panel serves as a sample of the greater population for the study (McMillan & Schumacher, 2010). The sample for this study consisted of 18 expert panelists who shared expertise in education and adult professional learning activities. The panelists in this study represented practical and theoretical experts in the area of education and adult professional learning activities.

**Presentation and Analysis of Data**

The Round 1 questionnaire, which included one open-ended question—“What professional learning activities do experts perceive are necessary for local education agencies to effectively implement California’s Quality Professional Learning Standards
in alignment with the Local Control Funding Formula Priority 2 (State Standards)?”—yielded responses from 21 expert panelists. The responses were summarized and synthesized by the researcher to identify 38 recommended professional learning activities. These activities were used to populate the Round 2 questionnaire. The Round 2 questionnaire requested that the expert panelists rank each professional learning activity by degree of importance (1 = low to 10 = high) and likelihood of implementation (0% = low to 100% = high). Nineteen of the 21 panelists responded to the Round 2 questionnaire. The researcher calculated the median panelist score for each professional learning activity’s degree of importance and likelihood of implementation. These data were used to populate the Round 3 questionnaire. The Round 3 questionnaire requested for the expert panelists to review their ranking for each professional learning activity from Round 2 and compare it to the median panelist ranking. The expert panelists were also provided with the opportunity in Round 3 to make changes to their original rankings from Round 2, if they desired to do so.

Table 2 lists the frequency and sum of changes in rankings for the importance and likelihood of implementation of professional learning activities from Round 2 to Round 3. Eight experts chose not to make changes to their rankings of the degree of importance for the 38 activities from Round 2 to Round 3, whereas four experts chose not to make changes to their rankings of the likelihood of implementation. A total of four experts chose not to make changes to their rankings of either degree of importance or likelihood of implementation. Fourteen experts chose to make changes from Round 2 to Round 3. Forty-seven changes were made to the rankings of degree of importance, whereas 66 changes were made to the rankings of likelihood of implementation. Four experts made
changes to their rankings of the degree of importance but did not make changes to their rankings of the likelihood of implementation, and there were no experts who made changes to their rankings of the likelihood of implementation but did not make changes to their rankings of the degree of importance. Of the 14 experts who did make changes during Round 3, six accounted for 66% of all changes made.

Table 2

*Frequency and Sum of Changes for Importance and Likelihood of Implementation of Professional Learning Activities From Round 2 to Round 3*

<table>
<thead>
<tr>
<th>Number of changes</th>
<th>Importance Number of panelists</th>
<th>Sum of changes</th>
<th>Likelihood of implementation Number of panelists</th>
<th>Sum of changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>8</td>
<td>0</td>
<td>4</td>
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<td>Total</td>
<td>18</td>
<td>47</td>
<td>18</td>
<td>66</td>
</tr>
</tbody>
</table>

Table 3 shows the rating change values for the degree of importance and the likelihood of implementation ratings that had positive or negative changes. The panel members made increases to 67 ratings and decreases to 46 ratings from Round 2 to Round 3 for both degree of importance and likelihood of implementation. The largest number of changes resulted in small changes in value. There were 42 changes resulting in a 1- or 2-point increase or decrease in the value of degree of importance, and 56
changes resulted in a 10% or 20% increase or decrease in the value of likelihood of implementation.

Table 3

*Rating Change Values and Sum of Changes for Importance and Likelihood of Implementation Ratings of Professional Learning Activities*

<table>
<thead>
<tr>
<th>Rating change value</th>
<th>Importance</th>
<th>Likelihood of implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Increase</td>
<td>Decrease</td>
</tr>
<tr>
<td>1</td>
<td>23</td>
<td>11</td>
</tr>
<tr>
<td>2</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
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<td>1</td>
</tr>
<tr>
<td>4</td>
<td>2</td>
<td>0</td>
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<tr>
<td></td>
<td>50%</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>36</td>
<td>12</td>
</tr>
</tbody>
</table>

Fewer changes were made to the ratings for degree of importance, with a total of 48 changes, than for likelihood of implementation. The greatest change in the ratings for likelihood of implementation was an increase of 50% for Professional Learning Activity 25, “school leaders engage in learning how to become instructional/learning leaders from experts, mentors, and peer collaboration.” One hundred percent of the changes in the ratings for degree of importance were values of 4 points or less, and 100% of the changes in the ratings for likelihood of implementation were values of 50% or less.

Tables 4 and 5 display the professional learning activities (identified by finding number) for which ratings were most frequently changed between Round 2 and Round 3. Of the 12 professional learning activities for which ratings were most frequently changed, two had a median score increase of 0.5 in importance ratings. The other 10 activities had no change in the median rating for importance. Activity 5, “learning walks to stay
connected with the implementation,” had a positive increase in the IQR, which caused an increase in the level of consensus among the panel in Round 3. Although there was an increase in the IQR, the change did not alter the IQR score enough to decrease to 1 or 2, which would have indicated expert consensus.

Table 4

*Professional Learning Activities With Most Frequently Changed Ratings Between Rounds 2 and 3 for Importance*

<table>
<thead>
<tr>
<th>Research finding number</th>
<th>Frequency of change</th>
<th>Round 2</th>
<th>Round 3</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Median IQR</td>
<td>Median IQR</td>
<td>Median IQR</td>
<td>Median IQR</td>
</tr>
<tr>
<td>5</td>
<td>4</td>
<td>8 4</td>
<td>8 3</td>
<td>0 -1</td>
</tr>
<tr>
<td>12</td>
<td>4</td>
<td>10 1</td>
<td>10 1</td>
<td>0 0</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>10 2</td>
<td>10 2</td>
<td>0 0</td>
</tr>
<tr>
<td>4</td>
<td>3</td>
<td>9 1</td>
<td>9 1</td>
<td>0 0</td>
</tr>
<tr>
<td>6</td>
<td>3</td>
<td>9 2</td>
<td>9 2</td>
<td>0 0</td>
</tr>
<tr>
<td>9</td>
<td>3</td>
<td>8 2</td>
<td>8 2.5</td>
<td>0 +0.5</td>
</tr>
<tr>
<td>19</td>
<td>3</td>
<td>9 2</td>
<td>9 2</td>
<td>0 0</td>
</tr>
<tr>
<td>22</td>
<td>3</td>
<td>10 2</td>
<td>10 2</td>
<td>0 0</td>
</tr>
<tr>
<td>25</td>
<td>3</td>
<td>9 1</td>
<td>9.5 1</td>
<td>+0.5 0</td>
</tr>
<tr>
<td>29</td>
<td>3</td>
<td>9 3</td>
<td>9 3</td>
<td>0 0</td>
</tr>
<tr>
<td>32</td>
<td>3</td>
<td>9 2</td>
<td>9 2.25</td>
<td>0 +0.25</td>
</tr>
<tr>
<td>35</td>
<td>3</td>
<td>8 3</td>
<td>8.5 2.25</td>
<td>+0.5 +0.25</td>
</tr>
</tbody>
</table>

Table 5

*Professional Learning Activities With Most Frequently Changed Ratings Between Rounds 2 and 3 for Likelihood of Implementation*

<table>
<thead>
<tr>
<th>Research finding number</th>
<th>Frequency of change</th>
<th>Round 2</th>
<th>Round 3</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Median IQR</td>
<td>Median IQR</td>
<td>Median IQR</td>
<td>Median IQR</td>
</tr>
<tr>
<td>5</td>
<td>4</td>
<td>50% 3</td>
<td>50% 2.5</td>
<td>0 -0.5</td>
</tr>
<tr>
<td>12</td>
<td>4</td>
<td>70% 3</td>
<td>70% 2</td>
<td>0 0</td>
</tr>
<tr>
<td>4</td>
<td>3</td>
<td>70% 3</td>
<td>70% 4</td>
<td>0 -1</td>
</tr>
<tr>
<td>6</td>
<td>3</td>
<td>70% 5</td>
<td>70% 4</td>
<td>0 -1</td>
</tr>
<tr>
<td>9</td>
<td>3</td>
<td>60% 3</td>
<td>60% 2</td>
<td>0 -1</td>
</tr>
<tr>
<td>19</td>
<td>3</td>
<td>60% 2</td>
<td>55% 2.5</td>
<td>-5 +0.5</td>
</tr>
<tr>
<td>25</td>
<td>3</td>
<td>60% 4</td>
<td>60% 3.5</td>
<td>0 -0.5</td>
</tr>
<tr>
<td>29</td>
<td>3</td>
<td>60% 2</td>
<td>60% 2.5</td>
<td>0 +0.5</td>
</tr>
<tr>
<td>32</td>
<td>3</td>
<td>50% 4</td>
<td>55% 3.5</td>
<td>+5 -0.5</td>
</tr>
</tbody>
</table>
Of the nine professional learning activities for which ratings for likelihood of implementation were most frequently changed, two had a change to the median score. Activity 19 had a median score decrease of 5%, whereas Activity 32 had a median score increase of 5%. One of the nine professional learning activities for which ratings were most frequently changed had no effect on the median or IQR score. Of the other eight activities, six had a decrease in the IQR, which caused an increase in the level of consensus among the panel in Round 3. The adjustment in ratings for Activity 4, “examining student work consistently and constantly,” and Activity 9, “technology support for instruction, data, and assessment,” was enough to alter the IQR score to 2, indicating expert consensus regarding the likelihood of implementation.

**Research Question 1**

The first research question in this study was, “What professional learning activities do experts perceive are necessary for LEAs to effectively implement California’s QPLS in alignment with the LCFF Priority 2?” Abbreviated versions of the 38 professional learning activities and panel median ratings for Rounds 2 and 3 regarding degree of importance and likelihood of implementation are presented in Table 6. A complete list of the unabbreviated professional learning activities may be reviewed in Appendix N. The professional learning activities are listed in the same order in which they were listed on the study’s rating questionnaires for Round 2 and Round 3.

Of the 38 activities identified in Round 1, 12 directly involved instructional staff, five were directed toward school leadership positions, and one emphasized effectively partnering with families. The remaining activities focused on teaching methods and practices, data collection, technology, school finance, and school culture.
## Abbreviated Versions of the Professional Learning Activities With Rounds 2 and 3 Panel Median Ratings

<p>| Professional learning activity                                                                                                                                                                                                 | Median scores |
|                                                                                                                                                                                                                             | Importance | Likelihood |
| 1. School leaders work with staff to build a culture that values continuous learning, purposeful collaboration, and connections to research based practices.                                           | 10 10       | 70% 70%    |
| 2. As an emerging practitioner, teacher leaders must design tools for better understanding students’ learning needs and those tools must be implemented to collect evidence; thus, the evidence must be used in making data-driven decisions regarding curriculum, pedagogy, and goals. | 10 10       | 60% 65%    |
| 3. Shared analysis of formative and summative student achievement data, direct support in understanding how to use this data to inform long and short-term instructional planning, support in understanding how to disaggregate data, and understand how to modify practices to target under-performing subgroups. | 10 10       | 70% 70%    |
| 4. Examining student work consistently and constantly.                                                                                                                                                                     | 9 9         | 70% 70%    |
| 5. Learning walks to stay connected with the implementation.                                                                                                                                                               | 8 8         | 50% 50%    |
| 6. Realignment of fiscal and human resources to support implementation.                                                                                                                                                  | 9 9         | 70% 70%    |
| 7. Targeted support in unpacking and understanding Common Core State Standards (CCSS) for associated grade level and content areas and grade levels above and below with structured support in translating grade level CCSSs to long term instructional plans. | 9 9         | 70% 70%    |
| 8. Developing consistent expectations with accountability at all levels.                                                                                                                                                  | 10 10       | 70% 65%    |
| 9. Technology support for instruction, data, and assessment.                                                                                                                                                              | 8 8         | 60% 60%    |
| 10. Local education agencies must implement professional learning opportunities that incorporate theoretical knowledge and information, as well as the practical knowledge.                                             | 9 9         | 70% 70%    |
| 11. Activities within the professional development day need to incorporate examples of how teachers can make minor tweaks and adjustments, such as Universal Design for Learning, in order to ensure students are engaged and provide formative data. | 9 9         | 70% 70%    |</p>
<table>
<thead>
<tr>
<th>Professional learning activity</th>
<th>Median scores</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Importance R-2</td>
</tr>
<tr>
<td>12. The structure of the day should allow for teachers to collaborate during professional development/workshops.</td>
<td>10</td>
</tr>
<tr>
<td>13. Implementation teams shall guide an organization in identifying, refining and improving professional learning activities. As a result, the teams shall contain members that have broad, diverse perspectives and experiences to ensure equitable outcomes.</td>
<td>8</td>
</tr>
<tr>
<td>14. Professional learning shall be structured by implementation stages which include exploration, installation, initial implementation and full implementation stages.</td>
<td>9</td>
</tr>
<tr>
<td>15. Professional learning activities shall incorporate continuous improvement cycles such as, Plan, Do, Study, Act (PDSA) is a problem-solving methodology that never ends and requires constant focus.</td>
<td>10</td>
</tr>
<tr>
<td>16. Organizational drivers, such as data systems and hospitable environments, shall be in place to reduce barriers.</td>
<td>8</td>
</tr>
<tr>
<td>17. Leadership drivers such as, adaptive, supportive and technical leadership, is in place and focused on fidelity and accountability measures.</td>
<td>9</td>
</tr>
<tr>
<td>18. Teachers and leaders must have the opportunity to learn a concept, practice a concept, receive feedback on their implementation of the concept, and then have a mechanism to report out the outcomes.</td>
<td>10</td>
</tr>
<tr>
<td>19. Professional learning activities around instructional leadership.</td>
<td>9</td>
</tr>
<tr>
<td>20. On-going, targeted, and embedded professional development on best instructional practices.</td>
<td>10</td>
</tr>
<tr>
<td>21. Instructional coaches provide demonstrations and support for teachers and teaching assistants.</td>
<td>9</td>
</tr>
<tr>
<td>22. Professional learning communities (PLCs) where teachers collaborate around lesson design and student data.</td>
<td>10</td>
</tr>
<tr>
<td>23. Direct professional development opportunities aligned with the specific pedagogy associated with the grade level or content area; opportunities to reflect on personal practice, view (observe) and reflect on exemplars and best practices, and practice instructional strategies getting real time feedback.</td>
<td>10</td>
</tr>
<tr>
<td>24. Training in how to effectively partner with families.</td>
<td>9</td>
</tr>
<tr>
<td>Professional learning activity</td>
<td>Median scores</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>---------------</td>
</tr>
<tr>
<td></td>
<td>Importance</td>
</tr>
<tr>
<td></td>
<td>R-2</td>
</tr>
<tr>
<td>25. School leaders engage in learning how to become instructional/learning leaders from experts, mentors, and peer collaboration.</td>
<td>9</td>
</tr>
<tr>
<td>26. School leaders and staff examine student achievement data, using various sources and multiple measures, and then do a gap analysis of expectations (standards) and performance of students along with gaps in teacher training.</td>
<td>10</td>
</tr>
<tr>
<td>27. School staff meet on a regular basis in professional learning teams by grade level or content. Leaders from each team meet with site and district leaders to share needs, ensure alignment with implementation of instruction targeted toward data identified student gaps in achievement, and share feedback from each team.</td>
<td>9</td>
</tr>
<tr>
<td>28. School leaders observe and give feedback to teachers and ensure peer observation is taking place.</td>
<td>8</td>
</tr>
<tr>
<td>29. Using John Hattie’s research, district leaders can provide teachers with support in the following professional development topics: Teacher efficacy, Close Reading, Asking high order questions, using sentence frames to help language learners create academic sentences, and focus on effective engagement strategies.</td>
<td>9</td>
</tr>
<tr>
<td>30. Support student transitions to higher education and careers, including collaboration needed with higher education, career tech, and health and community support organizations.</td>
<td>8</td>
</tr>
<tr>
<td>31. Local Education Agencies shall engage in a process to plan a multi-year approach to focus content areas, general and specific pedagogy, and assessment.</td>
<td>8</td>
</tr>
<tr>
<td>32. Monitoring equity of access data to implementing the California state standards.</td>
<td>9</td>
</tr>
<tr>
<td>33. The development of a shared vision between administrators, teachers, and principals of what implementation of standards looks like when students are engaging in the learning behaviors that illustrate the California state standards.</td>
<td>9</td>
</tr>
<tr>
<td>34. Implementation of a data process to look at implementation, expectations, and learning collectively such as Instructional Rounds or Phil Daro’s 5x8 card.</td>
<td>9</td>
</tr>
</tbody>
</table>
Table 6 (continued)

<table>
<thead>
<tr>
<th>Professional learning activity</th>
<th>Median scores</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Importance</td>
</tr>
<tr>
<td></td>
<td>R-2</td>
</tr>
<tr>
<td>35. The stakeholders need to engage in discussions about their learning, negotiate priorities and alignment with their goals.</td>
<td>8</td>
</tr>
<tr>
<td>36. Alignment of instructional materials and electronic resources.</td>
<td>8</td>
</tr>
<tr>
<td>37. Professional development for all staff.</td>
<td>10</td>
</tr>
<tr>
<td>38. Alignment of instructional assistance and support programs, including supports for English learners and those programs traditionally viewed as special education.</td>
<td>10</td>
</tr>
</tbody>
</table>

*Note. R-2 = Round 2; R-3 = Round 3.*

**Research Question 2**

The second research question in this study was, “What degree of importance will the professional learning activities have on LEAs’ ability to effectively implement California’s QPLS in alignment with the LCFF Priority 2?” In Round 2, the expert panelists were requested to rate the degree of importance of the 38 professional learning activities on a 10-point Likert scale, with 1 indicating low importance and 10 indicating high importance. The median rank order for importance as determined in Round 3 is listed in Table 7. The range of median panel scores for importance in Round 3 was 8 to 10. Frequency distribution tables for Round 2 and Round 3 are located in Appendix O.

For this study, the professional learning activities that received a median score of 8 or higher and had an IQR of 2 or lower were considered to have high importance. One hundred percent of the 38 professional learning activities received a median score of 8 or higher after Round 3, with 24 receiving an IQR of 1 or 2, signifying consensus of high importance on 63% of activities. Table 8 lists the 24 professional learning activities that were considered to have high importance and consensus for Round 3.
Table 7

Round 3 Median Rank Order for Importance of Professional Learning Activity Findings

<table>
<thead>
<tr>
<th>Rank</th>
<th>Item</th>
<th>Median</th>
<th>IQR</th>
<th>Rank</th>
<th>Item</th>
<th>Median</th>
<th>IQR</th>
</tr>
</thead>
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<tr>
<td>1</td>
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<td>9</td>
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<td>3</td>
</tr>
<tr>
<td>7</td>
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<td>1.25</td>
<td>26</td>
<td>29</td>
<td>9</td>
<td>3</td>
</tr>
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<td>8</td>
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<td>10</td>
<td>2</td>
<td>27</td>
<td>32</td>
<td>9</td>
<td>2.25</td>
</tr>
<tr>
<td>9</td>
<td>23</td>
<td>10</td>
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<td>28</td>
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<td>9</td>
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<td>9</td>
<td>1</td>
</tr>
<tr>
<td>11</td>
<td>37</td>
<td>10</td>
<td>1</td>
<td>30</td>
<td>16</td>
<td>8.5</td>
<td>2.25</td>
</tr>
<tr>
<td>12</td>
<td>38</td>
<td>10</td>
<td>1.25</td>
<td>31</td>
<td>30</td>
<td>8.5</td>
<td>2.25</td>
</tr>
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<td>13</td>
<td>15</td>
<td>9.5</td>
<td>2</td>
<td>32</td>
<td>31</td>
<td>8.5</td>
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<td>14</td>
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<td>9.5</td>
<td>1</td>
<td>34</td>
<td>36</td>
<td>8.5</td>
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<tr>
<td>16</td>
<td>4</td>
<td>9</td>
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<td>35</td>
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<td>9</td>
<td>2</td>
<td>36</td>
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<td>2.25</td>
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<td>9</td>
<td>2.25</td>
<td>38</td>
<td>28</td>
<td>8</td>
<td>2</td>
</tr>
</tbody>
</table>

Twelve professional learning activities received the highest rating for degree of importance. Each activity received a median score of 10 and an IQR of 1 or 2. Activities 8, 12, 18, 20, 22, 26, and 37 addressed opportunities to engage instructional staff more effectively, whereas Activities 2, 3, 23, and 38 highlighted activities to evaluate methods and practices of teachers. The topic of Activity 1, “school leaders work with staff to build a culture that values continuous learning, purposeful collaboration, and connections to research based practices,” was an outlier in the highest rated activities, as it focused on school culture.

The professional learning activities that received a median score of 8 or more and had an IQR of 2 or more were considered to have high importance but a lack of
<table>
<thead>
<tr>
<th>Rank</th>
<th>Activity number</th>
<th>Abbreviated professional learning activity statement</th>
<th>Median</th>
<th>IQR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>School leaders work with staff to build a culture that values continuous learning, purposeful collaboration, and connections to research based practices.</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>As an emerging practitioner, teacher leaders must design tools for better understanding students’ learning needs and those tools must be implemented to collect evidence; thus, the evidence must be used in making data-driven decisions regarding curriculum, pedagogy, and goals.</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>Shared analysis of formative and summative student achievement data, direct support in understanding how to use this data to inform long and short-term instructional planning, support in understanding how to disaggregate data, and understand how to modify practices to target under-performing subgroups.</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>8</td>
<td>Developing consistent expectations with accountability at all levels.</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>12</td>
<td>The structure of the day should allow for teachers to collaborate during professional development/workshops.</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>18</td>
<td>Teachers and leaders must have the opportunity to learn a concept, practice a concept, receive feedback on their implementation of the concept, and then have a mechanism to report out the outcomes.</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>20</td>
<td>On-going, targeted, and embedded professional development on best instructional practices.</td>
<td>10</td>
<td>1.25</td>
</tr>
<tr>
<td>8</td>
<td>22</td>
<td>Professional learning communities (PLCs) where teachers collaborate around lesson design and student data.</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>9</td>
<td>23</td>
<td>Direct professional development opportunities aligned with the specific pedagogy associated with the grade level or content area; opportunities to reflect on personal practice, view (observe) and reflect on exemplars and best practices, and practice instructional strategies getting real time feedback.</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>10</td>
<td>26</td>
<td>School leaders and staff examine student achievement data, using various sources and multiple measures, and then do a gap analysis of expectations (standards) and performance of students along with gaps in teacher training.</td>
<td>10</td>
<td>1.25</td>
</tr>
<tr>
<td>Rank</td>
<td>Activity number</td>
<td>Abbreviated professional learning activity statement</td>
<td>Median</td>
<td>IQR</td>
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<tr>
<td>------</td>
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<td>------</td>
</tr>
<tr>
<td>11</td>
<td>37</td>
<td>Professional development for all staff.</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>12</td>
<td>38</td>
<td>Alignment of instructional assistance and support programs, including supports for English learners and those programs traditionally viewed as special education.</td>
<td>10</td>
<td>1.25</td>
</tr>
<tr>
<td>13</td>
<td>15</td>
<td>Professional learning activities shall incorporate continuous improvement cycles such as, Plan, Do, Study, Act (PDSA) is a problem-solving methodology that never ends and requires constant focus.</td>
<td>9.5</td>
<td>2</td>
</tr>
<tr>
<td>14</td>
<td>25</td>
<td>School leaders engage in learning how to become instructional/learning leaders from experts, mentors, and peer collaboration.</td>
<td>9.5</td>
<td>1</td>
</tr>
<tr>
<td>15</td>
<td>4</td>
<td>Examining student work consistently and constantly.</td>
<td>9</td>
<td>1</td>
</tr>
<tr>
<td>16</td>
<td>6</td>
<td>Realignment of fiscal and human resources to support implementation.</td>
<td>9</td>
<td>2</td>
</tr>
<tr>
<td>17</td>
<td>7</td>
<td>Targeted support in unpacking and understanding Common Core State Standards (CCSS) for associated grade level and content areas and grade levels above and below with structured support in translating grade level CCSSs to long term instructional plans.</td>
<td>9</td>
<td>2</td>
</tr>
<tr>
<td>18</td>
<td>11</td>
<td>Activities within the professional development day need to incorporate examples of how teachers can make minor tweaks and adjustments, such as Universal Design for Learning, in order to ensure students are engaged and provide formative data.</td>
<td>9</td>
<td>2</td>
</tr>
<tr>
<td>19</td>
<td>14</td>
<td>Professional learning shall be structured by implementation stages which include exploration, installation, initial implementation and full implementation stages.</td>
<td>9</td>
<td>2</td>
</tr>
<tr>
<td>20</td>
<td>19</td>
<td>Professional learning activities around instructional leadership.</td>
<td>9</td>
<td>2</td>
</tr>
<tr>
<td>21</td>
<td>33</td>
<td>The development of a shared vision between administrators, teachers, and principals of what implementation of standards looks like when students are engaging in the learning behaviors that illustrate the California state standards.</td>
<td>9</td>
<td>1.25</td>
</tr>
<tr>
<td>22</td>
<td>34</td>
<td>Implementation of a data process to look at implementation, expectations, and learning collectively such as Instructional Rounds or Phil Daro’s 5x8 card.</td>
<td>9</td>
<td>1</td>
</tr>
</tbody>
</table>
Table 8 (continued)

<table>
<thead>
<tr>
<th>Rank</th>
<th>Activity number</th>
<th>Abbreviated professional learning activity statement</th>
<th>Median</th>
<th>IQR</th>
</tr>
</thead>
<tbody>
<tr>
<td>23</td>
<td>13</td>
<td>Implementation teams shall guide an organization in identifying, refining and improving professional learning activities. As a result, the teams shall contain members that have broad, diverse perspectives and experiences to ensure equitable outcomes.</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>24</td>
<td>28</td>
<td>School leaders observe and give feedback to teachers and ensure peer observation is taking place.</td>
<td>8</td>
<td>2</td>
</tr>
</tbody>
</table>

consensus. The 14 professional learning activities that met these parameters for Round 3 are listed in Table 9. Five activities received an IQR of 3, indicating a lack of consensus regarding the activities’ degree of importance. Two of the five activities identified specific educational interventions by name. These references may not have been familiar to all expert panelists, which may have impacted the activities’ ratings.

**Research Question 3**

The third research question in this study was, “What is the likelihood of implementation of the professional learning activities that experts agree are necessary for LEAs to effectively implement California’s QPLS in alignment with the LCFF Priority 2?” During Round 2, the expert panelists were requested to rate the likelihood of implementation for the 38 professional learning activities on an 11-point scale of 0% to 100%. The scale was divided by increments of 10, with 0% indicating there was no likelihood of implementation and 100% indicating the highest likelihood of implementation. The median rank order for likelihood of implementation as determined in Round 3 is listed in Table 10. The range of median panel scores for likelihood of implementation in Round 3 was 40% to 80%. Frequency distribution tables for Round 2 and Round 3 are located in Appendix P.
### Table 9

**Round 3 Professional Learning Activity Findings of High Importance and a Lack of Consensus**

<table>
<thead>
<tr>
<th>Rank</th>
<th>Activity number</th>
<th>Abbreviated professional learning activity statement</th>
<th>Median</th>
<th>IQR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>17</td>
<td>Leadership drivers such as, adaptive, supportive and technical leadership, is in place and focused on fidelity and accountability measures.</td>
<td>9.5</td>
<td>2.25</td>
</tr>
<tr>
<td>2</td>
<td>10</td>
<td>Local education agencies must implement professional learning opportunities that incorporate theoretical knowledge and information, as well as the practical knowledge.</td>
<td>9</td>
<td>2.25</td>
</tr>
<tr>
<td>3</td>
<td>21</td>
<td>Instructional coaches provide demonstrations and support for teachers and teaching assistants.</td>
<td>9</td>
<td>2.25</td>
</tr>
<tr>
<td>4</td>
<td>24</td>
<td>Training in how to effectively partner with families.</td>
<td>9</td>
<td>2.25</td>
</tr>
<tr>
<td>5</td>
<td>27</td>
<td>School staff meet on a regular basis in professional learning teams by grade level or content. Leaders from each team meet with site and district leaders to share needs, ensure alignment with implementation of instruction targeted toward data identified student gaps in achievement, and share feedback from each team.</td>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td>6</td>
<td>29</td>
<td>Using John Hattie’s research, district leaders can provide teachers with support in the following professional development topics: Teacher efficacy, Close Reading, Asking high order questions, using sentence frames to help language learners create academic sentences, and focus on effective engagement strategies.</td>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td>7</td>
<td>32</td>
<td>Monitoring equity of access data to implementing the California state standards.</td>
<td>9</td>
<td>2.25</td>
</tr>
<tr>
<td>8</td>
<td>16</td>
<td>Organizational drivers, such as data systems and hospitable environments, shall be in place to reduce barriers.</td>
<td>8.5</td>
<td>2.25</td>
</tr>
<tr>
<td>9</td>
<td>30</td>
<td>Support student transitions to higher education and careers, including collaboration needed with higher education, career tech, and health and community support organizations.</td>
<td>8.5</td>
<td>2.25</td>
</tr>
<tr>
<td>10</td>
<td>31</td>
<td>Local Education Agencies shall engage in a process to plan a multi-year approach to focus content areas, general and specific pedagogy, and assessment.</td>
<td>8.5</td>
<td>3</td>
</tr>
<tr>
<td>11</td>
<td>35</td>
<td>The stakeholders need to engage in discussions about their learning, negotiate priorities and alignment with their goals.</td>
<td>8.5</td>
<td>2.25</td>
</tr>
</tbody>
</table>
Table 9 (continued)

<table>
<thead>
<tr>
<th>Rank</th>
<th>Activity number</th>
<th>Abbreviated professional learning activity statement</th>
<th>Median</th>
<th>IQR</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>36</td>
<td>Alignment of instructional materials and electronic resources.</td>
<td>8.5</td>
<td>3</td>
</tr>
<tr>
<td>13</td>
<td>5</td>
<td>Learning walks to stay connected with the implementation</td>
<td>8</td>
<td>3</td>
</tr>
<tr>
<td>14</td>
<td>9</td>
<td>Technology support for instruction, data, and assessment.</td>
<td>8</td>
<td>2.25</td>
</tr>
</tbody>
</table>

Table 10

**Round 3 Median Rank Order for Likelihood of Implementation of Professional Learning Activity Findings**

<table>
<thead>
<tr>
<th>Rank</th>
<th>Item</th>
<th>Median</th>
<th>IQR</th>
<th>Rank</th>
<th>Item</th>
<th>Median</th>
<th>IQR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>36</td>
<td>80%</td>
<td>2.5</td>
<td>20</td>
<td>17</td>
<td>60%</td>
<td>3.5</td>
</tr>
<tr>
<td>2</td>
<td>37</td>
<td>75%</td>
<td>3.5</td>
<td>21</td>
<td>18</td>
<td>60%</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>70%</td>
<td>3</td>
<td>22</td>
<td>21</td>
<td>60%</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>3</td>
<td>70%</td>
<td>2</td>
<td>23</td>
<td>23</td>
<td>60%</td>
<td>2.5</td>
</tr>
<tr>
<td>5</td>
<td>4</td>
<td>70%</td>
<td>2</td>
<td>24</td>
<td>25</td>
<td>60%</td>
<td>3.5</td>
</tr>
<tr>
<td>6</td>
<td>6</td>
<td>70%</td>
<td>4</td>
<td>25</td>
<td>26</td>
<td>60%</td>
<td>3</td>
</tr>
<tr>
<td>7</td>
<td>7</td>
<td>70%</td>
<td>2</td>
<td>26</td>
<td>27</td>
<td>60%</td>
<td>3</td>
</tr>
<tr>
<td>8</td>
<td>10</td>
<td>70%</td>
<td>3</td>
<td>27</td>
<td>29</td>
<td>60%</td>
<td>2.5</td>
</tr>
<tr>
<td>9</td>
<td>11</td>
<td>70%</td>
<td>3</td>
<td>28</td>
<td>34</td>
<td>60%</td>
<td>3</td>
</tr>
<tr>
<td>10</td>
<td>12</td>
<td>70%</td>
<td>3</td>
<td>29</td>
<td>38</td>
<td>60%</td>
<td>2</td>
</tr>
<tr>
<td>11</td>
<td>20</td>
<td>70%</td>
<td>1.5</td>
<td>30</td>
<td>13</td>
<td>55%</td>
<td>3</td>
</tr>
<tr>
<td>12</td>
<td>22</td>
<td>70%</td>
<td>2</td>
<td>31</td>
<td>19</td>
<td>55%</td>
<td>2.5</td>
</tr>
<tr>
<td>13</td>
<td>31</td>
<td>70%</td>
<td>4</td>
<td>32</td>
<td>28</td>
<td>55%</td>
<td>4</td>
</tr>
<tr>
<td>14</td>
<td>2</td>
<td>65%</td>
<td>2</td>
<td>33</td>
<td>30</td>
<td>55%</td>
<td>3</td>
</tr>
<tr>
<td>15</td>
<td>8</td>
<td>65%</td>
<td>3</td>
<td>34</td>
<td>32</td>
<td>55%</td>
<td>3.5</td>
</tr>
<tr>
<td>16</td>
<td>16</td>
<td>65%</td>
<td>3</td>
<td>35</td>
<td>35</td>
<td>55%</td>
<td>4</td>
</tr>
<tr>
<td>17</td>
<td>33</td>
<td>65%</td>
<td>2.5</td>
<td>36</td>
<td>5</td>
<td>50%</td>
<td>2.5</td>
</tr>
<tr>
<td>18</td>
<td>9</td>
<td>60%</td>
<td>2</td>
<td>37</td>
<td>14</td>
<td>50%</td>
<td>3</td>
</tr>
<tr>
<td>19</td>
<td>15</td>
<td>60%</td>
<td>3</td>
<td>38</td>
<td>24</td>
<td>40%</td>
<td>3</td>
</tr>
</tbody>
</table>

A high panel median rating with an IQR of 2 or less indicated consensus of the expert panel that there is a high likelihood of implementation of the particular professional learning activity. Table 10 shows that in Round 3, Activity 36, “alignment of instructional materials and electronic resources,” had the only rating in the 80% to
100% range. Fifty-five percent of the ratings were within the middle range of 40% to 60%. Forty-two percent of the ratings were in the 65% to 75% range. There were zero ratings provided for less than 40%. An IQR of 1 or 2 was reached for nine of the 38 activities, which indicates consensus on 24% of the research findings. Forty-four percent of the consensus was clustered in the 60% to 65% panel median scores for likelihood of implementation, and 56% of the consensus was gathered in the 70% panel median scores.

For this study, the professional learning activities that received a median score of 60% or higher were considered to have a high likelihood of implementation. Although 29 professional learning activities had a score of 60% or higher, only those activities that also had an IQR of 2 or lower were identified as having a high likelihood of implementation and consensus. Table 11 lists the professional learning activities that were selected as having a high likelihood of implementation for Round 3 and consensus among the expert panel. Nine professional learning activities met these parameters.

Five professional learning activities received a high rating for likelihood of implementation. Each activity received a median score of 70% and an IQR of 1 or 2. Activities 3, 22, and 4 focused on the significance of analyzing student data, Activity 7 addressed the analysis of California Common Core State Standards (CCSS), and Activity 20 highlighted the importance of “on-going, targeted, and embedded professional development on best instructional practices.”

For this study, the professional learning activities that received a median score of 40% percent or less were considered to have a low likelihood of implementation. One professional learning activity received a median score for Round 3 below 50%.
### Round 3 Professional Learning Activity Findings of High Likelihood of Implementation and Consensus

<table>
<thead>
<tr>
<th>Rank</th>
<th>Activity number</th>
<th>Abbreviated professional learning activity statement</th>
<th>Median</th>
<th>IQR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3</td>
<td>Shared analysis of formative and summative student achievement data, direct support in understanding how to use this data to inform long and short-term instructional planning, support in understanding how to disaggregate data, and understand how to modify practices to target under-performing subgroups.</td>
<td>70%</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>4</td>
<td>Examining student work consistently and constantly.</td>
<td>70%</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>7</td>
<td>Targeted support in unpacking and understanding Common Core State Standards (CCSS) for associated grade level and content areas and grade levels above and below with structured support in translating grade level CCSSs to long term instructional plans.</td>
<td>70%</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>20</td>
<td>On-going, targeted, and embedded professional development on best instructional practices.</td>
<td>70%</td>
<td>1.5</td>
</tr>
<tr>
<td>5</td>
<td>22</td>
<td>Professional learning communities (PLCs) where teachers collaborate around lesson design and student data.</td>
<td>70%</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>2</td>
<td>As an emerging practitioner, teacher leaders must design tools for better understanding students’ learning needs and those tools must be implemented to collect evidence; thus, the evidence must be used in making data-driven decisions regarding curriculum, pedagogy, and goals</td>
<td>65%</td>
<td>2</td>
</tr>
<tr>
<td>7</td>
<td>9</td>
<td>Technology support for instruction, data, and assessment.</td>
<td>65%</td>
<td>2</td>
</tr>
<tr>
<td>8</td>
<td>18</td>
<td>Teachers and leaders must have the opportunity to learn a concept, practice a concept, receive feedback on their implementation of the concept, and then have a mechanism to report out the outcomes.</td>
<td>60%</td>
<td>2</td>
</tr>
<tr>
<td>9</td>
<td>38</td>
<td>Alignment of instructional assistance and support programs, including supports for English learners and those programs traditionally viewed as special education.</td>
<td>60%</td>
<td>2</td>
</tr>
</tbody>
</table>

Activity 24, “training in how to effectively partner with families,” was the only activity to receive a rating of 40%. This rating indicates that the panelists foresaw the likelihood of
this activity being implemented in four out of 10, or fewer, instances. The activity also received an IQR of 3, highlighting a lack of consensus by the expert panelists.

**High Priority of Importance and Likelihood of Implementation of Professional Learning Activities**

The purpose of this Delphi study was to identify the professional learning activities that experts perceive are necessary for LEAs to effectively implement California’s QPLS in alignment with the LCFF Priority 2. Expert panelists helped to achieve this purpose by examining the degree of importance and likelihood of implementation for each of the 38 professional learning activities identified in Round 1.

The priority matrix in Figure 8 depicts a graphical representation of the interaction between panel median ratings for the importance and likelihood of implementation of professional learning activities reported in this study for Round 3. The matrix contains nine cells, with degree of importance on the vertical axis and likelihood of implementation on the horizontal axis. A 10-point scale indicates the values for importance with low on the bottom and high at the top. A 10-point scale indicates the values for likelihood of implementation with low on the right and high on the left. Within the nine cells, three arrows cross three cells each, which are representative of the high, medium, and low groupings. The nine-cell matrix is read from left to right, starting in the top left-hand corner with cell 1 and ending in the bottom right-hand corner with cell 9.

The high-priority cells in Figure 8 include 1, 2, and 4. The medium-priority cells include 3, 5, and 7. The low-priority cells include 6, 8, and 9. As a result, the cell in the
Figure 8. Priority matrix displaying Round 3 professional learning activity composite panel median ratings for importance and likelihood of implementation. The numbers in parentheses indicate the cell numbers.

The top left-hand corner of the matrix contains the professional learning activities that have the highest degree of importance and the highest likelihood of implementation. Conversely, the cell in the bottom right-hand corner of the matrix contains the professional learning activities that have the lowest degree of importance and the lowest likelihood of implementation.

For the purposes of this study, the professional learning activities with a median panel score of 8 or higher were considered to have a high degree of importance, 7.9-5.1
medium, and 5.0-1 low. A median value of 60% or higher was considered high for likelihood of implementation, 59%-45% medium, and 44% and below was considered a low likelihood of implementation. The panel median values selected for high, medium, and low importance and likelihood of implementation are aligned to the upper, middle, and lower quartiles of the priority matrix. Only the professional learning activities in the highest priority cells were considered for further research. The activities in the medium cells were determined by the panel to not have as high a degree of importance or likelihood of being implemented as those in the top priority. The expert ratings represented each individual panelist’s best judgement of each finding according to its degree of importance and likelihood of implementation. Although each professional learning activity was submitted by an expert who believed it to be important, if the activity did not receive a collective high judgement of importance and likelihood of implementation by a majority of expert panelists, it was determined to be less of a priority. As a result, activities that did not receive a collective high judgement of importance and likelihood of implementation were determined not to be a priority for the purposes of this study; however, they should not be discounted for future research.

Thirty-seven professional learning activities were considered to be of high priority in this study. Cell 1 of the priority matrix represents research findings that have a high degree of importance and high likelihood of implementation. Professional Learning Activities 1, 2, 3, 4, 6, 7, 8, 9, 10, 11, 12, 16, 17, 18, 20, 21, 22, 23, 25, 26, 27, 29, 31, 33, 34, 36, 37, and 38 fell into this category. Activities highlighted in cell 2 were rated high in degree of importance and medium in likelihood of implementation. Professional Learning Activities 5, 13, 14, 15, 19, 28, 30, 32, and 35 were included in cell 2. One
professional learning activity was categorized as high in importance and low in likelihood of implementation. Activity 24, “training in how to effectively partner with families,” was included in cell 3.

**Combined Importance and Likelihood of Implementation of Professional Learning Activities**

The Venn diagram in Figure 9 provides a graphical representation of the combined consensus regarding the highest degree of importance and highest likelihood of implementation of professional learning activities, listed in Table 6. The Venn diagram consists of overlapping circles that are representative of different sets of information. The overlapping of the two circles represents the information that both sets have in common. In Figure 9, the first circle represents consensus regarding the highest degree of importance, and the second circle represents consensus regarding the highest likelihood of implementation. The overlapping of the circles represents consensus among the panel of experts regarding both highest importance and highest likelihood of implementation.

Twenty-four professional learning activities received consensus on high rankings of importance. Nine professional learning activities received consensus on high rankings of likelihood of implementation. Eight professional learning activities received consensus on high rankings of importance and likelihood of implementation. Table 12 lists the research findings that received consensus on high rankings of importance and likelihood of implementation.
Three activities received a combined consensus from the panel of experts with a median score of 10 with an IQR between 1 and 2 for importance and a median score of 70% with an IQR between 1 and 2 for likelihood of implementation. Activity 22, “professional learning communities (PLCs) where teachers collaborate around lesson design and student data,” and Activity 3, “shared analysis of formative and summative student achievement data, direct support in understanding how to use this data to inform long and short-term instructional planning, support in understanding how to disaggregate data, and understand how to modify practices to target under-performing subgroups,” both focused on analysis of student data. The third highly rated activity for importance and likelihood of implementation, Activity 20, described the need for “on-going, targeted, and embedded professional development on best instructional practices.”
### Table 12

**Highest Rank Order of Panel Median Ratings for Combined Importance and Likelihood of Implementation**

<table>
<thead>
<tr>
<th>Rank</th>
<th>Activity number</th>
<th>Abbreviated professional learning activity statement</th>
<th>Median IQR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>22</td>
<td>Professional learning communities (PLCs) where teachers collaborate around lesson design and student data.</td>
<td>10 70% 2 2</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>Shared analysis of formative and summative student achievement data, direct support in understanding how to use this data to inform long and short-term instructional planning, support in understanding how to disaggregate data, and understand how to modify practices to target under-performing subgroups.</td>
<td>10 70% 1 2</td>
</tr>
<tr>
<td>3</td>
<td>20</td>
<td>On-going, targeted, and embedded professional development on best instructional practices.</td>
<td>10 70% 1.25 1.5</td>
</tr>
<tr>
<td>4</td>
<td>2</td>
<td>As an emerging practitioner, teacher leaders must design tools for better understanding students’ learning needs and those tools must be implemented to collect evidence; thus, the evidence must be used in making data-driven decisions regarding curriculum, pedagogy, and goals.</td>
<td>10 65% 2 2</td>
</tr>
<tr>
<td>5</td>
<td>38</td>
<td>Alignment of instructional assistance and support programs, including supports for English learners and those programs traditionally viewed as special education.</td>
<td>10 60% 1.25 2</td>
</tr>
<tr>
<td>6</td>
<td>18</td>
<td>Teachers and leaders must have the opportunity to learn a concept, practice a concept, receive feedback on their implementation of the concept, and then have a mechanism to report out the outcomes.</td>
<td>10 60% 1 2</td>
</tr>
<tr>
<td>7</td>
<td>7</td>
<td>Targeted support in unpacking and understanding Common Core State Standards (CCSS) for associated grade level and content areas and grade levels above and below with structured support in translating grade level CCSSs to long term instructional plans.</td>
<td>9 70% 2 2</td>
</tr>
<tr>
<td>8</td>
<td>4</td>
<td>Examining student work consistently and constantly.</td>
<td>9 70% 1 2</td>
</tr>
</tbody>
</table>

*Note.* I = importance; L = likelihood.
Two activities received a combined consensus from the panel of experts with a slightly lower median score of 9 with an IQR between 1 and 2 for importance and a median score of 70% with an IQR between 1 and 2 for likelihood of implementation. As a result, Activity 4, “examining student work consistently and constantly,” and Activity 7, “targeted support in unpacking and understanding Common Core State Standards (CCSS) for associated grade level and content areas and grade levels above and below with structured support in translating grade level CCSSs to long term instructional plans,” were determined to be of slightly less importance than Activities 22, 3, and 20 but equally as likely to be implemented.

Lastly, three activities received a combined consensus from the panel of experts with a median score of 10 with an IQR between 1 and 2 for importance and a slightly lower median score of 60%-65% with an IQR between 1 and 2 for likelihood of implementation. Activity 2, “as an emerging practitioner, teacher leaders must design tools for better understanding students’ learning needs and those tools must be implemented to collect evidence; thus, the evidence must be used in making data-driven decisions regarding curriculum, pedagogy, and goals,” received a median score of 10 with an IQR of 2 for importance and a median score of 65% with an IQR of 2 for likelihood of implementation. Activity 18, “teachers and leaders must have the opportunity to learn a concept, practice a concept, receive feedback on their implementation of the concept, and then have a mechanism to report out the outcomes,” and Activity 38, “alignment of instructional assistance and support programs, including supports for English learners and those programs traditionally viewed as special education,” received a median score of 10 with IQRs of 1 and 1.25, respectively, for
importance and a median score of 60% with an IQR of 2 for likelihood of implementation. These three activities were determined by the panel of experts to be of greatest importance but were believed to be the least likely to be implemented of the eight professional learning activities that received panel consensus for importance and likelihood of implementation.

Summary

The purpose of this Delphi study was to identify the professional learning activities that experts perceive are necessary for LEAs to effectively implement California’s QPLS in alignment with the LCFF Priority 2. A panel of 18 experts in the area of professional learning participated in this study. The study utilized a Delphi process to identify professional learning activities and bring about consensus regarding each activity’s degree of importance and likelihood of implementation according to the panel.

The Delphi process consisted of three rounds. Round 1 requested the panelists to respond to the question, “What professional learning activities do experts perceive are necessary for local education agencies to effectively implement California’s Quality Professional Learning Standards in alignment with the Local Control Funding Formula Priority 2 (State Standards)?” A total of 38 professional learning activities were identified in Round 1. In Round 2, expert panelists were requested to rank each professional learning activity by two factors: (a) degree of importance, using a scale from 1 to 10, with 10 being most important, and (b) likelihood of implementation, using a scale from 0% to 100%, with 100% being most likely to be implemented. The data from Round 2 were then analyzed to determine the panel’s median response rate for each
activity. In Round 3, panelists were asked to review and compare their ratings with the panel median rating for each professional learning activity from Round 2 and to take the opportunity to change their responses should they desire to do so.

There were 113 changes made to 34 research findings from Round 2 to Round 3. The panel members made increases to 67 ratings and decreases to 46 ratings from Round 2 to Round 3 for both degree of importance and likelihood of implementation. The largest number of changes resulted in small changes in value. There were 42 changes resulting in a 1- or 2-point increase or decrease in the value of degree of importance, and 56 changes resulted in a 10% or 20% increase or decrease in the value of likelihood of implementation. These changes resulted in two increases in the median rating for importance, three increases in the median rating for likelihood of implementation, and one decrease in the median rating for likelihood of implementation.

Thirty-seven professional learning activities were considered to be of high priority in this study. Twenty-four professional learning activities received consensus on high rankings of importance. Nine professional learning activities received consensus on high rankings of likelihood of implementation. Eight professional learning activities received consensus on high rankings of importance and likelihood of implementation. These activities were illustrated in a Venn diagram (Figure 9). Activities 1, 2, 3, 4, 6, 7, 8, 11, 12, 13, 14, 19, 23, 15, 18, 20, 22, 25, 26, 28, 33, 34, 37, and 38 attained full consensus by the expert panelists regarding their high degree of importance. Full consensus was reached by the expert panelists on the high likelihood of implementation for Activities 2, 3, 4, 7, 9, 18, 20, 22, and 38. Activities 2, 3, 4, 7, 18, 20, 22, and 38 attained full consensus by the expert panelists for importance and likelihood of implementation.
These 25 professional learning activities constitute the research findings that experts believe are necessary for LEAs to effectively implement California’s QPLS in alignment with the LCFF Priority 2.
CHAPTER V: FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

This chapter includes the purpose of the study, research questions, and a summary of the major findings. This chapter also highlights unexpected findings, the researcher’s conclusions, implications for future action, and recommendations for further research.

Purpose Statement

The purpose of this Delphi study was to identify the professional learning activities that experts perceive are necessary for local education agencies (LEAs) to effectively implement California’s Quality Professional Learning Standards (QPLS) in alignment with the Local Control Funding Formula (LCFF) Priority 2. The study also examined the degree of importance that the identified professional learning activities will have and those most likely to be implemented.

Research Questions

1. What professional learning activities do experts perceive are necessary for LEAs to effectively implement California’s QPLS in alignment with the LCFF Priority 2?
2. What degree of importance will the professional learning activities have on LEAs’ ability to effectively implement California’s QPLS in alignment with the LCFF Priority 2?
3. What is the likelihood of implementation of the professional learning activities that experts agree are necessary for LEAs to effectively implement California’s QPLS in alignment with the LCFF Priority 2?

Major Findings

To address Research Question 1, expert panelists were asked to identify, “What professional learning activities do experts perceive are necessary for LEAs to effectively
implement California’s QPLS in alignment with the LCFF Priority 2?” Thirty-eight professional learning activities were identified from the synthesis and summarization of the information provided. Twelve activities directly involved instructional staff, five were directed toward school leadership positions, and one emphasized effectively partnering with families. The remaining 20 activities focused on teaching methods and practices, data collection, technology integration, school finance, and school culture.

To address the second research question, the expert panel was asked to identify, “What degree of importance will the professional learning activities have on LEAs’ ability to effectively implement California’s QPLS in alignment with the LCFF Priority 2?” Panelists rated the degree of importance of the 38 professional learning activities on a 10-point Likert scale, with 1 indicating low importance and 10 indicating high importance. For this study, the professional learning activities that received a median score of 8 or higher and had an IQR of 2 or lower were considered to have high importance. The range of median panel scores for importance in Round 3 was 8 to 10. One hundred percent of the 38 professional learning activities received a median score of 8 or higher after Round 3, with 24 receiving an IQR of 1 or 2, signifying consensus of high importance. The 24 professional learning activities that the expert panel reached consensus on regarding high importance are listed below:

1. School leaders work with staff to build a culture that values continuous learning, purposeful collaboration, and connections to research based practices.

2. As an emerging practitioner, teacher leaders must design tools for better understanding students’ learning needs and those tools must be implemented
to collect evidence; thus, the evidence must be used in making data-driven decisions regarding curriculum, pedagogy, and goals.

3. Shared analysis of formative and summative student achievement data, direct support in understanding how to use this data to inform long and short-term instructional planning, support in understanding how to disaggregate data, and understand how to modify practices to target under-performing subgroups.

4. Developing consistent expectations with accountability at all levels.

5. The structure of the day should allow for teachers to collaborate during professional development/workshops.

6. Teachers and leaders must have the opportunity to learn a concept, practice a concept, receive feedback on their implementation of the concept, and then have a mechanism to report out the outcomes.

7. On-going, targeted, and embedded professional development on best instructional practices.

8. Professional learning communities (PLCs) where teachers collaborate around lesson design and student data.

9. Direct professional development opportunities aligned with the specific pedagogy associated with the grade level or content area; opportunities to reflect on personal practice, view (observe) and reflect on exemplars and best practices, and practice instructional strategies getting real time feedback.

10. School leaders and staff examine student achievement data, using various sources and multiple measures, and then do a gap analysis of expectations (standards) and performance of students along with gaps in teacher training.
11. Professional development for all staff.

12. Alignment of instructional assistance and support programs, including supports for English learners and those programs traditionally viewed as special education.

13. Professional learning activities shall incorporate continuous improvement cycles such as, Plan, Do, Study, Act (PDSA) is a problem-solving methodology that never ends and requires constant focus.

14. School leaders engage in learning how to become instructional/learning leaders from experts, mentors, and peer collaboration.

15. Examining student work consistently and constantly.

16. Realignment of fiscal and human resources to support implementation.

17. Targeted support in unpacking and understanding Common Core State Standards (CCSS) for associated grade level and content areas and grade levels above and below with structured support in translating grade level CCSSs to long term instructional plans.

18. Activities within the professional development day need to incorporate examples of how teachers can make minor tweaks and adjustments, such as Universal Design for Learning, in order to ensure students are engaged and provide formative data.

19. Professional learning shall be structured by implementation stages which include exploration, installation, initial implementation and full implementation stages.

20. Professional learning activities around instructional leadership.
21. The development of a shared vision between administrators, teachers, and principals of what implementation of standards looks like when students are engaging in the learning behaviors that illustrate the California state standards.

22. Implementation of a data process to look at implementation, expectations, and learning collectively such as Instructional Rounds or Phil Daro’s 5x8 card.

23. Implementation teams shall guide an organization in identifying, refining and improving professional learning activities. As a result, the teams shall contain members that have broad, diverse perspectives and experiences to ensure equitable outcomes.

24. School leaders observe and give feedback to teachers and ensure peer observation is taking place.

To address the third research question, the expert panel was asked to identify, “What is the likelihood of implementation of the professional learning activities that experts agree are necessary for LEAs to effectively implement California’s QPLS in alignment with the LCFF Priority 2?” Panelists rated the likelihood of implementation for the 38 professional learning activities on an 11-point scale of 0% to 100%. For this study, a high panel median rating of 60% or higher with an IQR of 2 or less indicated consensus of the expert panel that there is a high likelihood of implementation of the particular professional learning activity. Nine of the 38 activities met these parameters, indicating consensus on 24% of the research findings. The nine professional learning activities that the expert panel reached consensus on regarding a high likelihood of implementation are listed below:
1. Shared analysis of formative and summative student achievement data, direct
   support in understanding how to use this data to inform long and short-term
   instructional planning, support in understanding how to disaggregate data, and
   understand how to modify practices to target under-performing subgroups.

2. Examining student work consistently and constantly.

3. Targeted support in unpacking and understanding Common Core State
   Standards (CCSS) for associated grade level and content areas and grade
   levels above and below with structured support in translating grade level
   CCSSs to long term instructional plans.

4. On-going, targeted, and embedded professional development on best
   instructional practices.

5. Professional learning communities (PLCs) where teachers collaborate around
   lesson design and student data.

6. As an emerging practitioner, teacher leaders must design tools for better
   understanding students’ learning needs and those tools must be implemented
   to collect evidence; thus, the evidence must be used in making data-driven
   decisions regarding curriculum, pedagogy, and goals.

7. Technology support for instruction, data, and assessment.

8. Teachers and leaders must have the opportunity to learn a concept, practice a
   concept, receive feedback on their implementation of the concept, and then
   have a mechanism to report out the outcomes.
9. Alignment of instructional assistance and support programs, including supports for English learners and those programs traditionally viewed as special education.

A priority matrix (see Figure 8 in Chapter IV) was used to depict a graphical representation of the interaction between panel median ratings for the importance and likelihood of implementation of professional learning activities reported in this study for Round 3. Thirty-seven professional learning activities were considered to be of high priority in this study. Professional Learning Activities 1, 2, 3, 4, 6, 7, 8, 9, 10, 11, 12, 16, 17, 18, 20, 22, 23, 25, 26, 29, 31, 33, 34, 36, 37, and 38 fell into this category. Professional Learning Activities 5, 13, 15, 19, 28, 30, 32, and 35 were rated high in degree of importance and medium in likelihood of implementation, and only Activity 24 was categorized as high in importance and low in likelihood of implementation.

A Venn diagram (see Figure 9 in Chapter IV) was utilized to show a graphical representation of the intersection between consensus regarding the highest degree of importance and consensus regarding the highest likelihood of implementation. Eight professional learning activities received consensus on high rankings of importance and likelihood of implementation. These activities are listed below:

1. Professional learning communities (PLCs) where teachers collaborate around lesson design and student data.

2. Shared analysis of formative and summative student achievement data, direct support in understanding how to use this data to inform long and short-term instructional planning, support in understanding how to disaggregate data, and understand how to modify practices to target under-performing subgroups.
3. On-going, targeted, and embedded professional development on best instructional practices.

4. As an emerging practitioner, teacher leaders must design tools for better understanding students’ learning needs and those tools must be implemented to collect evidence; thus, the evidence must be used in making data-driven decisions regarding curriculum, pedagogy, and goals.

5. Alignment of instructional assistance and support programs, including supports for English learners and those programs traditionally viewed as special education.

6. Teachers and leaders must have the opportunity to learn a concept, practice a concept, receive feedback on their implementation of the concept, and then have a mechanism to report out the outcomes.

7. Targeted support in unpacking and understanding Common Core State Standards (CCSS) for associated grade level and content areas and grade levels above and below with structured support in translating grade level CCSSs to long term instructional plans.

8. Examining student work consistently and constantly.

**Unexpected Findings**

The researcher found one unexpected finding following the data collection process for Round 2. Although the researcher perceived that the expert panel would place a high value on professional learning activities within educational settings based on the panelists’ voluntary commitment to participate in this study, the researcher did not anticipate the high importance ratings that were provided for 100% of the 38 activities
that resulted from the synthesis and summarization of the data for this study. For the purpose of this study, a panel median score of 8 was considered to indicate high importance. Four activities received a panel median score of 8, five activities received a panel median score of 8.5, 14 activities received a panel median score of 9, three activities received a panel median score of 9.5, and 12 activities received a panel median score of 10. In summary, it was unexpected and surprising that every expert panelists would provide a high-importance rating to all 38 professional learning activities.

Conclusions

During the 20th and 21st centuries, three major events highlighted the impact of globalization on the U.S. economy. First, income inequality grew at an exponential rate (Davidson, 2012; Goldin & Katz, 2009). Second, there was a shift in the race between technological change and education, and for the first time, innovations in technology surpassed those in education (Goldin & Katz, 2009). Lastly, there was growing awareness of international economic and educational competition with other nations, and in some instances, the United States was being surpassed in productivity and attainments (National Commission on Excellence in Education, 1983). These events directed national attention to the public school system and brought into question whether the general public was obtaining the type of preparation, skills, and training that were necessary to build a competitive and civic-minded population.

As a result, over the next 30 years, public education reforms in academic standards, accountability systems, and school finance were undertaken at both the federal and state levels. However, many researchers agree that the most valuable resource for positively affecting the outcomes for students is teachers (Darling-Hammond et al., 2010;
Levine, 2010; Manley, 2013; Merriman & Nicoletti, 2008; National Commission on Excellence in Education, 1983; National Commission on Teaching & America’s Future, 1996; Tyack & Cuban, 1995). Research has also shown that in order for teachers to be a sustainable valuable resource for students over time, teachers must continuously engage in learning opportunities and evaluate their practices (CDE, 2012; Darling-Hammond et al., 2001; Joyce & Calhoun, 2015; Levine, 2010; Manley, 2013; Merriman & Nicoletti, 2008; National Commission on Teaching & America’s Future, 1996).

This Delphi study was designed to identify the professional learning activities that experts perceive are necessary for LEAs to effectively implement two recent reforms to California’s public education system: (a) California’s QPLS and (b) the LCFF Priority 2. Based on the research findings and information gleaned from the literature review, the researcher drew seven conclusions. The conclusions infer a deeper understanding of professional learning activities and their impact on LEAs and instructional staff.

Conclusion 1

Professional development has long been defined as the strategy used by schools to ensure that instructional staff continue to increase their knowledge and strengthen their practice throughout their careers (Darling-Hammond et al., 2009; Fenstermacher & Berliner, 1985; Mizell, 2010). Further, research has shown that instructional staff are more likely to engage in the practice of professional development if they are involved during the planning stages in determining “the what, who, how, why, when, and where of their learning” (Dunkle, 2012, p. 81), rather than just having information available to them (Cochran-Smith & Lytle, 2009; Lieberman & Miller, 2011; Lindsey et al., 2014; Manley, 2013). Yet, there is evidence to show that in many professional development
settings and during implementation phases of applying new skills, teachers in America’s public schools are typically working in isolation from their colleagues (Buczynski & Hansen, 2010; Dunkle, 2012).

In this study, the expert panelists collectively judged the need for professional learning opportunities to incorporate collaboration among instructional staff, emphasizing the opportunity to discuss lesson design and student data. Collaborating with colleagues on analyzing curriculum, designing instructional lessons, and evaluating student performance data affords instructional staff the opportunity to learn from one another and build a culture in which constructive feedback is welcomed. Research from countries such as Finland, Japan, and Singapore, all of which have high student performance and achievement, supports this conclusion and highlights the benefit of expanding these collaborative efforts to conducting action research, observing colleagues and other school sites, and pursuing personal professional development opportunities (Fullan & Hargreaves, 2012). Therefore, regardless of the professional learning focus area, it can be concluded that the activity should include collaboration among participants.

**Conclusion 2**

Analysis of formative and summative student achievement data and student work samples, in collaborative professional learning settings, was collectively judged to be of high importance and likely to be implemented. This finding aligns with the guidance outlined in the QPLS, which stated that “quality professional learning uses varied sources and kinds of information to guide priorities, design, and assessments” (CDE, 2015c, p. 7). The expert panelists further agreed that the analysis of data and work samples should inform short- and long-term instructional planning and modification of instructional
practices to target underperforming subgroups of students. Based on this research finding, it can be concluded that the type of data to be analyzed by instructional staff must be well defined and provided during collaborative professional learning activities.

**Conclusion 3**

Providing ongoing, targeted, and embedded professional development on best instructional practices was clearly defined as a high priority for California’s LEAs. Research has pointed to the ineffectiveness of “one-shot workshops” (CDE, 2012, p. 16) and emphasized that “teachers learn just as students do: by studying, doing, and reflecting; by collaborating with other teachers; by looking closely at students and their work; and by sharing what they see” (Darling-Hammond et al., 2001, p. 18). As a result, when school sites and district leadership prioritize ongoing, targeted, and embedded collaborative professional learning opportunities, engagement and effectiveness of instructional staff will increase.

**Conclusion 4**

Designing tools that allow for a better understanding of student learning needs was considered to be a critical element of effective professional development activities. The expert panel specifically identified teacher leaders as the individuals who should engage in this activity. This research finding supports many theories of change that highlight that the institutional culture is a key element of the change process that must be given sufficient attention and that change must be guided by a coalition of members from within the culture (Billig, 2015; W. W. Burke, 2002; Kotter, 2012). Consequently, it can be concluded that within a school setting, identifying key members of the instructional staff as teacher leaders will improve professional learning based on identifying and
understanding student needs. These instructional leaders shall oversee the process of designing and refining tools that will be used by all instructional staff to guide instruction, collect data on student performance and engagement, and focus debrief conversations to foster continuous growth.

Conclusion 5

The alignment of instructional assistance and support programs, including supports for English language learners and special education, was judged to be an important component of professional learning activities. This research finding supports the efforts of state policymakers and the California Department of Education (CDE) to provide additional monetary resources to support instructional staff to meet the needs of the subgroups of English language learners, foster youth, and low-income students in the LCFF. Furthermore, special education has historically had an additional funding stream of state and federal dollars.

Although additional resources are often necessary to make professional development and other opportunities available to staff in order to implement reforms, there is evidence in research stating that an increase in resources is not sufficient. In fact, culture is most important for effectively implementing organizational change because of its powerful influence on human behavior (Billig, 2015; W. W. Burke, 2002). Therefore, the alignment of instructional assistance and support programs requires a cultural expectation that all educators, regardless of which students they are assigned to serve, shall have a collective responsibility to provide all children with the supports they need to maximize their development and potential. As a result, it can be concluded that all instructional staff should engage in collaborative professional learning activities that
focus on supporting subgroups of the student population and strategies to make instruction more accessible to them.

**Conclusion 6**

The expert panel identified the process of understanding and unpacking CCSS as a highly valued activity for instructional staff to engage in during professional development opportunities. Further, the panelists judged extensive knowledge of assigned instructional grade-level CCSS, as well as those for the grade level below and above, as important for empowering teachers to practice long-term instructional planning. Consequently, it can be concluded that collaborative professional development activities designed to facilitate grade-level analysis of CCSS and the creation of individual student instructional plans will better prepare teachers for long-term instructional planning and improvement. Instructional staff shall initially collaborate within grade-level teams and then collaborate with instructional teams in the grade level below and above their assigned instructional grade level.

**Conclusion 7**

This study’s eight research findings, as identified by the expert panel, each require the commitment of various resources; however, the resource that is consistent across all findings is time. Although few educators would dispute that time is a valuable resource, many would agree that it may be one of the most difficult resources to materialize, as there are only 8 hours in a work day. As a result, it can be concluded that instructional strategies provided in ongoing collaborative professional learning activities are more likely to be implemented and sustained over time. This creates consistent opportunities in instructional staff’s schedules to engage in collaborative professional development and
also allows for reasonable amounts of information to be shared regularly rather than overwhelming amounts of information shared inconsistently. A second conclusion, based on the resource of time, is that collaborative professional learning activities should be embedded within the school day whenever possible. Examples of practice-embedded, collaborative professional learning may include, but are not limited to, instructional observations, brief and targeted opportunities to discuss lesson implementation with an instructional peer or coach, and analysis of student work samples with an instructional peer or coach.

**Implications for Action**

Given the research findings in this study and the conclusions drawn by the researcher, the following actions are recommended for LEAs so that they may effectively implement California’s QPLS in alignment with LCFF Priority 2:

1. School site and district administrators should promote and model a school culture that values (a) a willingness to engage in collaborative activities with colleagues and administration, (b) an eagerness to review current and historical caseload performance data, and (c) enthusiasm to adjust professional practices in order to increase student engagement and continuously evaluate opportunities to increase student performance.

2. School site administrators, in collaboration with instructional staff and district leaders, should develop a 2-year strategic professional development plan. The plan shall align with the school site and district Local Control Accountability Plan (LCAP) priorities and specify a weekly schedule for engaging instructional staff in practice-embedded and nonembedded collaborative activities. In addition, based on the results from the expert panel, the activities outlined in the strategic plan must allow time for the
teachers to learn a concept, practice the concept, receive feedback on their implementation practice, and share their conclusions with colleagues. This process directly complements the requirements for LEAs to design LCAPs in order to receive state and federal public funds as outlined within the LCFF.

3. School site administrators, in collaboration with teacher leaders and district leaders, should identify the formative and summative data that shall be used to evaluate student achievement. In addition, site and district administrators, as well as teacher leaders, shall model the data evaluation process.

4. School site administrators, in collaboration with teacher leaders and district leaders, should facilitate grade-level analysis of CCSS and the creation of individual student instructional plans. Instructional staff shall initially collaborate within grade-level teams, based on the grade level for which they are assigned to provide instruction, and then collaborate with instructional teams in the grade level below and above their assigned instructional grade level.

5. School site administrators, in collaboration with teacher leaders and district leaders, should engage in collaborative professional learning activities with all instructional staff that focus on analyzing student achievement and accessibility of instruction to subgroups of the student population.

6. California state policymakers should consider enacting statewide policy which would allocate time, in a traditional school calendar, to focus on collaborative professional learning activities for all instructional staff. In addition, the policy should specify a direct funding source.

7. Educator preparation programs should require teacher and administrator mastery of
formative, summative, and student-work-sample data analysis processes. Teacher and administrator preparation should also include practical experience in designing instructional tools that will inform their data analysis processes.

Recommendations for Further Research

Based on the research findings and limitations of this study, the researcher recommends further research in the following areas in order to expand the understanding of professional learning activities in educational settings:

1. A replication of this study using a different panel with the same criteria would further clarify if the results of this study are representative of the larger population of California practical and theoretical experts in the area of education and adult professional learning activities.

2. The results of this study highlighted that the expert panel reached consensus regarding eight professional learning activities as have both high importance and a high likelihood of implementation. It is recommended that a mixed methods research study be conducted to further examine the perceptions of instructional staff and/or administration regarding these eight professional learning activities.

3. This study identified a body of professional learning activities and strong agreement on their importance by an expert panel. The study did not, however, provide data on the effectiveness of these activities. It is recommended that further research be conducted to identify the effectiveness of specific professional learning activities that are identified to have high importance.

4. The expert panel for this study identified 29 professional learning activities as having a high likelihood of implementation; however, the panel only attained consensus on
eight of those activities. It is recommended that a study be conducted to identify the barriers to the implementation of professional learning activities and what support is needed to overcome those barriers.

5. It is recommended that a phenomenological study be conducted at two or more school sites to examine the experiences and perceptions of teachers when engaging in professional learning activities at their schools of employment.

6. Lastly, it is recommended that a Delphi study be conducted to identify the state education policy initiatives that would likely increase the number of local education agencies which would implement the eight professional learning activities identified in this study.

**Concluding Remarks and Reflections**

When interviewing for my first teaching position, I was asked, “What motivates you as an educator?” At the time, the question reminded me of a quote by Mahatma Gandhi: “Live as if you were to die tomorrow. Learn as if you were to live forever.” As a school director, I continue to incorporate this question into teacher interviews today. The most common responses focus on the individuals’ ability to solicit student engagement and achievement.

This research study began with a passion to better understand what motivates educators to be lifelong learners. The study was designed to consider recent guidance provided by the CDE on quality professional learning standards for educators, new state achievement standards, and a new public education funding model. After completion of this research study, I firmly believe that while standards and resources set the landscape for instructional practices, the underlying motivator for teacher engagement and
achievement lies in one’s ability to measure and understand student engagement and achievement. Further, the research findings from this study highlight that collaborative professional learning activities can facilitate the opportunity to gain this understanding.
REFERENCES


*Futures, 24*(3), 232-250.


## APPENDIX A

### Synthesis Matrix

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APPENDIX B

Invitation to Participate in the Delphi Study

Date

Name
Address

Dear Mr./Mrs./Ms./Dr.

I hope this email finds you well.

I am a doctoral candidate at Brandman University. I am also a special education director at a charter management organization in Sacramento, California. I am conducting a Delphi study for my dissertation on which adult professional learning activities provide for effective implementation of California’s Quality Professional Learning Standards in alignment with California’s academic content and performance standards. This study will ask a panel of experts with expertise and experience in education and adult professional learning to identify activities that may improve the implementation of California’s Quality Professional Learning Standards in alignment with California’s academic content and performance standards and the likelihood of implementation.

You have been identified as an “expert” in education and adult professional learning and I would like to invite you to be a member of this expert panel. The Delphi study will consist of three rounds of electronic questionnaires and each round shall take approximately 20-30 minutes to complete.

Following receipt of this letter, I will be contact you via phone to further explain specifics of the study and answer any questions you may have. In addition, at that time, I would like to inquire if you have recommendations for other experts in education and adult professional learning that may be interested in participating on this panel. Thank you for your consideration and I look forward to speaking with you.

Sincerely,

Sadie Pinotti
Doctoral Candidate
Brandman University
APPENDIX C

List of Delphi Expert Panelists

1. Dr. Vicki Barber  
   Co-Executive Director  
   California Special Education Task Force  
   Sacramento County, California

2. Mrs. Ellen Barger  
   Assistant Superintendent, Curriculum & Instruction  
   Santa Barbara County Education Office  
   Santa Barbara County, California

3. Dr. James Brascia  
   Superintendent  
   San Luis Obispo County Office of Education  
   San Luis Obispo County, California

4. Mrs. Maureen Burness  
   Task Force Member  
   Educator Excellence Task Force  
   Sacramento County, California

5. Dr. Karen Chiechi  
   Induction Director  
   Sutter County Office of Education  
   Sutter County, California

6. Mr. John Danner  
   CEO/Founder  
   Zeal Learning  
   San Francisco County, California

7. Dr. Melissa Farrar  
   Director of Professional Development and Education Technology  
   Fairfield-Suisun Unified School District  
   Solano County, California

8. Mrs. Melissa Ferrante  
   Inclusion Specialist  
   Sacramento Unified School District  
   Sacramento County, California
9. Mrs. Deanna Keulian
   Administrator, Educational Services Division
   Desert Sands Unified School District
   Riverside County, California

10. Mrs. Angie Lind
    Senior Director Curriculum, Instruction & Accountability
    El Dorado County Office of Education
    El Dorado County, California

11. Dr. Nancy Lynch
    Superintendent
    Reed Union School District
    Marin County, California

12. Dr. Julie Monet
    Professor/Department Chair
    California State University, Chico
    Butte County, California

13. Mrs. Sarah Notch
    Coordinator of Special Services
    Freemont Unified High School District
    Santa Clara County, California

14. Dr. Kristy Pruitt
    Coordinator of Teacher Education
    Fortune School of Education
    Sacramento County, California

15. Mr. Kevin Schaefer
    Director of Program Support
    El Dorado County Charter Special Education Local Plan Area (SELPA)
    El Dorado County, California

16. Dr. Erin Studer
    Executive Director
    Chime Charter School
    Los Angeles County, California

17. Mrs. Genevieve Thomas
    Vice President of Integrated Special Education
    Rocketship Education
    Santa Clara County, California
18. Mrs. Terry Winig  
  District Superintendent, Retired  
  Buckeye School District  
  El Dorado County, California
Dear Expert Panelist:

Thank you for your interest and agreement to participate in this Delphi study. The study is titled, *The Effect of Professional Learning Activities on Implementation of California’s Quality Professional Learning Standards in Alignment With the Local Control Funding Formula Priority 2.*

This study will request a panel of identified experts with expertise and experience in education and adult professional learning to first identify professional learning activities which experts perceive are necessary for local education agencies to effectively implement California’s Quality Professional Learning Standards in alignment with the Local Control Funding Formula Priority Two (2). Secondly, the panel of identified experts will be asked to rate each activity’s degree of importance and likelihood of implementation.

**Delphi Study Process**

Three rounds of electronic questionnaires are anticipated for this Delphi study process:

1. The first questionnaire will request that you identify the professional learning activities which are necessary for local education agencies to effectively implement California’s Quality Professional Learning Standards in alignment with the Local Control Funding Formula Priority Two.
2. The second questionnaire will list the responses from the entire expert panel and request that you rate each response regarding its degree of importance and likelihood of implementation.
3. The third questionnaire will provide you with the feedback from questionnaire number two on your responses as well as the interquartile mean for the entire expert panel. You will be requested to review the feedback and provided with an opportunity to change your original responses. Lastly, you will asked to provide written comments on any of the activities that are of particular significance.

Please note: An additional round may be necessary if consensus is not attained.
**Delphi Study Dates**

This Delphi study is anticipated to be conducted from Monday, January 30th to Friday, March 3rd. Each round, describe above, is scheduled to be conducted for one work week with a five day break in between each round. While the process is intended to be conducted quickly, there is some flexibility built into the timeline to allow for any unforeseen challenges which may arise and the rate of response from all panelists.

**Delphi Study Requirements**

To ensure the validity and reliability of this study, expert panelists are request to review the following requirements of a Delphi study and confirm your willingness and ability to participate:

1. A key feature of the Delphi process is that each round shall be structured in a way to ensure communication between the expert panelists is anonymous. Your name will not be shared with other members of the expert panel and it is requested that you do not discuss your participation on the panel until the study is complete.

   You have also been assigned the following three digit code: XXX. You will be requested to provide this code during each survey.

2. The selection process and selection criteria for this study has been outlined to ensure that the chosen expert panelists are qualified to identify professional learning activities and rank both the degree of importance and likelihood of implementation. As a result, you are assumed to have the necessary expertise and experience to effectively contribute to this study.

3. For each round, detailed instructions will be provided to the panelists by the researcher to guide the process.

4. The anticipated time needed to complete each round should range from twenty to thirty minutes. The panelists prompt responses are greatly appreciated and will help ensure the timely completion of the process.

5. Email will be utilized to communicate with panelist.

6. Survey Monkey will be utilized to gather the panelist’s responses. The response survey for each round will be sent to you as a link within the body of an email.

7. All computer networks, email systems, and associated internet browsers are compatible with Survey Monkey, however panelists are requested to please contact the researcher as soon as possible if they experience difficulty in accessing the forms.
8. At the conclusion of the study, each panelists will be provided with a copy of the results of the study.

9. All questions or concerns should be directed to the researcher, Sadie Pinotti at spinotti@mail.brandman.edu. I will make every effort to return your email within 24 hours.

**Consent to Participate**

Prior to distribution of the questionnaires, the researcher must obtain your consent to participate in this research study. Please use the following link to provide your consent electronically: https://www.surveymonkey.com/r/Consent-to-Participate

The Brandman University Bill of Rights document is also attached to this memo for your review and information.

Finally, if you have questions or concerns regarding the information provided in this memo or the research study, please contact Sadie Pinotti at spinotti@mail.brandman.edu.

Thank you.

Sadie Pinotti
Doctoral Candidate
Brandman University
APPENDIX E

Consent to Participate in Research

1. Introduction

Your participation in a research study is being requested because you meet the criteria of an expert panelist in the area of education and adult professional learning activities. The study, *The Effect of Professional Learning Activities on Implementation of California’s Quality Professional Learning Standards in Alignment With the Local Control Funding Formula Priority 2*, is being conducted by Sadie Pinotti M.A., a doctoral student with Brandman University. The results of this study will contribute to my dissertation.

2. Purpose of the Study

The purpose of this Delphi study is to identify the professional learning activities that experts perceive are necessary for local education agencies to effectively implement California’s Quality Professional Learning Standards in alignment with the Local Control Funding Formula Priority Two (2). The study will also examine the degree of importance for each identified professional learning activity and those most likely to be implemented. This study will be collecting data from 23 expert panelists who are either theorists or practitioners in education and professional learning activities.

3. Participant Identification

For the duration of the data collection procedures of this study, each participant will use a three digit code for identification purposes. The researcher will keep the identifying codes safe-guarded in a locked file drawer to which the researcher will have sole access.

1. Please enter your three digit code below.

Please note: This code was provided in the Consent to Participate email sent on January 22nd.
4. Research Procedures

The Delphi research design of this study will utilize three electronic questionnaires to collect data over the course of three rounds. It is anticipated that panelists will be able to complete each round in no more than thirty (30) minutes. The proposed timeline for this study is provided below:

1. Round One (January 25-February 1)--The first questionnaire will request that you review the Quality Professional Learning Standards and identify the professional learning activities that are necessary for local education agencies to effectively implement the standards in alignment with the Local Control Funding Formula Priority 2.

2. Round Two (February 6-10)--The second round will list the responses from the entire panel of experts and ask you to identify the degree of importance for each activity and its likelihood for implementation.

3. Round Three (February 15-22)--The third round will provide you with feedback on your responses from the panelists in round two. You will be requested to review the feedback and determine whether or not you would like to change your original responses. You will also be request to provide written comments on any of the activities that are of particular interest to you.

The final results of the study will be sent of all panel members.

5. Potential Risks and Discomforts

Participation in this study requires minimal risk of participants. A key feature of the Delphi process is each round shall be structured in a way to ensure communication between the expert panelists is anonymous. However, the researcher acknowledges that the expert panel may experience minimal discomfort when responding to the questionnaires.

6. Potential Benefits to Participation

The data collected during each round of the Delphi study should prove to be informative and valuable for panel members professionally and, in some circumstances, personally. In addition, the results of this study will provide California educators with recommended activities which could lead to effective implementation of California’s Quality Professional Learning Standards in alignment with Local Control Funding Formula, Priority 2.
7. Researcher’s Contact Information

The researcher, Sadie Pinotti, may be contacted at any time if there are questions or concerns regarding this study. Sadie's contact email is spinotti@mail.brandman.edu and her personal cell phone number is 209.256.3944.

You may also contact the researcher’s dissertation chair, Dr. DeVore at ddevore@brandman.edu or 623-293-2421.

Sadie and Dr. DeVore will make every effort to respond within 24 hours.

8. Participation Withdrawal

I understand that I may refuse to participate in or I may withdraw from this study at any time without any negative consequences. Also, the investigator may stop the study at any time. I also understand that no information that identifies me will be released without my separate consent and that all identifiable information will be protected to the limits allowed by law. If the study design or the use of the data is to be changed I will be so informed and my consent obtained. I understand that if I have any questions, comments, or concerns about the study or the informed consent process, I may write or call the Office of the Vice Chancellor Academic Affairs, Brandman University, 16355 Laguna Canyon Road, Irvine, CA 92618 Telephone (949) 341-7641. I acknowledge that I have received a copy of this form and the Research participant’s Bill of Rights.

2. I have reviewed and understand my rights as a research participant. By selecting the “agree” button you are indicating that you have read the informed consent form and the information in this document and that you voluntarily agree to participate.

If you do not wish to participate in the survey, you may decline participation by clicking on the “disagree” button.

If you have additional questions regarding your participation and would like to have the researcher contact you, please select the “contact” button.

☐ AGREE
☐ DISAGREE
☐ CONTACT. I would like the researcher to contact me to discuss my participation further.
APPENDIX F

Delphi Study Initial Test E-mail

Thank you for agreeing to participate in this Delphi study which is designed to identify professional learning activities which experts perceive are necessary for local education agencies to effectively implement California’s Quality Professional Learning Standards in alignment with the Local Control Funding Formula Priority Two (2).

This is an initial test to simulate the surveys which panelists will be utilizing in each of the three rounds necessary to complete the Delphi process. The survey can be accessed by using the following link: https://www.surveymonkey.com/r/Initial-Test-Survey

Please respond to each question and submit the form at the bottom of the page by Wednesday, January 25.

Thank you again for your participation and if you have questions or concerns, I can be reached at spinotti@mail.brandman.edu.

Sadie Pinotti
Doctoral Candidate
Brandman University
APPENDIX G

Delphi Study Initial Test

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<th>Delphi Study Initial Test</th>
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<td>1. Instructions</td>
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Thank you for agreeing to participate in this Delphi study which is designed to identify professional learning activities which experts perceive are necessary for local education agencies to effectively implement California’s Quality Professional Learning Standards in alignment with the Local Control Funding Formula Priority Two (2).

This is an initial test to simulate the forms which panelists will be utilizing in each of the three rounds necessary to complete the Delphi process.

Please respond to each question and submit the form at the bottom of the page by (insert date).

1. Please provide your contact information:
   - Name: [ ]
   - County: [ ]
   - Email Address: [ ]
   - Phone Number: [ ]

2. Will you be available to participate in all three rounds of this Delphi study during the months of October and November?
   - Yes [ ]
   - No [ ]

3. Did you experience difficulty in accessing this survey?
   - Yes [ ]
   - No [ ]

If you marked “Yes”, please explain:

[ ]

4. Please use the space below for questions, concerns, or additional comments regarding this study:

[ ]
APPENDIX H

Delphi Study Round 1 E-mail

Date: January 30, 2017
To:
From: Sadie Pinotti
Subject: Round One Questionnaire
Three Digit Participant Code: XXX

Thank you for agreeing to participate in this Delphi study which is designed to identify professional learning activities which experts perceive are necessary for local education agencies to effectively implement California’s Quality Professional Learning Standards in alignment with the Local Control Funding Formula Priority Two (2).

This is the first of three rounds which panelists will participate in to complete the Delphi process. The Round One Questionnaire can be accessed by using the following link: https://www.surveymonkey.com/r/Round_One_Questionnaire

Please review California’s Quality Professional Learning Standards (attached), respond to the survey question, and submit the survey by Friday, February 3rd.

Thank you again for your participation and if you have questions or concerns, I can be reached at spinotti@mail.brandman.edu.

Sadie Pinotti
Doctoral Candidate
Brandman University
APPENDIX I

Delphi Study Round 1 Questionnaire

Instructions

Thank you for agreeing to participate in this Delphi study which is designed to identify professional learning activities which experts perceive are necessary for local education agencies to effectively implement California’s Quality Professional Learning Standards in alignment with the Local Control Funding Formula Priority Two (2).

This is the first of three questionnaires which panelists will be utilizing to complete the Delphi process. Please respond to each question and submit the form at the bottom of the page by Friday, February 3, 2017.

1. Please provide your three digit identification code:

2. Please respond to the following question, *What professional learning activities do experts perceive are necessary for local education agencies to effectively implement California’s Quality Professional Learning Standards in alignment with the Local Control Funding Formula Priority 2 (State Standards)?*
Date: February 20, 2017
To: 
From: Sadie Pinotti  
Subject: Round Two Questionnaire 
Three Digit Participant Code: XXX

Thank you for agreeing to participate in this Delphi study which is designed to identify professional learning activities which experts perceive are necessary for local education agencies to effectively implement California’s Quality Professional Learning Standards in alignment with the Local Control Funding Formula Priority Two (2).

This is the second of three rounds which panelists will participate in to complete the Delphi process. The Round Two Questionnaire can be accessed by using the following link: (insert)

Please review California’s Quality Professional Learning Standards (attached), respond to each question, and submit the form at the bottom of the page by (insert date).

Thank you again for your participation and if you have questions or concerns, I can be reached at spinotti@mail.brandman.edu.

Sadie Pinotti  
Doctoral Candidate  
Brandman University
## APPENDIX K

### Delphi Study Round 2 Questionnaire

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<tr>
<td>The round one questionnaire requested that you respond to the following question: <em>What professional learning activities do experts perceive are necessary for local education agencies to effectively implement California’s Quality Professional Learning Standards in alignment with the Local Control Funding Formula Priority 2 (State Standards)</em>?</td>
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<tr>
<td>There were a total of 20 responses collected and 38 activities identified.</td>
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*1. Please provide your three digit identification code:*

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<tr>
<td>Please complete this second questionnaire of the Delphi study by Friday, February 17, 2017.</td>
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<td>Based on your professional judgement, please rate each of the responses to the round one questionnaire on two scales: (1) the importance of each professional learning activity and (2) the likelihood of the activity being implemented.</td>
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<td>- <strong>Importance</strong>—Rate each professional learning activity from one/low to ten/high (1-10) on the level of importance the activity may be for local education agencies (LEAs) to effectively implement California’s Quality Professional Learning Standards (QPLS) in alignment with the Local Control Funding Formula (LCFF) Priority 2.</td>
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<td>- <strong>Likelihood of Implementation</strong>—Rate each professional learning activity on a percentage scale (0-100%) as to the likelihood of the activity being implemented.</td>
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Please rate the following activity.

School leaders work with staff to build a culture that values continuous learning, purposeful collaboration, and connections to research based practices.

* 2. Please identify the degree of importance (one/low--ten/high).

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* 3. Please identify the likelihood of implementation (0%/low--100%/high).

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Please rate the following activity.

As an emerging practitioner, teacher leaders must design tools for better understanding students’ learning needs and those tools must be implemented to collect evidence; thus, the evidence must be used in making data-driven decisions regarding curriculum, pedagogy, and goals.

* 4. Please identify the degree of importance (one/low--ten/high).

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* 5. Please identify the likelihood of implementation (0%/low--100%/high).

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Please rate the following activity.

**Shared analysis of formative and summative student achievement data, direct support in understanding how to use this data to inform long and short-term instructional planning, support in understanding how to disaggregate data, and understand how to modify practices to target under-performing subgroups.**

* 6. Please identify the degree of importance (one/low--ten/high).

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* 7. Please identify the likelihood of implementation (0%/low--100%/high).

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Please rate the following activity.

**Examining student work consistently and constantly.**

* 8. Please identify the degree of importance (one/low--ten/high).

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* 9. Please identify the likelihood of implementation (0%/low--100%/high).

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Please rate the following activity.

Learning walks to stay connected with the implementation.

* 10. Please identify the degree of importance (one/low--ten/high).

1 2 3 4 5 6 7 8 9 10

* 11. Please identify the likelihood of implementation (0%/low--100%/high).

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

Please rate the following activity.

Realignment of fiscal and human resources to support implementation.

* 12. Please identify the degree of importance (one/low--ten/high).

1 2 3 4 5 6 7 8 9 10

* 13. Please identify the likelihood of implementation (0%/low--100%/high).

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

Please rate the following activity.

Targeted support in unpacking and understanding Common Core State Standards (CCSS) for associated grade level and content areas and grade levels above and below with structured support in translating grade level CCSSs to long term instructional plans.

* 14. Please identify the degree of importance (one/low--ten/high).

1 2 3 4 5 6 7 8 9 10

* 15. Please identify the likelihood of implementation (0%/low--100%/high).

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%
Please rate the following activity.

**Developing consistent expectations with accountability at all levels.**

* 16. Please identify the degree of importance (one/low—ten/high).

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* 17. Please identify the likelihood of implementation (0%/low—100%/high).

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Please rate the following activity.

**Technology support for instruction, data, and assessment.**

* 18. Please identify the degree of importance (one/low—ten/high).

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* 19. Please identify the likelihood of implementation (0%/low—100%/high).

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Please rate the following activity.

**Local education agencies must implement professional learning opportunities that incorporate theoretical knowledge and information, as well as the practical knowledge.**

* 20. Please identify the degree of importance (one/low—ten/high).

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* 21. Please identify the likelihood of implementation (0%/low—100%/high).

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Please rate the following activity.

Activities within the professional development day need to incorporate examples of how teachers can make minor tweaks and adjustments, such as Universal Design for Learning, in order to ensure students are engaged and provide formative data.

* 22. Please identify the degree of importance (one/low--ten/high).

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* 23. Please identify the likelihood of implementation (0%/low--100%/high).

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Please rate the following activity.

The structure of the day should allow for teachers to collaborate during professional development/workshops.

* 24. Please identify the degree of importance (one/low--ten/high).

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* 25. Please identify the likelihood of implementation (0%/low--100%/high).

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Please rate the following activity.

Implementation teams shall guide an organization in identifying, refining and improving professional learning activities. As a result, the teams shall contain members that have broad, diverse perspectives and experiences to ensure equitable outcomes.

* 26. Please identify the degree of importance (one/low--ten/high).

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* 27. Please identify the likelihood of implementation (0%/low--100%/high).

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Please rate the following activity.

Professional learning shall be structured by implementation stages which include exploration, installation, initial implementation and full implementation stages.

* 28. Please identify the degree of importance (one/low--ten/high).

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* 29. Please identify the likelihood of implementation (0%/low--100%/high).

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Please rate the following activity.

Professional learning activities shall incorporate continuous improvement cycles such as, Plan, Do, Study, Act (PDSA) is a problem-solving methodology that never ends and requires constant focus.

* 30. Please identify the degree of importance (one/low--ten/high).

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* 31. Please identify the likelihood of implementation (0%/low--100%/high).

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Please rate the following activity.

Organizational drivers, such as data systems and hospitable environments, shall be in place to reduce barriers.

* 32. Please identify the degree of importance (one/low--ten/high).

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* 33. Please identify the likelihood of implementation (0%/low--100%/high).

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Please rate the following activity.

Leadership drivers such as, adaptive, supportive and technical leadership, is in place and focused on fidelity and accountability measures.

* 34. Please identify the degree of importance (one/low--ten/high).

* 35. Please identify the likelihood of implementation (0%/low--100%/high).

Please rate the following activity.

Teachers and leaders must have the opportunity to learn a concept, practice a concept, receive feedback on their implementation of the concept, and then have a mechanism to report out the outcomes.

* 36. Please identify the degree of importance (one/low--ten/high).

* 37. Please identify the likelihood of implementation (0%/low--100%/high).
Please rate the following activity.

Professional learning activities around instructional leadership.

* 38. Please identify the degree of importance (one/low--ten/high).

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* 39. Please identify the likelihood of implementation (0%/low--100%/high).

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Please rate the following activity.

On-going, targeted, and embedded professional development on best instructional practices.

* 40. Please identify the degree of importance (one/low--ten/high).

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* 41. Please identify the likelihood of implementation (0%/low--100%/high).

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Please rate the following activity.

Instructional coaches provide demonstrations and support for teachers and teaching assistants.

* 42. Please identify the degree of importance (one/low--ten/high).

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* 43. Please identify the likelihood of implementation (0%/low--100%/high).

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Please rate the following activity.

Professional learning communities (PLCs) where teachers collaborate around lesson design and student data.

* 44. Please identify the degree of importance (one/low--ten/high).

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* 45. Please identify the likelihood of implementation (0%/low--100%/high).

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Please rate the following activity.

Direct professional development opportunities aligned with the specific pedagogy associated with the grade level or content area; opportunities to reflect on personal practice, view (observe) and reflect on exemplars and best practices, and practice instructional strategies getting real time feedback.

* 46. Please identify the degree of importance (one/low--ten/high).

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* 47. Please identify the likelihood of implementation (0%/low--100%/high).

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Please rate the following activity.

Training in how to effectively partner with families.

* 48. Please identify the degree of importance (one/low--ten/high).

* 49. Please identify the likelihood of implementation (0%/low--100%/high).

Please rate the following activity.

School leaders engage in learning how to become instructional/learning leaders from experts, mentors, and peer collaboration.

* 50. Please identify the degree of importance (one/low--ten/high).

* 51. Please identify the likelihood of implementation (0%/low--100%/high).
Please rate the following activity.

School leaders and staff examine student achievement data, using various sources and multiple measures, and then do a gap analysis of expectations (standards) and performance of students along with gaps in teacher training.

* 52. Please identify the degree of importance (one/low--ten/high).

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* 53. Please identify the likelihood of implementation (0%/low--100%/high).

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Please rate the following activity.

School staff meet on a regular basis in professional learning teams by grade level or content. Leaders from each team meet with site and district leaders to share needs, ensure alignment with implementation of instruction targeted toward data identified student gaps in achievement, and share feedback from each team.

* 54. Please identify the degree of importance (one/low--ten/high).

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* 55. Please identify the likelihood of implementation (0%/low--100%/high).

| 0% | 10% | 20% | 30% | 40% | 50% | 60% | 70% | 80% | 90% | 100% |
Please rate the following activity.

School leaders observe and give feedback to teachers and ensure peer observation is taking place.

* 56. Please identify the degree of importance (one/low--ten/high).

1 2 3 4 5 6 7 8 9 10

* 57. Please identify the likelihood of implementation (0%/low--100%/high).

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

Please rate the following activity.

Using John Hattie's research, district leaders can provide teachers with support in the following professional development topics: Teacher efficacy, Close Reading, Asking high order questions, using sentence frames to help language learners create academic sentences, and focus on effective engagement strategies.

* 58. Please identify the degree of importance (one/low--ten/high).

1 2 3 4 5 6 7 8 9 10

* 59. Please identify the likelihood of implementation (0%/low--100%/high).

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%
Please rate the following activity.

Support student transitions to higher education and careers, including collaboration needed with higher education, career tech, and health and community support organizations.

* 60. Please identify the degree of importance (one/low--ten/high).

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* 61. Please identify the likelihood of implementation (0%/low--100%/high).

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Please rate the following activity.

Local Education Agencies shall engage in a process to plan a multi-year approach to focus content areas, general and specific pedagogy, and assessment.

* 62. Please identify the degree of importance (one/low--ten/high).

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* 63. Please identify the likelihood of implementation (0%/low--100%/high).

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Please rate the following activity.

Monitoring equity of access data to implementing the California state standards.

* 64. Please identify the degree of importance (one/low--ten/high).

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* 65. Please identify the likelihood of implementation (0%/low--100%/high).

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Please rate the following activity.

The development of a shared vision between administrators, teachers, and principals of what implementation of standards looks like when students are engaging in the learning behaviors that illustrate the California state standards.

* 66. Please identify the degree of importance (one/low--ten/high).

* 67. Please identify the likelihood of implementation (0%/low--100%/high).

Please rate the following activity.

Implementation of a data process to look at implementation, expectations, and learning collectively such as Instructional Rounds or Phil Daro’s 5x8 card.

* 68. Please identify the degree of importance (one/low--ten/high).

* 69. Please identify the likelihood of implementation (0%/low--100%/high).
Please rate the following activity.

The stakeholders need to engage in discussions about their learning, negotiate priorities and alignment with their goals.

* 70. Please identify the degree of importance (one/low--ten/high).

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* 71. Please identify the likelihood of implementation (0%/low--100%/high).

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Please rate the following activity.

Alignment of instructional materials and electronic resources.

* 72. Please identify the degree of importance (one/low--ten/high).

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* 73. Please identify the likelihood of implementation (0%/low--100%/high).

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Please rate the following activity.

Professional development for all staff.

* 74. Please identify the degree of importance (one/low--ten/high).

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* 75. Please identify the likelihood of implementation (0%/low--100%/high).

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Please rate the following activity.

Alignment of instructional assistance and support programs, including supports for English learners and those programs traditionally viewed as special education.

* 76. Please identify the degree of importance (one/low--ten/high).

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* 77. Please identify the likelihood of implementation (0%/low--100%/high).

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Date: February 20, 2017
To: 
From: Sadie Pinotti
Subject: Round One Questionnaire
Three Digit Participant Code: XXX

Thank you for agreeing to participate in this Delphi study which is designed to identify professional learning activities which experts perceive are necessary for local education agencies to effectively implement California’s Quality Professional Learning Standards in alignment with the Local Control Funding Formula Priority Two (2).

This is the third and final questionnaire which panelists will participate in to complete the Delphi process. The Round Three Questionnaire can be accessed by using the following link:

Please review California’s Quality Professional Learning Standards (attached), respond to each question, and submit the form at the bottom of the page by Friday, February 24, 2017.

Thank you again for your participation and if you have questions or concerns, I can be reached at spinotti@mail.brandman.edu.

Sadie Pinotti
Doctoral Candidate
Brandman University
APPENDIX M

Delphi Study Round 3 Questionnaire

Introduction

Thank you for your participation in this Delphi study. This is the third and final survey that will be distributed to the panelists for this study.

As a friendly reminder, the round one questionnaire requested that you respond to the following question: What professional learning activities do experts perceive are necessary for local education agencies to effectively implement California’s Quality Professional Learning Standards in alignment with the Local Control Funding Formula Priority 2 (State Standards)?

The round two questionnaire requested that, based on your professional judgement, you rate each of the responses to the round one questionnaire on two scales: (1) the importance of each professional learning activity and (2) the likelihood of the activity being implemented.

There were a total of 19 responses collected during round two.

1. Please confirm your three digit identification code:

Round Three Questionnaire Instructions

This is the last round for the Delphi process. Please complete this questionnaire by Saturday, February 25, 2017.

During this third round, you are requested to compare your ratings for importance and likelihood of implementation for each of the identified professional learning activities from round two to the median rating of the entire panel.

After comparing this information for each professional learning activity, you will have the opportunity to leave your rating the same or change your rating.

Please note: There is no requirement that you change your ratings. If you would like to leave your rating the same, you may select, “I do not want to change my rating” and the survey will direct you to review the next activity.
Example:

Local education agencies shall provide...

- Degree of importance (1/Low – 10/High)
  - Your Score: 9
  - Panel Median Score: 10
- Likelihood of Implementation (0%/Low – 100%/High)
  - Your Score: 50%
  - Panel Median Score: 70%

Please select one of the following:

- I do not want to change my responses.
- I do want to change my responses.

Please consider whether or not to change the rating of the following activity.

School leaders work with staff to build a culture that values continuous learning, purposeful collaboration, and connections to research based practices.

- Degree of Importance (1/Low–10/High)
  - Your Score:
  - Panel Median Score: 10
- Likelihood of Implementation (0%/Low–100%/High)
  - Your Score:
  - Panel Median Score: 70%

* 2. Please select one of the following:

- I do not want to change my responses.
- I do want to change my responses.
Please adjust your rating for one or both of the questions below:

**Degree of Importance (1/Low--10/High)**
- Your Score: 
- Panel Median Score: 10

**Likelihood of Implementation (0%/Low--100%/High)**
- Your Score: 
- Panel Median Score: 70%

3. Please identify the degree of importance (one/low--ten/high).

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4. Please identify the likelihood of implementation (0%/low--100%/high).

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Please consider whether or not to change the rating of the following activity:

As an emerging practitioner, teacher leaders must design tools for better understanding students' learning needs and those tools must be implemented to collect evidence; thus, the evidence must be used in making data-driven decisions regarding curriculum, pedagogy, and goals.

- **Degree of Importance (1/Low--10/High)**
  - Your Score: 
  - Panel Median Score: 10
- **Likelihood of Implementation (0%/Low--100%/High)**
  - Your Score: 
  - Panel Median Score: 60%

* 5. Please select one of the following:

- [ ] I do not want to change my responses.
- [ ] I do want to change my responses.
Please adjust your rating for one or both of the questions below:

Degree of Importance (1/Low--10/High)
Your Score: 10
Panel Median Score: 10

Likelihood of Implementation (0%/Low--100%/High)
Your Score: 60%
Panel Median Score: 60%

6. Please identify the degree of importance (one/low--ten/high).

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7. Please identify the likelihood of implementation (0%/low--100%/high).

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   ○ ○ ○ ○ ○ ○ ○ ○ ○ ○

Please consider whether or not to change the rating of the following activity:

Shared analysis of formative and summative student achievement data, direct support in understanding how to use this data to inform long and short-term instructional planning, support in understanding how to disaggregate data, and understand how to modify practices to target under-performing subgroups.

- Degree of Importance (1/Low--10/High)
  - Your Score:
  - Panel Median Score: 10
- Likelihood of Implementation (0%/Low--100%/High)
  - Your Score:
  - Panel Median Score: 70%

* 8. Please select one of the following:

   ○ I do not want to change my responses.
   ○ I do want to change my responses.
Please adjust your rating for one or both of the questions below:

Degree of Importance (1/Low−10/High)
Your Score:
Panel Median Score: 10

Likelihood of Implementation (0%/Low−100%/High)
Your Score:
Panel Median Score: 70%

9. Please identify the degree of importance (one/low−ten/high).

10. Please identify the likelihood of implementation (0%/low−100%/high).

Please consider whether or not to change the rating of the following activity:

Examine student work consistently and constantly.
- Degree of Importance (1/Low−10/High)
  - Your Score:
  - Panel Median Score: 9
- Likelihood of Implementation (0%/Low−100%/High)
  - Your Score:
  - Panel Median Score: 70%

* 11. Please select one of the following:

☐ I do not want to change my responses.

☐ I do want to change my responses.
Please adjust your rating for one or both of the questions below:

Degree of Importance (1/Low--10/High)
Your Score:
Panel Median Score: 9

Likelihood of Implementation (0%/Low--100%/High)
Your Score:
Panel Median Score: 70%

12. Please identify the degree of importance (one/low--ten/high).

13. Please identify the likelihood of implementation (0%/low--100%/high).

Please consider whether or not to change the rating of the following activity:

Learning walks to stay connected with the implementation.
- Degree of Importance (1/Low--10/High)
  - Your Score:
  - Panel Median Score: 8
- Likelihood of Implementation (0%/Low--100%/High)
  - Your Score:
  - Panel Median Score: 50%

* 14. Please select one of the following:

- I do not want to change my responses.
- I do want to change my responses.
Please adjust your rating for one or both of the questions below:

**Degree of Importance (1/Low--10/High)**
Your Score:
Panel Median Score: 8

**Likelihood of Implementation (0%/Low--100%/High)**
Your Score:
Panel Median Score: 50%

15. Please identify the degree of importance (one/low--ten/high).

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16. Please identify the likelihood of implementation (0%/low--100%/high).

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Please consider whether or not to change the rating of the following activity:

**Realignment of fiscal and human resources to support implementation.**

- **Degree of Importance (1/Low--10/High)**
  - Your Score:
  - Panel Median Score: 9
- **Likelihood of Implementation (0%/Low--100%/High)**
  - Your Score:
  - Panel Median Score: 70%

* 17. Please select one of the following:

- [ ] I do not want to change my responses.
- [ ] I do want to change my responses.
Please adjust your rating for one or both of the questions below:

Degree of Importance (1/Low--10/High)
Your Score:
Panel Median Score: 9

Likelihood of Implementation (0%/Low--100%/High)
Your Score:
Panel Median Score: 70%

18. Please identify the degree of importance (one/low--ten/high).

19. Please identify the likelihood of implementation (0%/low--100%/high).

Please consider whether or not to change the rating of the following activity:

Targeted support in unpacking and understanding Common Core State Standards (CCSS) for associated grade level and content areas and grade levels above and below with structured support in translating grade level CCSSs to long term instructional plans.

- Degree of Importance (1/Low--10/High)
  - Your Score:
  - Panel Median Score: 9
- Likelihood of Implementation (0%/Low--100%/High)
  - Your Score:
  - Panel Median Score: 70%

* 20. Please select one of the following:

- [ ] I do not want to change my responses.
- [ ] I do want to change my responses.
Please adjust your rating for one or both of the questions below:

**Degree of Importance (1/Low--10/High)**
Your Score: 
Panel Median Score: 9

**Likelihood of Implementation (0%/Low--100%/High)**
Your Score: 
Panel Median Score: 70%

21. Please identify the degree of importance (one/low--ten/high).

22. Please identify the likelihood of implementation (0%/low--100%/high).

Please consider whether or not to change the rating of the following activity:

* Developing consistent expectations with accountability at all levels.
  * Degree of Importance (1/Low--10/High)
    * Your Score: 
    * Panel Median Score: 10
  * Likelihood of Implementation (0%/Low--100%/High)
    * Your Score: 
    * Panel Median Score: 70%

23. Please select one of the following:

- [ ] I do not want to change my responses.
- [ ] I do want to change my responses.
Please adjust your rating for one or both of the questions below:

Degree of Importance (1/Low—10/High)
Your Score: ______________________
Panel Median Score: 10

Likelihood of Implementation (0%/Low—100%/High)
Your Score: ______________________
Panel Median Score: 70%

24. Please identify the degree of importance (one/low—ten/high).

[Scale from 1 to 10]

25. Please identify the likelihood of implementation (0%/low—100%/high).

[Scale from 0% to 100%]

Please consider whether or not to change the rating of the following activity:

Technology support for instruction, data, and assessment.
- Degree of Importance (1/Low—10/High)
  - Your Score: ______________________
  - Panel Median Score: 8
- Likelihood of Implementation (0%/Low—100%/High)
  - Your Score: ______________________
  - Panel Median Score: 60%

* 26. Please select one of the following:

- [ ] I do not want to change my responses.
- [ ] I do want to change my responses.
Please adjust your rating for one or both of the questions below:

**Degree of Importance (1/Low--10/High)**
Your Score: 
Panel Median Score: 8

**Likelihood of Implementation (0%/Low--100%/High)**
Your Score: 
Panel Median Score: 60%

### Question 27

Please identify the degree of importance (one/low--ten/high).

1  2  3  4  5  6  7  8  9  10

### Question 28

Please identify the likelihood of implementation (0%/low--100%/high).

0%  10%  20%  30%  40%  50%  60%  70%  80%  90%  100%

Please consider whether or not to change the rating of the following activity:

Local education agencies must implement professional learning opportunities that incorporate theoretical knowledge and information, as well as the practical knowledge.

- **Degree of Importance (1/Low--10/High)**
  - Your Score: 
  - Panel Median Score: 9
- **Likelihood of Implementation (0%/Low--100%/High)**
  - Your Score: 
  - Panel Median Score: 70%

### Question 29

Please select one of the following:

- I do not want to change my responses.
- I do want to change my responses.
Please adjust your rating for one or both of the questions below:

Degree of Importance (1/Low--10/High)
Your Score:
Panel Median Score: 9

Likelihood of Implementation (0%/Low--100%/High)
Your Score:
Panel Median Score: 70%

30. Please identify the degree of importance (one/low--ten/high).

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31. Please identify the likelihood of implementation (0%/low--100%/high).

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Please consider whether or not to change the rating of the following activity:

Activities within the professional development day need to incorporate examples of how teachers can make minor tweaks and adjustments, such as Universal Design for Learning, in order to ensure students are engaged and provide formative data.

- Degree of Importance (1/Low--10/High)
  - Your Score:
  - Panel Median Score: 9
- Likelihood of Implementation (0%/Low--100%/High)
  - Your Score:
  - Panel Median Score: 70%

* 32. Please select one of the following:

- [ ] I do not want to change my responses.
- [ ] I do want to change my responses.
Please adjust your rating for one or both of the questions below:

**Degree of Importance (1/Low--10/High)**
- Your Score: __________
- Panel Median Score: 9

**Likelihood of Implementation (0%/Low--100%/High)**
- Your Score: __________
- Panel Median Score: 70%

33. Please identify the degree of importance (one/low--ten/high).

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34. Please identify the likelihood of implementation (0%/low--100%/high).

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Please consider whether or not to change the rating of the following activity:

The structure of the day should allow for teachers to collaborate during professional development/workshops.
- **Degree of Importance (1/Low--10/High)**
  - Your Score: __________
  - Panel Median Score: 10
- **Likelihood of Implementation (0%/Low--100%/High)**
  - Your Score: __________
  - Panel Median Score: 70%

* 35. Please select one of the following:

- [ ] I do not want to change my responses.
- [ ] I do want to change my responses.
Please adjust your rating for one or both of the questions below:

**Degree of Importance (1/Low—10/High)**
Your Score:
Panel Median Score: 10

** Likelihood of Implementation (0%/Low—100%/High)**
Your Score:
Panel Median Score: 70%

36. Please identify the degree of importance (one/low—ten/high).

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37. Please identify the likelihood of implementation (0%/low—100%/high).

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Please consider whether or not to change the rating of the following activity:

Implementation teams shall guide an organization in identifying, refining and improving professional learning activities. As a result, the teams shall contain members that have broad, diverse perspectives and experiences to ensure equitable outcomes.

- Degree of Importance (1/Low—10/High)
  - Your Score:
  - Panel Median Score: 8
- Likelihood of Implementation (0%/Low—100%/High)
  - Your Score:
  - Panel Median Score: 60%

* 38. Please select one of the following:

- [ ] I do not want to change my responses.
- [ ] I do want to change my responses.
Please adjust your rating for one or both of the questions below:

Degree of Importance (1/Low--10/High)
Your Score: 8
Panel Median Score: 8

Likelihood of Implementation (0%/Low--100%/High)
Your Score: 60%
Panel Median Score: 60%

39. Please identify the degree of importance (one/low--ten/high).

40. Please identify the likelihood of implementation (0%/low--100%/high).

Please consider whether or not to change the rating of the following activity:

Professional learning shall be structured by implementation stages which include exploration, installation, initial implementation and full implementation stages.

- Degree of Importance (1/Low--10/High)
  - Your Score: 9
  - Panel Median Score: 9

- Likelihood of Implementation (0%/Low--100%/High)
  - Your Score: 50%
  - Panel Median Score: 50%

* 41. Please select one of the following:

- I do not want to change my responses.
- I do want to change my responses.
Please adjust your rating for one or both of the questions below:

Degree of Importance (1/Low--10/High)
Your Score:
Panel Median Score: 9

Likelihood of Implementation (0%/Low--100%/High)
Your Score:
Panel Median Score: 50%

42. Please identify the degree of importance (one/low--ten/high).

43. Please identify the likelihood of implementation (0%/low--100%/high).

Please consider whether or not to change the rating of the following activity:

Professional learning activities shall incorporate continuous improvement cycles such as, Plan, Do, Study, Act (PDSA) is a problem-solving methodology that never ends and requires constant focus.

- Degree of Importance (1/Low--10/High)
  - Your Score:
  - Panel Median Score: 10
- Likelihood of Implementation (0%/Low--100%/High)
  - Your Score:
  - Panel Median Score: 60%

* 44. Please select one of the following:

- [ ] I do not want to change my responses.
- [ ] I do want to change my responses.
Please adjust your rating for one or both of the questions below:

**Degree of Importance (1/Low--10/High)**
Your Score: 
Panel Median Score: 10

**Likelihood of Implementation (0%/Low--100%/High)**
Your Score: 
Panel Median Score: 60%

45. Please identify the degree of importance (one/low--ten/high).

![Rating Scale]

46. Please identify the likelihood of implementation (0%/low--100%/high).

![Rating Scale]

Please consider whether or not to change the rating of the following activity:

Organizational drivers, such as data systems and hospitable environments, shall be in place to reduce barriers.

- **Degree of Importance (1/Low--10/High)**
  - Your Score: 
  - Panel Median Score: 8

- **Likelihood of Implementation (0%/Low--100%/High)**
  - Your Score: 
  - Panel Median Score: 60%

* 47. Please select one of the following:

- [ ] I do not want to change my responses.
- [ ] I do want to change my responses.
Please adjust your rating for one or both of the questions below:

Degree of Importance (1/Low--10/High)
Your Score:
Panel Median Score: 8

Likelihood of Implementation (0%/Low--100%/High)
Your Score:
Panel Median Score: 60%

48. Please identify the degree of importance (one/low--ten/high).

1 2 3 4 5 6 7 8 9 10

49. Please identify the likelihood of implementation (0%/low--100%/high).

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

Please consider whether or not to change the rating of the following activity:

Leadership drivers such as, adaptive, supportive and technical leadership, is in place and focused on fidelity and accountability measures.

- Degree of Importance (1/Low--10/High)
  - Your Score:
  - Panel Median Score: 9
- Likelihood of Implementation (0%/Low--100%/High)
  - Your Score:
  - Panel Median Score: 60%

* 50. Please select one of the following:

- I do not want to change my responses.
- I do want to change my responses.
Please adjust your rating for one or both of the questions below:

Degree of Importance (1/Low--10/High)
Your Score: 9
Panel Median Score: 9

Likelihood of Implementation (0%/Low--100%/High)
Your Score: 60%
Panel Median Score: 60%

51. Please identify the degree of importance (one/low--ten/high).

1 2 3 4 5 6 7 8 9 10

52. Please identify the likelihood of implementation (0%/low--100%/high).

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

Please consider whether or not to change the rating of the following activity:

Teachers and leaders must have the opportunity to learn a concept, practice a concept, receive feedback on their implementation of the concept, and then have a mechanism to report out the outcomes.

- Degree of Importance (1/Low--10/High)
  - Your Score: 10
  - Panel Median Score: 10
- Likelihood of Implementation (0%/Low--100%/High)
  - Your Score: 60%
  - Panel Median Score: 60%

* 53. Please select one of the following:

○ I do not want to change my responses.

○ I do want to change my responses.
Please adjust your rating for one or both of the questions below:

**Degree of Importance (1/Low--10/High)**
Your Score: 
Panel Median Score: 10

**Likelihood of Implementation (0%/Low--100%/High)**
Your Score: 
Panel Median Score: 60%

54. Please identify the degree of importance (one/low--ten/high).

55. Please identify the likelihood of implementation (0%/low--100%/high).

Please consider whether or not to change the rating of the following activity:

*Professional learning activities around instructional leadership.*

- **Degree of Importance (1/Low--10/High)**
  - Your Score:
  - Panel Median Score: 9
- **Likelihood of Implementation (0%/Low--100%/High)**
  - Your Score:
  - Panel Median Score: 60%

* 56. Please select one of the following:
  
  - I do not want to change my responses.
  - I do want to change my responses.
Please adjust your rating for one or both of the questions below:

**Degree of Importance (1/Low--10/High)**
Your Score: 
Panel Median Score: 9

**Likelihood of Implementation (0%/Low--100%/High)**
Your Score: 
Panel Median Score: 60%

57. Please identify the degree of importance (one/low--ten/high).

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58. Please identify the likelihood of implementation (0%/low--100%/high).

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Please consider whether or not to change the rating of the following activity:

On-going, targeted, and embedded professional development on best instructional practices.
- Degree of Importance (1/Low--10/High)
  - Your Score: 
  - Panel Median Score: 10
- Likelihood of Implementation (0%/Low--100%/High)
  - Your Score: 
  - Panel Median Score: 70%

* 59. Please select one of the following:

- I do not want to change my responses.
- I do want to change my responses.
Please adjust your rating for one or both of the questions below:

Degree of Importance (1/Low--10/High)
Your Score: 
Panel Median Score: 10

Likelihood of Implementation (0%/Low--100%/High)
Your Score: 
Panel Median Score: 70%

60. Please identify the degree of importance (one/low--ten/high).

61. Please identify the likelihood of implementation (0%/low--100%/high).

Please consider whether or not to change the rating of the following activity:

Instructional coaches provide demonstrations and support for teachers and teaching assistants.
- Degree of Importance (1/Low--10/High)
  - Your Score: 
  - Panel Median Score: 9
- Likelihood of Implementation (0%/Low--100%/High)
  - Your Score: 
  - Panel Median Score: 60%

* 62. Please select one of the following:

- I do not want to change my responses.
- I do want to change my responses.
Please adjust your rating for one or both of the questions below:

Degree of Importance (1/Low--10/High)
Your Score:
Panel Median Score: 9

Likelihood of Implementation (0%/Low--100%/High)
Your Score:
Panel Median Score: 60%

63. Please identify the degree of importance (one/low--ten/high).

64. Please identify the likelihood of implementation (0%/low--100%/high).

Please consider whether or not to change the rating of the following activity:

Professional learning communities (PLCs) where teachers collaborate around lesson design and student data.
• Degree of Importance (1/Low--10/High)
  • Your Score:
  • Panel Median Score: 10
• Likelihood of Implementation (0%/Low--100%/High)
  • Your Score:
  • Panel Median Score: 70%

* 65. Please select one of the following:
  ○ I do not want to change my responses.
  ○ I do want to change my responses.
Please adjust your rating for one or both of the questions below:

Degree of Importance (1/Low--10/High)
Your Score: [Score]
Panel Median Score: 10

Likelihood of Implementation (0%/Low--100%/High)
Your Score: [Score]
Panel Median Score: 70%

66. Please identify the degree of importance (one/low--ten/high).

67. Please identify the likelihood of implementation (0%/low--100%/high).

Please consider whether or not to change the rating of the following activity:

Direct professional development opportunities aligned with the specific pedagogy associated with the grade level or content area; opportunities to reflect on personal practice, view (observe) and reflect on exemplars and best practices, and practice instructional strategies getting real time feedback.

- Degree of Importance (1/Low--10/High)
  - Your Score: [Score]
  - Panel Median Score: 10

- Likelihood of Implementation (0%/Low--100%/High)
  - Your Score: [Score]
  - Panel Median Score: 60%

* 68. Please select one of the following:

- [ ] I do not want to change my responses.
- [ ] I do want to change my responses.
Please adjust your rating for one or both of the questions below:

**Degree of Importance (1/Low--10/High)**
Your Score:
Panel Median Score: 10

**Likelihood of Implementation (0%/Low--100%/High)**
Your Score:
Panel Median Score: 60%

69. Please identify the degree of importance (one/low--ten/high).

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70. Please identify the likelihood of implementation (0%/low--100%/high).

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Please consider whether or not to change the rating of the following activity:

Training in how to effectively partner with families.
- **Degree of Importance (1/Low--10/High)**
  - Your Score:
  - Panel Median Score: 9
- **Likelihood of Implementation (0%/Low--100%/High)**
  - Your Score:
  - Panel Median Score: 40%

* 71. Please select one of the following:

- [ ] I do not want to change my responses.
- [ ] I do want to change my responses.
Please adjust your rating for one or both of the questions below:

**Degree of Importance (1/Low—10/High)**
Your Score:
Panel Median Score: 9

**Likelihood of Implementation (0%/Low—100%/High)**
Your Score:
Panel Median Score: 40%

72. Please identify the degree of importance (one/low—ten/high).

73. Please identify the likelihood of implementation (0%/low—100%/high).

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Please consider whether or not to change the rating of the following activity:

School leaders engage in learning how to become instructional/learning leaders from experts, mentors, and peer collaboration.
- **Degree of Importance (1/Low—10/High)**
  - Your Score:
  - Panel Median Score: 9
- **Likelihood of Implementation (0%/Low—100%/High)**
  - Your Score:
  - Panel Median Score: 60%

* 74. Please select one of the following:
  
  - [ ] I do not want to change my responses.
  - [ ] I do want to change my responses.
Please adjust your rating for one or both of the questions below:

Degree of Importance (1/Low--10/High)
Your Score:
Panel Median Score: 9

Likelihood of Implementation (0%/Low--100%/High)
Your Score:
Panel Median Score: 60%

75. Please identify the degree of importance (one/low--ten/high).

[Rating options: 1 to 10]

76. Please identify the likelihood of implementation (0%/low--100%/high).

[Rating options: 0% to 100%]

Please consider whether or not to change the rating of the following activity:

School leaders and staff examine student achievement data, using various sources and multiple measures, and then do a gap analysis of expectations (standards) and performance of students along with gaps in teacher training.

• Degree of Importance (1/Low--10/High)
  • Your Score:
  • Panel Median Score: 10
• Likelihood of Implementation (0%/Low--100%/High)
  • Your Score:
  • Panel Median Score: 60%

* 77. Please select one of the following:

  ○ I do not want to change my responses.
  ○ I do want to change my responses.
Please adjust your rating for one or both of the questions below:

Degree of Importance (1/Low--10/High)
Your Score:
Panel Median Score: 10

Likelihood of Implementation (0%/Low--100%/High)
Your Score:
Panel Median Score: 60%

78. Please identify the degree of importance (one/low--ten/high).

79. Please identify the likelihood of implementation (0%/low--100%/high).

Please consider whether or not to change the rating of the following activity:

School staff meet on a regular basis in professional learning teams by grade level or content. Leaders from each team meet with site and district leaders to share needs, ensure alignment with implementation of instruction targeted toward data identified student gaps in achievement, and share feedback from each team.

- Degree of Importance (1/Low--10/High)
  - Your Score:
  - Panel Median Score: 9

- Likelihood of Implementation (0%/Low--100%/High)
  - Your Score:
  - Panel Median Score: 60%

* 80. Please select one of the following:

  ○ I do not want to change my responses.

  ○ I do want to change my responses.
Please adjust your rating for one or both of the questions below:

Degree of Importance (1/Low--10/High)
Your Score: 
Panel Median Score: 9

Likelihood of Implementation (0%/Low--100%/High)
Your Score: 
Panel Median Score: 60%

81. Please identify the degree of importance (one/low--ten/high).

82. Please identify the likelihood of implementation (0%/low--100%/high).

Please consider whether or not to change the rating of the following activity:

School leaders observe and give feedback to teachers and ensure peer observation is taking place.

• Degree of Importance (1/Low--10/High)
  • Your Score: 
  • Panel Median Score: 8

• Likelihood of Implementation (0%/Low--100%/High)
  • Your Score: 
  • Panel Median Score: 50%

* 83. Please select one of the following:

  O I do not want to change my responses.

  O I do want to change my responses.
Please adjust your rating for one or both of the questions below:

Degree of Importance (1/Low--10/High)
Your Score:
Panel Median Score: 8

Likelihood of Implementation (0%/Low--100%/High)
Your Score:
Panel Median Score: 50%

84. Please identify the degree of importance (one/low--ten/high).

85. Please identify the likelihood of implementation (0%/low--100%/high).

Please consider whether or not to change the rating of the following activity:

Using John Hattie's research, district leaders can provide teachers with support in the following professional development topics: Teacher efficacy, Close Reading, Asking high order questions, using sentence frames to help language learners create academic sentences, and focus on effective engagement strategies.

- Degree of Importance (1/Low--10/High)
  - Your Score:
  - Panel Median Score: 9
- Likelihood of Implementation (0%/Low--100%/High)
  - Your Score:
  - Panel Median Score: 60%

* 86. Please select one of the following:
   - I do not want to change my responses.
   - I do want to change my responses.
Please adjust your rating for one or both of the questions below:

Degree of Importance (1/Low--10/High)
Your Score:
Panel Median Score: 9

Likelihood of Implementation (0%/Low--100%/High)
Your Score:
Panel Median Score: 60%

87. Please identify the degree of importance (one/low--ten/high).

88. Please identify the likelihood of implementation (0%/low--100%/high).

Please consider whether or not to change the rating of the following activity:

Support student transitions to higher education and careers, including collaboration needed with higher education, career tech, and health and community support organizations.

- Degree of Importance (1/Low--10/High)
  - Your Score:
  - Panel Median Score: 8

- Likelihood of Implementation (0%/Low--100%/High)
  - Your Score:
  - Panel Median Score: 50%

* 89. Please select one of the following:

  - [ ] I do not want to change my responses.
  - [ ] I do want to change my responses.
Please adjust your rating for one or both of the questions below:

Degree of Importance (1/Low--10/High)
Your Score:
Panel Median Score: 8

Likelihood of Implementation (0%/Low--100%/High)
Your Score:
Panel Median Score: 50%

90. Please identify the degree of importance (one/low--ten/high).

[Rating scale from 1 to 10]

91. Please identify the likelihood of implementation (0%/low--100%/high).

[Rating scale from 0% to 100%]

Please consider whether or not to change the rating of the following activity:

Local Education Agencies shall engage in a process to plan a multi-year approach to focus content areas, general and specific pedagogy, and assessment.
- Degree of Importance (1/Low--10/High)
  - Your Score:
  - Panel Media Score: 8
- Likelihood of Implementation (0%/Low--100%/High)
  - Your Score:
  - Panel Median Score: 60%

* 92. Please select one of the following:

- [ ] I do not want to change my responses.
- [ ] I do want to change my responses.
Please adjust your rating for one or both of the questions below:

**Degree of Importance (1/Low--10/High)**
Your Score: 8
Panel Media Score: 8

**Likelihood of Implementation (0%/Low--100%/High)**
Your Score: 60%
Panel Median Score: 60%

93. Please identify the degree of importance (one/low--ten/high).

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94. Please identify the likelihood of implementation (0%/low--100%/high).

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Please consider whether or not to change the rating of the following activity:

Monitoring equity of access data to implementing the California state standards.
- Degree of Importance (1/Low--10/High)
  - Your Score:
  - Panel Median Score: 9
- Likelihood of Implementation (0%/Low--100%/High)
  - Your Score:
  - Panel Median Score: 50%

* 95. Please select one of the following:

- [ ] I do not want to change my responses.
- [ ] I do want to change my responses.
Please adjust your rating for one or both of the questions below:

Degree of Importance (1/Low--10/High)
Your Score: 
Panel Median Score: 9

Likelihood of Implementation (0%/Low--100%/High)
Your Score: 
Panel Median Score: 50%

96. Please identify the degree of importance (one/low--ten/high).

97. Please identify the likelihood of implementation (0%/low--100%/high).

Please consider whether or not to change the rating of the following activity:

The development of a shared vision between administrators, teachers, and principals of what implementation of standards looks like when students are engaging in the learning behaviors that illustrate the California state standards.

- Degree of Importance (1/Low--10/High)
  - Your Score: 
  - Panel Median Score: 9
- Likelihood of Implementation (0%/Low--100%/High)
  - Your Score: 
  - Panel Median Score: 60%

* 98. Please select one of the following:

  - I do not want to change my responses.
  - I do want to change my responses.
Please adjust your rating for one or both of the questions below:

Degree of Importance (1/Low--10/High)
Your Score:
Panel Median Score: 9

Likelihood of Implementation (0%/Low--100%/High)
Your Score:
Panel Median Score: 60%

99. Please identify the degree of importance (one/low--ten/high).

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100. Please identify the likelihood of implementation (0%/low--100%/high).

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Please consider whether or not to change the rating of the following activity:

Implementation of a data process to look at implementation, expectations, and learning collectively such as Instructional Rounds or Phil Daro’s 5x8 card.

- Degree of Importance (1/Low--10/High)
  - Your Score:
  - Panel Median Score: 9
- Likelihood of Implementation (0%/Low--100%/High)
  - Your Score:
  - Panel Median Score: 60%

* 101. Please select one of the following:

- [ ] I do not want to change my responses.
- [ ] I do want to change my responses.
Please adjust your rating for one or both of the questions below:

Degree of Importance (1/Low--10/High)
Your Score: 
Panel Median Score: 9

Likelihood of Implementation (0%/Low--100%/High)
Your Score: 
Panel Median Score: 60%

102. Please identify the degree of importance (one/low--ten/high).

103. Please identify the likelihood of implementation (0%/low--100%/high).

Please consider whether or not to change the rating of the following activity:

The stakeholders need to engage in discussions about their learning, negotiate priorities and alignment with their goals.

- Degree of Importance (1/Low--10/High)
  - Your Score: 
  - Panel Median Score: 8
- Likelihood of Implementation (0%/Low--100%/High)
  - Your Score: 
  - Panel Median Score: 50%

* 104. Please select one of the following:

- I do not want to change my responses.
- I do want to change my responses.
Please adjust your rating for one or both of the questions below:

Degree of Importance (1/Low--10/High)
Your Score:
Panel Median Score: 8

Likelihood of Implementation (0%/Low--100%/High)
Your Score:
Panel Median Score: 50%

105. Please identify the degree of importance (one/low--ten/high).

1 2 3 4 5 6 7 8 9 10

106. Please identify the likelihood of implementation (0%/low--100%/high).

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

Please consider whether or not to change the rating of the following activity:

Alignment of instructional materials and electronic resources.
  • Degree of Importance (1/Low--10/High)
    • Your Score:
    • Panel Median Score: 8
  • Likelihood of Implementation (0%/Low--100%/High)
    • Your Score:
    • Panel Median Score: 80%

* 107. Please select one of the following:

  O I do not want to change my responses.

  O I do want to change my responses.
Please adjust your rating for one or both of the questions below:

**Degree of Importance (1/Low--10/High)**
Your Score: 8
Panel Median Score: 8

**Likelihood of Implementation (0%/Low--100%/High)**
Your Score: 80%
Panel Median Score: 80%

108. Please identify the degree of importance (one/low--ten/high).

109. Please identify the likelihood of implementation (0%/low--100%/high).

Please consider whether or not to change the rating of the following activity:

**Professional development for all staff.**
- Degree of Importance (1/Low--10/High)
  - Your Score:
  - Panel Median Score: 10
- Likelihood of Implementation (0%/Low--100%/High)
  - Your Score:
  - Panel Median Score: 70%

* 110. Please select one of the following:

- I do not want to change my responses.
- I do want to change my responses.
Please adjust your rating for one or both of the questions below:

Degree of Importance (1/Low--10/High)
Your Score:
Panel Median Score: 10

Likelihood of Implementation (0%/Low--100%/High)
Your Score:
Panel Median Score: 70%

111. Please identify the degree of importance (one/low--ten/high).

1 2 3 4 5 6 7 8 9 10

112. Please identify the likelihood of implementation (0%/low--100%/high).

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

Please consider whether or not to change the rating of the following activity:

Alignment of instructional assistance and support programs, including supports for English
learners and those programs traditionally viewed as special education.
- Degree of Importance (1/Low--10/High)
  - Your Score:
  - Panel Median Score: 10
- Likelihood of Implementation (0%/Low--100%/High)
  - Your Score:
  - Panel Median Score: 60%

* 113. Please select one of the following:

- I do not want to change my responses.
- I do want to change my responses.
Please adjust your rating for one or both of the questions below:

**Degree of Importance (1/Low--10/High)**
Your Score:  
Panel Median Score: 10

**Likelihood of Implementation (0%/Low--100%/High)**
Your Score:  
Panel Median Score: 60%

114. Please identify the degree of importance (one/low--ten/high).

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115. Please identify the likelihood of implementation (0%/low--100%/high).

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APPENDIX N

List of Unabbreviated Research Findings From Expert Panel

1. In my experience, the most effective professional learning plans involve multiple levels and modalities of activities. My favorite model begins with a long-range plan that involves whole-staff professional development to establish initiatives and support and shape school/district culture. It is often beneficial to get input from a panel of staff representatives regarding their priorities for professional development, though not always appropriate. Whole-staff PD should ideally be revisited several times throughout the year, such as a quarterly seminar. In conjunction with the whole-staff PD, staff needs an opportunity to share ideas and troubleshoot in small peer groups, such as a PLC. The PLC needs to meet frequently enough to keep momentum going throughout the year. Another important element is "boots on the ground" real time feedback. Administrators being present in classrooms, giving constructive and supportive feedback to help shape best practice is crucial. Peer observations are also very helpful. This all has to be carefully planned and coordinated, with staff time allotted to improving practice. Administration must set aside time for teachers to dedicate to professional learning activities if they expect growth and development to happen.

2. Effective implementation of the California Quality Professional Learning Standards in alignment with LCFF requires thoughtful planning, a coherent and strategic approach supported by the local board and involving teacher leaders and parent and community representatives, and attention to many interconnected elements. The following components are based on a combination of research, years of practical experience, and lessons emerging from early implementing districts. The components include:
   1. capacity building and leadership development;
   2. communication and stakeholder engagement;
   3. review of curriculum and instruction;
   4. alignment of instructional materials and electronic resources;
   5. professional development for all, including professional learning communities;
   6. student learning feedback systems and new assessments;
   7. alignment of instructional assistance and support programs, including supports for English learners and those programs traditionally viewed as special education;
   8. technology support for instruction, data, and assessment;
   9. realignment of fiscal and human resources realignment to support implementation; and
   10. student transitions to higher education and careers, including collaboration needed with higher education, career tech, and health and community support organizations.
This list was created for the Leadership Training related to Common Core State Standards and I believe is also helpful in consideration of the California Quality Professional Learning Standards.

3. The stakeholders need to engage in discussions about their learning, negotiate priorities and alignment with their goals.

4. Necessary activities for LEAs include the professional learning and coherence-making activities of developing clarity and shared mindsets around mission, vision, values and goals. This work (in CA) should be part of the ongoing LCAP cycle of continuous improvement. As such, the LEA needs to develop capacity and skill with generating and using data, learning to triangulate outcome and process data (quantitative, qualitative, and perception data) with research. The learning activities need to be iterative and designed so that there is coherence within the system, but with variation in scope at each altitude. Thus, with the district goals, indicators and targets around any priority, the LEA must interpret what that means, define how success will be indicated, and determine how intentional resource use (time, talent, attention, and money) can maximize progress toward those goals. Learning activities at the highest altitude, at the LEA level, include engagement in a process to plan a multi-year approach to focus content areas, general and specific pedagogy, and assessment. This may be influenced by student achievement data and/or the CA cycle of standards, frameworks and adoptions of curricular materials. Creation of a multi-year timeline helps set the foundation at the systems level.

Along with that, simultaneously, the LEA must look at their course pathways and opportunities through an equity/social justice lens. Implementation of standards does not happen in the abstract; it happens for students. Thus, the LEA must develop knowledge around how their current methods of grouping and isolating for instruction, course taking patterns and pathways support or inhibit universal access to grade-level content and instruction. This process must be replicated at the school site and even within a grade level or subject area. Monitoring equity of access data is essential to implementing the CA standards. Related is the LEA’s ability at all levels to describe "opportunity to learn". Course taking patterns and instructional grouping at the systems level are then reinforced at the process level. Leaders and peers can learn to look at the instructional core (interaction among students, teachers and content) in the classroom through a lens of "opportunity to learn", which has four basic elements (Robinson 2011): the outcome being pursued, the alignment of activities, resources and tasks with that outcome, the cognitive engagement of students with the tasks, and the students success with those tasks in the pursuit of learning. The process of looking at learning should be grounded in calibration and learning to look, and not just distribution of a checklist. It is the conversations (administrators with administrators, teachers with teachers, principals with principals) that help an LEA develop a shared vision of what implementation of standards looks like when students are engaging in the learning behaviors that illustrate the CA standards. Thus - this process data of learning to look at implementation, expectations and learning collectively is an essential competency that is necessary for
equity and overall implementation monitoring. Processes like Instructional Rounds or Phil Daro's 5x8 card are examples of this.

Related to the ability to look at and describe learning opportunities through classroom observation is curriculum implementation. After a data-driven rigorous process of choosing instructional materials (with the use of the state toolkits), an LEA must commit a great deal of time to helping all teachers engage in the process together of triangulating among the state framework (additionally in mathematics - the CCSS progression documents and in science - the story lines and bundles of PEs), the curricular materials and the assessment blueprints and Achievement Level Descriptors (ALDs). This intensive work should be facilitated at first. Teachers and anyone involved in curriculum and assessment development must learn how to collaborate in this way to answer the first two questions of the PLC (What do we want all students to know and be able to do, and how do we know when they know it?) Site leaders (principals, specialists and TOSAs must also lead learning around vertical articulation of this process.

Eventually, the choice and development of local assessment tools becomes an essential learning activity for the LEA to create coherence and to move forward in their implementation. Within this continuum, we are still looking at calibration and understanding of how to implement the CA standards. This builds connection between elements one and two of Opportunity to Learn – building a collective understanding of what important outcomes to pursue, and what activities, tasks and resources are aligned to that outcome.

LEAs must also develop a system of instructionally-based professional development to provide strategies and processes to support for students’ engagement in the meaningful aligned tasks. Understanding of instructional design, UDL and elements of inclusive instruction (could be grounded in MTSS) is essential to developing a shared mindset as well as the skills to ensure all students can engage in the rigorous and meaningful standards. PD should not be focused on the implementation of strategies for the sake of strategies, but grounded in helping teachers make choices about instructional design that will allow all students to engage in the meaningful learning activities that align with the learning processes calibrated in the instructional observations and the task alignment work described above. Areas of focus could include the importance of and ways to support academic language development, complex instruction, accountable talk, productive struggle and heuristics for problem solving. At the heart is connecting accessibility to the academic practices and dispositions called for in the new standards.

5. Professional learning activities should focus on two levels. First, is evidence to support the presumed student needs. This can be gathered from a variety of sources in the form of student projects, writing samples, and artifacts, in addition to more traditional forms of evidence, such as, grade-level testing. The first level is often referred to as content and pedagogy level for professional learning. The second level is support for enacting a model for improvement. This is a collective instructional leadership system that corresponds with processes associated with steps of the action research cycle:

- Collaborate
• Conduct evidence-based needs assessment to uncover a problem
• Select professional learning experiences
• Design & implement interventions
• Conduct action research to measure effects
• Use evidence to adjust interventions and to select the next needed professional learning

6. I don't know.

7. A grounding in the Systems work to understand the One Coherent System of Education, using a Multi-Tiered System of Supports academically, behaviorally and socio-emotionally, as well as across other agencies and systems.

8. Professional development for teachers should be considered in a focused approach. District leaders should identify High-yield strategies which leads to student outcome improvement. Some strategies can be related to the work of John Hattie, for example. Using Hattie's research, leaders can see what strategies really make a difference in the performance of students. In terms of the implementation of California's Standards, teachers should have support on the following PD topics: Teacher efficacy, Close Reading, Asking high order questions, using sentence frames to help language learners create academic sentences, and focus on effective engagement strategies.

9. I think LEAs need to design learning activities that supply their employees with the expert information they need to implement research based content and instructional approaches in order to help their students meet the state content standards. They also need to offer activities to inform employees about the theory that underpins this information. Finally employees need the opportunity to discuss their growing capacity and knowledge about this information with colleagues, be provided feedback on their emerging implementation from colleagues and administrators, and be provided ongoing coaching throughout the cycle of knowledge and skill acquisition.

10. The following professional learning activities need to be happening in a continuous cycle: School leaders - meaning district office and site - engage in learning how to become instructional/learning leaders from experts, mentors and peer collaboration. These leaders work with staffs to build a culture that values continuous learning, purposeful collaboration and connections to research based practices. This is where high expectations are established for all students. School leaders and staff study the content and standards expected and, at same time, how to collaborate with each other. They examine student achievement data using various sources and multiple measures and then do a gap analysis of expectations (standards) and performance of students along with gaps in teacher training (almost a needs assessment of staff's skills). It is important that this step include looking at all subgroups and questioning disparities. This becomes the "blueprint" or "goals" for the professional learning activities needed. This blueprint includes the learning needed for students and staff. School staff meet on a regular basis in professional learning teams by grade level or content - leaders from each team meet with site and district leaders to share needs, ensure
alignment with the "blueprint" and feedback from each team. These collaborative teams of staff look at student achievement data related to their content/curriculum, celebrate success and identify gaps. These teams then develop agreements on focus and even lesson plan. Each member of the team is then responsible for going back to his/her class and trying the lesson. Each then shares the results from their practice - did the lesson planning or methodology agreed upon work with the students by looking at formative and eventually, summative data. Meanwhile school leaders need to be observing and giving feedback to teachers on these lessons - or - even at a higher level - peer observation could be taking place - this is when the collaborative team really becomes a professional learning community. As these teams try new strategies and share they should have access to research, support from the school leader and resources needed - ergo leaders from each team meeting periodically to give feedback and school leader checking in regularly. The "blueprint" calls for certain skill development needed by staff. District, school and team leaders provide quality staff development by engaging staff with research based strategies and skills (ie. classroom management, differentiation of instruction, use of technology and even how to collaborate with other teachers) identified in the "blueprint" or goals. These approaches are then the focus of the collaboration teams as they practice the strategies in their classrooms, share feedback and then practice again in the lessons they are designing - this is a continuous feedback loop that takes time - multiple practices (some research indicates 17 times) are required for an adult learner. The skill development of the adult learners is assessed via multiple measures including feedback from team leaders, school leader observation, needs assessments, self-reflection and student data. At every step of the way, success and/or failures are analyzed and celebrated or redirected for a future celebration - this breeds excitement and motivation to continue in the cycle.

11. Shared analysis of formative and summative student achievement data; direct support in understanding how to use this data to inform long and short-term instructional planning; support in understanding how to disaggregate data and understand how to modify practices to target underperforming subgroups. Direct professional development opportunities aligned with the specific pedagogy associated with the grade level or content area; opportunities to reflect on personal practice, view and reflect on exemplars and best practices, and practice instructional strategies getting real time feedback. In person observation and coaching opportunities aligned with above mentioned PD. Targeted support in unpacking and understanding CCSS for associated grade level and content areas AND grade levels above and below; structured support in translating GL CCSSs to long term instructional plans. Support in understanding the rigor and depth of knowledge required across different CCSS and how to reflect the appropriate level of rigor in the classroom. Training in how to effectively partner with families. Support in understanding how to apply frameworks such as Universal Design for Learning to provide access to content for all learners.

12. Professional Learning Activities need to be focused on data as a means to identify areas of need(s). Professional development should then address those that identified need(s) and be carefully sequenced to ensure learning and implementation take place.
13. On-going, targeted and embedded professional development on best instructional practices. Instructional coaches to provide demonstrations and support for teachers and teaching assistants. PLC’s where teachers collaborate around lesson design and student data.

14. Professional learning activities around instructional leadership, basically, how do you help site administrators and district leaders learn and understand how to best support instructional practices in the classroom.

15. Professional learning activities cannot be drop in PD sessions, but rather ongoing, customized, with the opportunity to engagement and feedback. Teachers and leaders must have the opportunity to learn a concept, practice a concept, receive feedback on their implementation of the concept and then have a mechanism to report out the outcomes. As it relates to the LCFF priority areas, the professional learning must go beyond the state standards and also include information specific to serving students that fall into each of the areas.

16. Orientation, review of implementation and strategies provided. ELD implementation of academic content and performance standards.

17. I tend to refer to the tenets of Implementation science as a starting point to developing a high quality, sustainable professional learning plan. More specifically, the five implementation frameworks will guide an organization in identifying, refining and improving the activities that will deepen staff understanding, knowledge and skills.

   1. Implementation Teams - ensuring the planning team contains members that have broad, diverse perspectives and experiences to ensure equitable outcomes.
   2. Implementation Stages - Due diligence is given to the exploration, installation, initial implementation and full implementation stages. When consideration to planning and setting up structures focused on capacity and sustainability, professional learning plans are short term and, thus student outcomes are minimized.
   3. Continuous Improvement Cycles - Plan, Do, Study, Act (PDSA) is a problem-solving methodology that never ends and requires constant focus. This is the way in which initiatives/innovations move through the implementation stages toward the ultimate goal of innovation.
   4. Implementation Drivers - The implementation team must ensure structures are in place for the professional learning plan to be effective and reach the students for which the plan has been developed. Competency drivers - improving the knowledge of staff through training, coaching and accountability measures. Organizational Drivers - data systems in place, environments are designed to be hospitable and barriers are reduced. Leadership Drivers - Adaptive, supportive and technical leadership is in place focused on fidelity and accountability measures.
   5. Usable Interventions - Once the above frameworks have been addressed, professional learning activities (usable interventions) can be determined that are individualized to the needs of the organization. Additionally, there is a great deal of attention and resources being applied to Multi-tiered System of Support (MTSS) which aligns professional learning activities across the organization seamlessly.
focus on Implementation Science and MTSS are starting points for determining professional learning topics and activities that are specific to individual organizations based on adult learning theory.

18. LEAs must implement professional learning opportunities that incorporate the theoretical knowledge and information, as well as the practical knowledge. For example, providing training on the State Standards and why it is necessary is only one aspect of insuring teachers will implement in their classroom. Most educators understand the theoretical reason why, but frankly, they want, and need to be shown how. "How does teaching place value, for conceptual understanding, using base ten blocks in my full class look?" Additionally, activities within the professional development day needs to incorporate examples of how teachers can make minor tweaks and adjustments in order to ensure students are engaged, and provides formative data. Lastly, the structure of the day should allow for teachers to collaborate during professional development/workshops. When given parameters, give teachers time to build off of each other’s areas of knowledge and expertise. This not only cements the learning, but it also models what the student behaviors should be in the classroom.

19. The following activities will be necessary to conduct with staffs to effectively implement the CQPLS through LCFF: 1) examining student work consistently and constantly 2) learning walks to stay connected with the implementation 3) lesson studies on the most important standards, and 4) developing consistent expectations with accountability at all levels. This will create new ways for staff members to work collaboratively and gain the knowledge and skills necessary to positively impact student learning.

20. The professional learning activities need to be designed based on the student data. This data is disaggregated to show challenge areas for subgroups of students. The development is focused on increasing teachers' effectiveness in improving student learning based on the data. It may require outside expertise. The professional development is based on adult learning theory which implies the teachers are engaged in the learning; it is immediately applicable and builds on their current knowledge. Although the teacher is being developed, the ultimate goal and measure of success is the students' learning. It is not a one-time shot but a continuous process of looking at data, learning a skill needed to increase the student achievement, looking at the data again to see if the new skill worked. There is an agreed upon focus by the school or collaborative team rather than having professional development "done to them". Ideally, it is differentiated by teaching expertise and interest.

21. Local Education Agencies must work collaboratively with staff members, stakeholders, and various communities of practice to create the culture and professional dispositions for continuous professional learning. As an emerging practitioner, teacher leaders must design tools for better understanding students’ learning needs and those tools must be implemented to collect evidence; thus, the evidence must be used in making data-driven decisions regarding curriculum,
pedagogy and goals. Such evidence would incorporate California’s Quality Professional Learning Standards in alignment with Local Control Funding Formula Priority 2. For example, a professional learning activity might implement a Lesson Planning Template tool that has been aligned with California’s Quality Professional Learning Standards to ensure that teachers are meeting the standards by which they are being assessed by their administrators. In addition, such a tool would ensure first-year readiness of teachers because their lesson planning would align with California’s Quality Professional Learning Standards giving them confidence and better preparing them and their students for success. The tool could further be aligned to integrate the Local Control Funding Formula Priority 2 standards; the components could be integrated into the lesson planning tool or into a supplemental tool which would enhance their practice of becoming reflective practitioners.
APPENDIX O

Frequency Distribution Tables: Importance

Table O1

Round 2 Frequency Distribution Table: Importance

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## APPENDIX P

### Frequency Distribution Tables: Likelihood of Implementation

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